CITY OF SHERWOOD

LOCAL WETLAND INVENTORY (LWI)

FINAL SUMMARY REPORT

Prepared for:

City of Sherwood
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Sherwood, Oregon 97140

Prepared by:

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October 22, 1992

Accepted 11/10/92
SCM

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TRANSMITTAL

Date May 26, 1992

File SHWX0026

To Janet Moreland
Division of State Lands
775 Summer Street NE
Salem, OR 97301

Project Rock Creek LWI

Subject Final Map & Report

DEA

Item	Copies	Date	Description
1	1	5-19-92	Final Summary Report w/ 1=600 map
2	1	5-22-92	1" = 300' map w/ tax lot ~~#~~
3	1	5-22-92	Electronic file on disc

Remarks Janet-
If you have any questions, please call.

☐ As you requested
☑ For your information
☐ For your approval
☐ For your review
☐ Return requested
☐ _____

From Teresa Cunningham

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INTRODUCTION

The City of Sherwood contracted with David Evans and Associates, Inc. (DEA) to perform a Local Wetlands Inventory (LWI) of the wetlands within the Urban Growth Boundary (UGB). The LWI was designed around the Division of State Lands (DSL) standards and guidelines. A copy of the DSL standards and guidelines for conducting an LWI is provided in Appendix A.

METHODOLOGY

A preliminary review of available information was conducted prior to field work. The Washington County Soil Survey (WCSS) and the National Wetlands Inventory (NWI) maps were reviewed for any wetland indicators within the study area. The WCSS indicated that five hydric soils occur within the UGB: Cove, Huberly, Labish, Verboort, and Wapato (Appendix B). The NWI showed wetlands occurring only in association with Cedar Creek and its tributaries (Appendix C). The Washington County Soil Conservation Service (SCS) was also contacted to gather any wetland determinations that have been completed inside the project area. The SCS has only completed wetland determination on three-quarters of the county. The southeast portion of the county (Sherwood area) has not been done due to the changes in federal wetland methodology.

A color aerial photo (taken on June 9, 1991, at a scale 1"=400') was used in the office and field to locate and assist in mapping the limits of the wetlands. All potential wetlands located on the aerial photo were ground verified on January 13-15, 1992, for the Rock Creek basin. Those area were access was granted were ground verified on May 27-28, 1992, for the Cedar Creek basin.

In the field, the routine on-site determination method outlined in the *Manual for Identifying and Delineating Jurisdictional Wetlands* (FICWD, 1989) was used to determine the presence and extent of wetlands. Application of the triple parameter method includes examination of the area for hydrophytic vegetation, hydric soils, and hydrology to determine the extent of wetlands. Plots were established in areas of homogenous vegetation representative of each wetland plant communities within the UGB. Soil test pits were dug down to a minimum of 18 inches, and soil colors were determined using the Munsell Soil Color Chartbook. Indicators of wetland hydrology were sought and noted.

There are 963 acres of the Rock Creek basin and 1,659 acres of the Cedar Creek basin within the city limits. A total of 236.8 acres of wetlands were identified and mapped as occurring inside the study area (95 acres within Rock Creek basin and 141.8 acres within Cedar Creek basin).

Wetlands identified were given a code number starting with either the letter "C," indicating that the wetland is located within the Cedar Creek basin or with a "R" indicating that the wetland is located within the Rock Creek basin. Wetlands were classified according to the US Fish and Wildlife's *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, 1979). A summary sheet for each identified wetland is provided in Appendix D. The correlating code number is also on the inventory map (Enclosed) and routine field data forms. A copy of the routine data forms is provided in Appendix E.

Several wetland delineations have been performed in the project area in association with other projects. Areas that have already had a field determination were incorporated into the LWI without further field work, unless the data was questionable or incomplete.

A wetland delineation, joint removal-fill permit, and mitigation plan was completed by Shapiro & Associates, Inc. for the Steeplechase Country Estates and Cedar Creek Golf Course and submitted to the DSL and the US Army Corps of Engineer (COE) in 1990. This delineation includes the following wetlands: C-4, C-5, C-6, C-8, C-9, C-10, C-15. A copy of the delineation report and mitigation plan are provided in Appendix F.

Scientific Resource Investigations, Inc. performed a wetland delineation on Tax lot 31D 200. This delineation includes wetland C-11. A copy of the report is in Appendix G.

Wetland C-12 was partially delineated by Cascade Earth Sciences, Ltd. and partially by DEA. Cascade Earth Sciences, Ltd. performed a wetland delineation on May 11, 1992, on Tax lot 32C 2500. The wetland determination material available to DEA is provided in Appendix G. DEA performed a wetland delineation on November 6, 1991, on Tax lot 32C 2501. The on-site field forms and a concurrence letter from DSL on the determined wetland boundaries are located in Appendix H.

RESULTS

Cedar Creek Basin

Wetland C-1 is a small tributary of Chicken Creek. The creek has a fairly defined channel. It is surrounded by rural residential and agricultural uses. The south side is a steep bank down to the creek. The creek is located at the toe of the slope. The north side is relatively flat from the creek edge to the Tualatin River. The small portion of this tributary that is inside the UGB is forested with Oregon ash (*Fraxinus latifolia*) and willow (*Salix* sp.).

Wetlands C-2, C-3, C-4, C-5, C-7, C-11, C-12, C-13, C-15, C-16, C-17, C-18, and C-19 make up Cedar Creek and it's tributaries. The northern third of Cedar Creek (C-2) flows through agriculture land and is fairly disturbed by crop production and grazing. This section is vegetated with willow, soft rush (*Juncus effusus*), colonial bentgrass (*Agrostis tenuis*), reed canary grass (*Phalaris arundinacea*), and creeping buttercup (*Ranunculus repens*). The

middle third (C-3) is forested and flows along the west side of downtown Sherwood. It is vegetated with willow, Oregon ash, ponderosa pine (*Pinus ponderosa*), western red cedar (*Thuja plicata*), black hawthorne (*Crataegus douglasii*), rose (*Rosa* sp.), cattail (*Typhia latifolia*), reed canary grass, and creeping buttercup. The southern third (C-7 and C-11) of Cedar Creek is forested with the same species as above, but has been partially disturbed on the outside edges by agricultural uses. C-5 is a forested/emergent tributary of Cedar Creek delineated as part of the Steeplechase Country Estates project (see Appendix E). C-15 is an emergent wetland on the north end of C-5. C-4 is an emergent wetland that is the headwaters for C-17 (delineated as part of the Steeplechase Country Estates project). C-4 is connected hydrologically to C-17 via a culvert under Highway 99. C-17, C-18, and C-19 are north flowing forested tributaries of Cedar Creek that have been partially disturbed by agricultural uses on the outer edges, and in the headwaters.



C-8 is a wetland that has been altered by agricultural uses (plowing and grazing), and has been hydrologically separated from Cedar Creek and impounded by the railroad tracks. This wetland was delineated in association with the Steeplechase Country Estates project (Appendix E).

C-9 is a wetland that has been altered by agricultural uses (plowing and grazing), and has been hydrologically separated from Cedar Creek by Sunset Blvd. This wetland was delineated in association with the Steeplechase Country Estates project (Appendix E).

C-10 is a wetland that has been altered by agricultural uses (plowing and grazing), and has been hydrologically altered by the railroad tracks. This wetland was delineated in association with the Steeplechase Country Estates project (Appendix E).

C-12 is an Oregon ash/willow forested riparian area with a reed canary grass emergent wetland component that has been disturbed historically (Appendix G). The eastern part of the wetland was delineated by DEA, and the western part by Cascade Earth Sciences, Ltd.

C-13 is an emergent wetland vegetated with reed canary grass and soft rush. Historically, this small wetland was once part of C-12, but has been separated by Sunset Blvd. There is a culvert connecting the two hydrologically, but the culvert is constrictive and impounds water onto C-13.

C-14 is a forested wetland that has been impounded by the railroad tracks and urbanization. This was a historic tributary of Cedar Creek, but has been hydrologically separated by the railroad tracks.

C-16 is a south flowing forested tributary of Cedar Creek that has been hydrologically altered by both Highway 99 and Elwert Road. It has been additional disturbed by grazing. It is vegetated with ponderosa pine, Oregon ash, willow, Douglas spirea (*Spirea douglasii*), reed canary grass, soft rush, and a sedge (*Carex* sp.).

Rock Creek Basin

Wetlands R-1, R-2, R-3, R-5, R-6, and R-8 are all part of the same Rock Creek system. Through land development and manipulation, the wetlands that make-up this system have been separated and/or classified differently to be able to specifically describe each system. R-1 and R-2 are the north end of Rock Creek. R-1 is an palustrine emergent wetland dominated by reed canary grass, while R-2 is a forested riparian area composed of Douglas fir (*Pseudotsuga menziesii*) and red alder (*Alnus rubra*) along Rock Creek. R-1 and R-2 are separated from R-3, R-5, and R-6 by Edy Road. R-3 is a small forested area of Rock Creek south of Edy Road and not connected to R-5 and R-6 due to an historic fill that was placed for an agricultural access road. R-3 consist of a few large trees of willow (*Salix* sp.) and Oregon ash (*Fraxinus latifolia*). R-5 is Rock Creek itself and the associated wetland banks vegetated with reed canary grass. R-6 is a seasonal wetland that has been disturbed via historic agricultural uses. R-6 is best described as an agriculturally disturbed wetland that is now composed of two co-dominant species (reed canary grass and colonial bentgrass [*Agrostis tenuis*]), and other species such as Queen Anne's lace (*Daucus carota*), willow, common cattail (*Typha latifolia*), plantain (*Plantago* sp.), Oregon white oak, and Oregon ash. R-8 is an abandoned water treatment pond that now has a connection with Rock Creek due to a break in the eastern wall. R-8 is vegetated with willow, reed canary grass, and common cattail.

R-18 and R-19 are the wetlands associated with a small creek that drains into R-6 and eventually into R-5. R-18 is the wetland associated with a channelized creek that runs from the pallet factory to an apple and black walnut orchard. The creek runs through a plowed field and the orchard before out-falling into R-6. Over half of R-18 consists of a narrow strip of slough sedge (*Carex obnupta*) and reed canary grass growing along the top of the bank of the creek; the other half is a forested strip of willow and slough sedge (*Carex obnupta*) running through the orchard. R-19 is a small mowed swale composed of Oregon black cottonwood (*Populus trichocarpa*), willow, reed canary grass, and creeping buttercup (*Ranunculus repens*) that ends at the pallet factory property boundary. R-18 and R-19 are separated by the pallet factory. Water from R-18 is piped into a culvert on the eastern side (where R-6 would connect). The out-fall for the water that is collected from R-18 was not located. It is not known if there is still a connection between R-18/R-19 and R-5/R-6.

R-4 is a disturbed wetland. Hydrology and hydric soils are present, but the vegetation has been plowed under. The hydrology has been altered by a ditch and the reconstruction of S.W. Tualatin-Sherwood Road (Edy Road). The only remaining vegetation is a single Oregon ash tree and a small patch of reed canary grass growing around the base of the tree.

R-7 is the northern abandoned water treatment pond. Although no longer used as a treatment pond, the area was saturated to the surface with some areas inundated. Soils within the pond were gleyed, as expected from previous years of constant inundation. Vegetation consisted of reed canary grass, slough sedge, common cattails, and willows.

R-10, R-11, R-12, and R-13 are all part of what used to be Murdock Creek, but now the system has been channelized and divided by culverts. R-13 is a pond surrounded by willow and reed canary grass. R-12 is a small drainage overgrown with Himalayan blackberry (*Rubus discolor*). R-11 has been ditched, and the reed canary grass is contained within the well defined banks of the ditch. Previously, R-11 flowed north and connected with Rock Creek south of the southern water treatment pond, but it has been re-routed and now flows east into R-10. R-10 follows a drainage and forms a small pond where it turns north. It is vegetated with reed canary grass, Himalayan blackberry, and Oregon white oak (*Quercus garryana*). The water in this system (R-10 through R-13) eventually flows into Rock Creek (R-5).

R-14 is an isolated wetland consisting of reed canary grass. This small depression has a manhole in the northeast section of it.

R-15 is a small marsh located in a depression surrounded by hills. It is dominated by reed canary grass, curly dock (*Rumex crispus*), and an aster (*Aster* sp.).

R-16 and R-17 used to be part of the same system, but the construction of Murdock Road has isolated R-16 from connection with any other system. R-16 is composed of willow, rose (*Rosa* sp.), reed canary grass, hawthorn (*Crataegus* sp.) and curly dock. R-17 flows to the south and is a tributary to Rock Creek, although they do not connect within the city limits. This wetland is dominated by Himalayan blackberry, reed canary grass, and small-fruit bullrush (*Scirpus microcarpus*); with rose, Douglas fir, hawthorn, and red alder lining the upland banks. Several mallards and frogs were seen and heard utilizing this wetland.

REFERENCES

Cowardin, Lewis M., Carter, Virginia, Golet, Francis C., and LaRoe, Edward T., *Classification of Wetlands and Deepwater Habitats of the United States*, U.S. Fish and Wildlife Service.

Federal Interagency Committee for Wetland Delineation, 1989, *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and the USDA. Soil Conservation Service, Washington, DC. Cooperative technical publication.

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

National Technical Committee for Hydric Soils, 1991, *Hydric Soils of the United States*, USDA. Soil Conservation Service.

Reed, Porter 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).

USDA. Soil Conservation Service, 1982, *Washington County Soil Survey*, Oregon Agricultural Experiment Station.

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APPENDIX A

Division of State Lands Standards and Guidelines for Local Wetland Inventories

DAVID EVANS AND ASSOCIATES INC
A PROFESSIONAL SERVICES CONSULTING FIRM

Local Wetlands Inventory (LWI)
Standards and Guidelines

Purpose
141-86-180 Pursuant to ORS 196.674, these rules establish a system for uniform wetland identification, delineation, and comprehensive mapping. A Local Wetlands Inventory (LWI) is optional and is developed by a local jurisdiction for all or a portion of its jurisdiction according to the following standards and guidelines.

Policy
141-86-190 (1) Once adopted by the local jurisdiction and accepted by the Division of State Lands, the LWI may be used in place of the National Wetlands Inventory (NWI) and is incorporated into the State-wide Wetlands Inventory (SWI).

(2) A LWI provides good information for planning purposes and on location of potentially regulated wetlands, but is not of sufficient detail for regulatory certainty under the state Removal-Fill Law.

(3) The Offsite LWI Option is comprehensive enough to provide good information for planning purposes and improves notification to landowners, but there is not sufficient information to trigger Goal 5 for wetlands.

(4) The Onsite LWI Option fulfills location and quantity for Goal 5, but not quality. At the option of the local jurisdiction, a wetland function and value assessment may be conducted in order to obtain information sufficient to trigger Goal 5. The function/value assessment may be completed at a later date than the initial inventory, and is subject to approval by the Department of Land Conservation and Development.

(5) Wetland determinations and delineations shall be conducted according to the criteria and methodologies in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands and/or any subsequent manual/guidance developed or adopted by the Division.

(6) Determinations and delineations shall be conducted by any qualified person, and are subject to review and approval by the Division before incorporation into the State-wide Wetlands Inventory.

Definitions
141-86-200 (1) "Determination" means identifying an area as wetland or non-wetland.

(2) "Delineation" means identifying and marking the wetland/non-wetland boundary of each wetland identified.

(3) "Mapping" means transferring the identified and delineated wetlands to a base map.

Inventory Development Process and Standards
141-86-210 (1) Sources of inventory information shall include:

(a) U.S. Soil Conservation Service county soil survey and county list of hydric soils & soils with hydric inclusions;

(b) National Wetlands Inventory;

(c) Soil Conservation Service wetland maps where applicable;

(d) Federal Emergency Management Act floodplain maps where applicable;

(e) Other local wetlands inventories or wildlife habitat inventories that include wetlands;

(f) Resource agencies, including the Oregon Department of Fish & Wildlife and U.S. Fish & Wildlife Service;

(g) Division of State Lands and Corps of Engineers wetland determination & permit files; and

(h) Color and/or infra-red airphotos (min. scale 1" = 800').

(2) Sources of inventory information may include but is not limited to:

(a) Agricultural Stabilization and Conservation Service aerial color slides;

(b) Local knowledge of area (e.g., longtime residents); and

(c) The Nature Conservancy/Natural Heritage maps.

(3) A parcel base map shall be used which includes all roads, railroads, and property boundaries to facilitate accurate field mapping.

(a) The base map shall be scaled and shall be geographically referenced to State Plane Coordinate System and/or Public Land Survey.

(b) The base map shall be at or close to scale of airphotos used and final map products (Minimum scale of final wetlands maps is 1" = 800').

(c) The base map shall include hydrologic sub-basin boundaries, if any.

(4) Before beginning field verification, field map(s) shall be prepared from the base map and shall include the approximate location of:

(a) Any wetlands and deepwater habitats from NWI;

(b) Any wetlands from other inventories;

(c) Hydric soils and soils with hydric inclusions (keyed separately);

(d) Wetlands or possible wetlands delineated on airphotos; and

(e) Sites to check based on other leads.

(5) All work shall be completed by or supervised by a cartographer (on staff or contracted).

(6) Field verification of wetlands and possible wetlands shall be conducted as follows, except where access is denied by the landowner:

(a) For the Onsite LWI Option, onsite wetland determination is required for all wetlands or probable wetlands located through the process described in (1) through (4). Wetland boundary delineation is optional.

(b) For the Offsite LWI Option, field verification of wetlands or probable wetlands is required for:

(A) All wetland types identified through offsite process described in (1) through (4).

(B) Any wetland for which offsite source information is unclear or where two or more sources contradict each other (i.e., soils and NWI).

(c) Airphoto interpretation shall be tested early in the process by interpreting several wetland types, groundtruthing the interpretations, then completing the airphoto interpretations.

(7) Wetlands that are field-verified and those that are not shall be indicated on field forms and field map(s).

(8) The minimum size wetland to be identified and mapped shall be 0.5 acre.

(9) Each wetland shall be assigned a distinctive identification code to use on map(s), field data forms, and in optional database.

(10) At the option of the local jurisdiction, hydrologically altered former wetlands may be inventoried as potential restoration sites.

(11) All wetlands identified shall be classified by type according to the U.S. Fish and Wildlife Service's Classification of Wetlands and Deepwater Habitats of the United States (Cowardin 1979).

(a) All wetlands shall be classified to "Class" level and special modifiers shall be included. Water regime modifiers are optional, but recommended.

(b) When a wetland contains more than one adjoining classification, the minimum wetland type size to differentiate shall be 0.1 acre.

Final Maps and Reports

141-86-220 (1) The final wetland map products shall consist of one or more maps (depending on size of area to be covered). If the study area is covered by more than one wetland map, a single, smaller scale reference map of the complete study site is required. The reference map shall indicate the location of all wetlands and be keyed to individual, large-scale maps.

(2) Final maps shall include:

(a) Map name;

(b) Scale bar;

(c) Geographical reference to State Plane Coordinate System and/or Public Land Survey;

(d) Roads and railroads;

(e) Watercourses;

(f) Property boundaries (Onsite Option only);

(g) Watershed boundaries, if any;

(h) Legend key to wetland symbology on map;

(i) Month(s) and year of field determinations (Onsite Option only);

(j) Source air photo date and scale;

(k) Date inventory was adopted by local jurisdiction;

(l) Symbology for wetlands not field-verified, if any;

(m) Disclaimer (if any wetlands are not delineated), such as: "Information shown on this map is of a generalized nature. In all cases, actual field conditions determine wetland boundaries;" and

(n) All wetlands, clearly and accurately drawn and clearly identified by an individual wetland code that relates each wetland to field data sheets, database, and wetland summary sheets.

(3) Minimum map scale shall be 1" = 800' (1:9,600).

(4) Each inventory and mapping process shall be fully documented in order to ensure accuracy and consistency throughout the process. Documentation shall include:

(a) Wetland determination procedures used;

(b) Date(s) and scales of source maps and air photos used;

(c) Technical staff members and qualifications;

(d) Field data sheet(s) for each wetland field-verified, including wetland code;

(e) Field maps with sketches, notes, and measurements and air photos with wetland delineations; and

(f) All mapping and map transfer procedures used.

(5) A summary sheet shall be prepared for each wetland. The summary sheet shall include but is not limited to:

(a) Individual wetland code (used on map, data sheets, etc.);

(b) Street address or equivalent sufficient to locate site;

(c) Public Land Survey identifier (Township, Range, Section, Quarter Section);

(d) Approximate wetland size (in acres);

(e) Wetland Classification(s);

(f) Soil type(s) as mapped by Soil Conservation Service county soil survey, if any; and

(g) Hydrologic basin.

(6) A study area summary report shall be prepared that includes:

(a) Total acreage in study area;

(b) Total acreage of wetlands in study area; and

(c) Total number of wetlands in study area.

(7) One complete set of all final maps and reports shall be provided to the Division for in-house use, coordination with the local jurisdiction, and inclusion in the State-wide Wetlands Inventory.

(a) Maps provided to the Division are public record and may be made available to the public and state and federal agencies.

(b) Maps provided to the Division shall be in a stable base, reproducible form.

(c) If final mapping is electronic, digital map data shall also be provided to the Division in a form usable by the Division.

(8) All wetland inventory procedures, final maps, and final reports are subject to review and approval by the Division before:

(a) Maps are accepted by the Division as part of the State-wide Wetlands Inventory; and

(b) Maps are accepted by the Division as a Local Wetlands Inventory to be used in lieu of the National Wetlands Inventory for Wetland Land Use Notification purposes.

Revisions
141-86-230 Every ten years, the local jurisdiction shall conduct a field reconnaissance of wetlands on the LWI to verify permitted changes and to note any substantial changes attributable to natural events. A summary report and any map changes shall be provided to the Division.

Landowner Notification
141-86-240 When the LWI is adopted by the local jurisdiction and by the Division, the local jurisdiction shall notify by mail all landowners of record whose parcel contains a wetland that:

(1) Their parcel(s) was included in the wetlands study area; and

(2) There is a wetland mapped on their parcel.

APPENDIX B

Washington County Soil Survey

Sheet 49

DAVID EVANS AND ASSOCIATES, INC.
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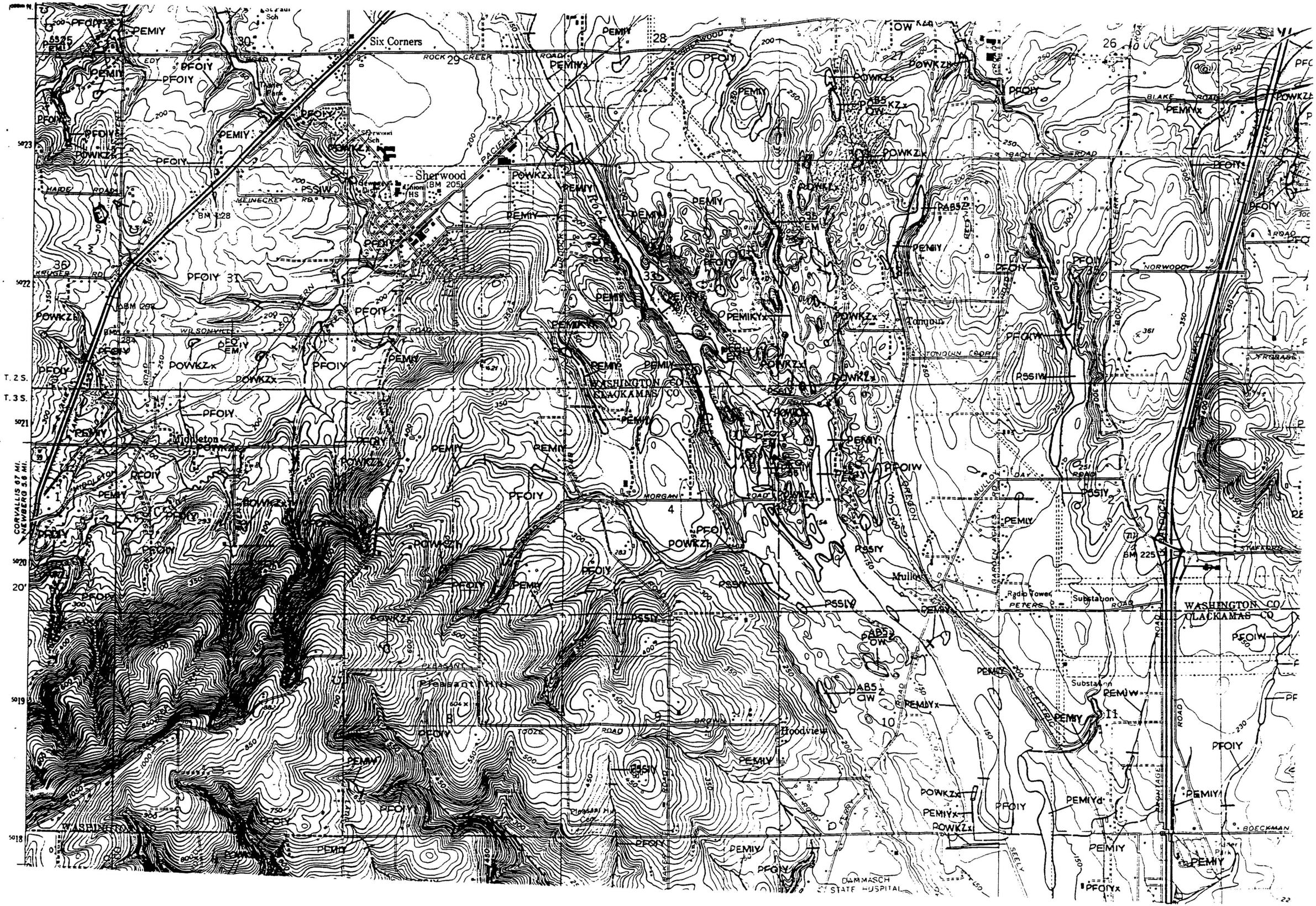
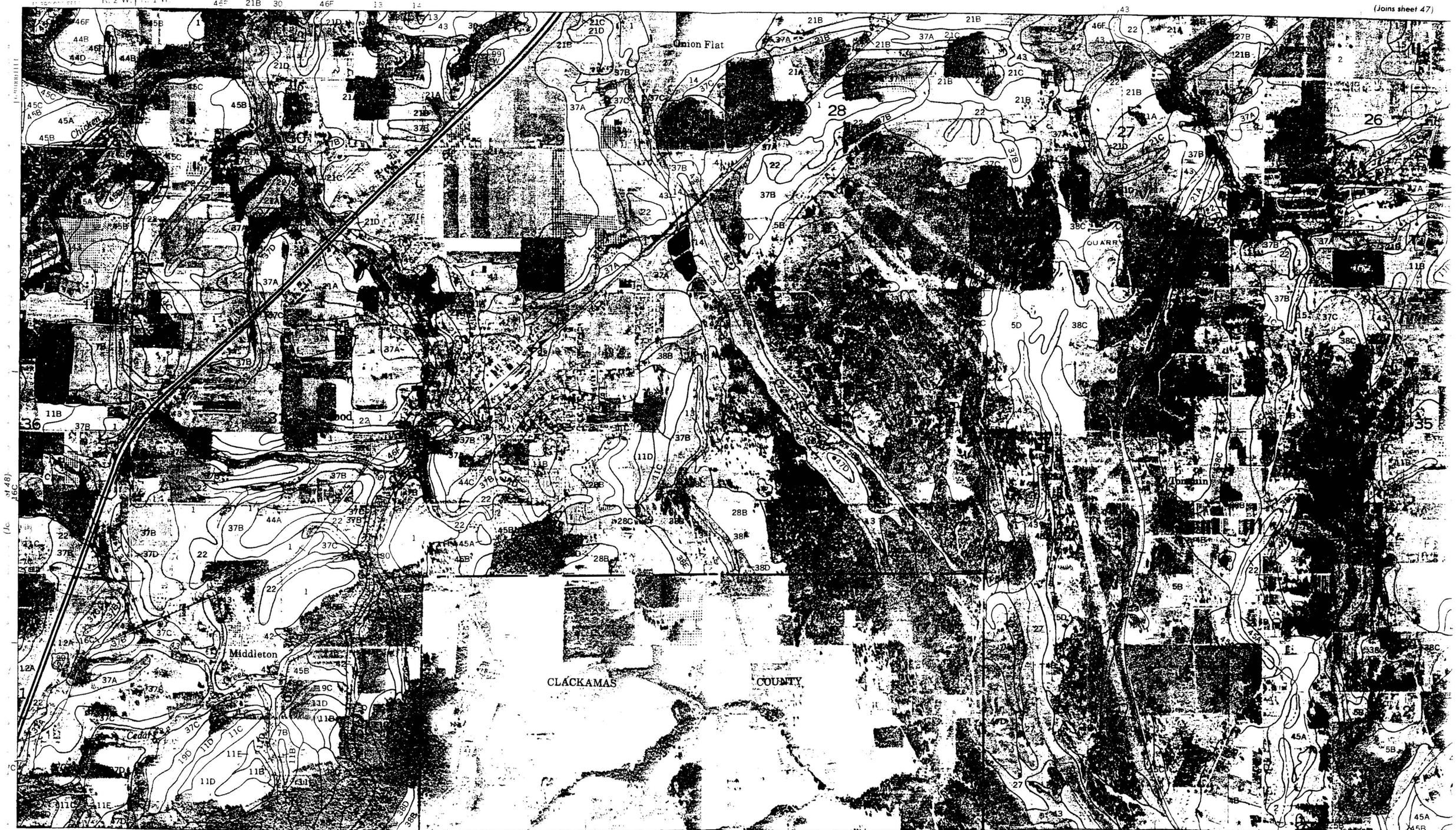
APPENDIX C

National Wetlands Inventory



Six Corners
Sherwood
Middleton
Tonquin
Mullock
Hoodview
Pleasant Hill
WASHINGTON CO
CLACKAMAS CO
DAMMASCH STATE HOSPITAL
T. 2 S.
T. 3 S.
CORVALLIS 67 MI.
NEWBERG 5.6 MI.


R. 2 W. | R. 1 W.
(Joins sheet 47)
Union Flat
Chicken
Middleton
Cedar
CLACKAMAS
COUNTY
QUARRY
(Joins inset A, sheet 45
(Joins inset, s
1 Mile
5000 Feet

APPENDIX D

Wetland Summary Sheets

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-1**

LOCATION:

Legal: T2S R1W Section 30, 1/4 NE, 1/16 NE

Other: East and north of Scholls-Sherwood Road

CLASSIFICATION: PFOy

SOIL:

Series: N/A **Subclass:** Xerochrepts and Haploxerolls

Color: 10YR 3/2 with mottles

HYDROLOGIC BASIN: Chicken Creek

SIZE: 4.49 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
	Salix sp.	
	Fraxinus latifolia	

COMMENTS:

Tributary of Chicken Creek. Fairly defined channel that is forested. Developed right up to the top-of-bank on the east end with houses, and has agricultural uses on the north and south sides. The south side has a very steep bank, and the creek is located at the toe of the slope.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-2**

LOCATION:

Legal: T2S R1W Section 30

Other: Cedar Creek north of Highway 99W

CLASSIFICATION: PEMy

SOIL:

Series: Wapato **Subclass:** Fluvaquentic Haplaquolls

Color: 10YR 3/2 with mottles

HYDROLOGIC BASIN: Cedar Creek

SIZE: 31.15 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
	Salix species	*Juncus effusus*
		Agrostis tenuis
		Phalaris arundinacea
		Ranunculus repens

COMMENTS:

Tributary of Chicken Creek. Fairly defined channel that is forested. Developed right up to the top-of-bank on the east end with houses, and has agricultural uses on the north and south sides. The south side has a very steep bank, and the creek is located at the toe of the slope.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-3**

LOCATION:

Legal: T2S R1W Section *

Other: Cedar Creek south of Highway 99W and north of railroad tracks

CLASSIFICATION: PFO/PSSy

SOIL:

Series: McBee **Subclass:** Cumulic Ultic Haploxerolls

Color: 10YR 2/1

HYDROLOGIC BASIN: Cedar Creek

SIZE: 28.85 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
Salix sp.	*Salix* sp.	*Typhia latifolia*
Fraxinus latifolia	*Rosa* sp.	*Phalaris arundinacea*
Pinus ponderosa	*Crataegus douglasii*	*Ranunculus repens*
Thuja plicata		

COMMENTS:

*Section 30, 1/4 SE, 1/16 SE
Section 31, 1/4 NE, 1/16 NE, 1/32 NE
Section 32, 1/4 NW

This section of Cedar Creek is forested on the outer fringes, and vegetated with shrubs and forbs on the interior.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-4**

LOCATION:

Legal: T2S R1W Section 31, 1/4 NW, 1/16 NE

Other: South of Highway 99W

CLASSIFICATION: PEMy

SOIL:

Series: Wapato **Subclass:** Fluvaquentic Haplaquolls

Color: 10YR 2/1

HYDROLOGIC BASIN: Cedar Creek

SIZE: 4.45 acres

COMMENTS:

This area was delineated as part of the Steeple Chase Country Estates and Cedar Creek Golf Course projects by Shapiro and Associates, Inc., and is included as part of the Mitigation Plan (Mitigation area 1). This wetland connects with C-17 hydrologically via a culvert under Highway 99W. C-17 is a forested tributary of Cedar Creek. This wetland is the headwaters for C-17.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded
PSS = palustrine scrub-shrub
y = seasonal
PEM = palustrine emergent
z = intermittently

Wetland Summary Sheet

Date of Field Verification: May 27, 1992 **Wetland Code # C-5**

LOCATION:

Legal: T2S R1W Section 31

Other: Cedar Creek between Highway 99W and the railroad tracks.

CLASSIFICATION: PFO/PEMy

SOIL:

Series: Wapato **Subclass:** Fluvaquentic Haplaquolls

Color:

HYDROLOGIC BASIN: Cedar Creek

SIZE: 13.38 acres

COMMENTS:

This area was delineated as part of the Steeple Chase Country Estates and Cedar Creek Golf Course projects by Shapiro and Associates, Inc., and is included as part of the Mitigation Plan (Mitigation areas 3, 4, 5, 6, 7).

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded
PSS = palustrine scrub-shrub
y = seasonal
PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-6**

LOCATION:

Legal: T2S R1W Section 31, 1/4 NE

Other: West and south of Villa Road.

CLASSIFICATION: PFOy

SOIL:

Series: Huberly **Subclass:** Typic Fragiquepts

Color:

HYDROLOGIC BASIN: Cedar Creek

SIZE: 2.51 acres

COMMENTS:

This area was delineated as part of the Steeple Chase Country Estates and Cedar Creek Golf Course projects by Shapiro and Associates, Inc. These projects propose to culvert this wetland twice (on the north and east ends).

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-7**

LOCATION:

Legal: T2S R1W Section 31, 1/4 SW, 1/16 SW

Other: South of Sunset Blvd and east of the railroad tracks.

CLASSIFICATION: PFOy

SOIL:

Series: Huberly **Subclass:** Typic Fragiaquepts

Color: 10YR 2/2 with mottles

HYDROLOGIC BASIN: Cedar Creek

SIZE: 18.03 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
Pinus ponderosa	Salix sp.	*Phalaris arundinacea*
Fraxinus latifolia		

COMMENTS:

This is the southern end of Cedar Creek within the City of Sherwood Urban Growth Boundary. This section of the creek has a fairly defined channel, but the wetland limits expand beyond the channel. The western end is cleared and disturbed from agricultural practices. This wetland is hydrologically separated from C-8 by the railroad tracks.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-8**

LOCATION:

Legal: T2S R1W Section 31, 1/4 SE, 1/16 SW, 1/32 SE

Other: East of railroad tracks and south of Sunset Blvd.

CLASSIFICATION: POWkzx

SOIL:

Series: Aloha **Subclass:** Typic Fragiquepts

Color:

HYDROLOGIC BASIN: Cedar Creek

SIZE: 0.64 acres

COMMENTS:

This area was delineated as part of the Steeple Chase Country Estates and Cedar Creek Golf Course projects by Shapiro and Associates, Inc., and is included in the Mitigation Plan (Mitigation area 9).

Wetland Classification Codes:
PFO = palustrine forested
PSS = palustrine scrub-shrub
PEM = palustrine emergent
k = artifically flooded
y = seasonal
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-9**

LOCATION:

Legal: T2S R1W Section 31, 1/4 SW, 1/16 SE, 1/32 NW

Other: South of Sunset Blvd and east of Middleton Road.

CLASSIFICATION: PEMy

SOIL:

Series: Huberly **Subclass:** Typic Fragiquepts

Color:

HYDROLOGIC BASIN: Cedar Creek

SIZE: 1.90 acres

COMMENTS:

This area was delineated as part of the Steeple Chase Country Estates and Cedar Creek Golf Course projects by Shapiro and Associates, Inc., and is included in the Mitigation Plan (Mitigation area 8).

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code #** C-10

LOCATION:

Legal: T2S R1W Section 31, 1/4 SW, 1/16 SW 1/32 SE

Other: South of C-9

CLASSIFICATION: PFO/PEMy

SOIL:

Series: Huberly **Subclass:** Typic Fragiquepts

Color:

HYDROLOGIC BASIN: Cedar Creek

SIZE: 2.27 acres

COMMENTS:

This area was delineated as part of the Steeple Chase Country Estates and Cedar Creek Golf Course projects by Shapiro and Associates, Inc., and is included in the Mitigation Plan (Mitigation area 10).

Wetland Classification Codes:
PFO = palustrine forested
PSS = palustrine scrub-shrub
PEM = palustrine emergent
k = artifically flooded
y = seasonal
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code #** C-11

LOCATION:

Legal: T2S R1W Section 31, 1/4 SE, 1/16 NE

Other: East of railroad tracks, north of Sunset Blvd., and west of St. Charles Way.

CLASSIFICATION: PFO/PEMy

SOIL:

Series: Huberly **Subclass:** Typic Fragiquepts

Color:

HYDROLOGIC BASIN: Cedar Creek

SIZE: 5.83 acres

COMMENTS:

This area was delineated by SRI. The SRI delineation report is in Appendix H. In the report, SRI did not include Cedar Creek as a jurisdictional wetland. DEA's field work concluded that Cedar Creek should be designated a jurisdictional wetland based on vegetation (*Agrostis tenuis*, *Phalaris arundinacea*, and *Salix* species), observation of positive hydrology, and hydric soils.

Wetland Classification Codes:
PFO = palustrine forested
PSS = palustrine scrub-shrub
PEM = palustrine emergent
k = artifically flooded
y = seasonal
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code #** C-12

LOCATION:

Legal: T2S R1W Section 32, 1/4 SW, 1/16 SW, 1/32 NE

Other: South of Sunset Blvd and west of Sherwood Blvd.

CLASSIFICATION: PFO/PEMy

SOIL:

Series: Huberly **Subclass:** Typic Fragiaquepts

Color: 10YR 2/2 with mottles

HYDROLOGIC BASIN: Cedar Creek

SIZE: 5.31 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
Acer macrophyllum	*Rubus ursinus*	*Cirsium vulgare*
Fraxinus latifolia	*Salix* sp.	*Plantago lanceolata*
Populus trichocarpa	*Pyrus fusca*	*Festuca arundinacea*
	Phalaris arundinacea	

COMMENTS:

This wetland was delineated by both DEA and Cascade Earth Sciences, LTD in association with the Sunset Subdivision. Tax lot 2500 was delineated by Cascade Earth Sciences, and tax lot 2501 was delineated by DEA. The results of the delineation are in Appendix G.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code #** C-13

LOCATION:

Legal: T2S R1W Section 32, 1/4 SW, 1/16 SW, 1/32 NE

Other: North of Sunset Blvd and C-12.

CLASSIFICATION: PEMy

SOIL:

Series: Huberly **Subclass:** Typic Fragiaquepts

Color: 10YR 2/1

HYDROLOGIC BASIN: Cedar Creek

SIZE: 0.39 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
Cytisus scoparius	*Festuca arundinacea*	
	Phalaris arundinacea	

COMMENTS:

This wetland was once a part of C-12, but is now separated by Sunset Blvd. There is a culvert under Sunset Blvd. that connects the two hydrologically, but the culvert is constrictive.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-14**

LOCATION:

Legal: T2S R1W Section 32, 1/4 NW, 1/16 SW, 1/32 NE

Other: South of railroad tracks and west Sherwood Blvd.

CLASSIFICATION: PFOy

SOIL:

Series: N/A **Subclass:** Xerochrepts and Haploxerolls

Color:

HYDROLOGIC BASIN: Cedar Creek

SIZE: 0.88 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
Pinus ponderosa	*Salix* sp.	*Phalaris arundinacea*
Fraxinus latifolia		

COMMENTS:

Disturbed area from housing developments and railroad tracks. Historical tributary to Cedar Creek, but is now hydrologically separated and impounded by the railroad tracks.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-15**

LOCATION:

Legal: T2S R1W Section 31, 1/4 NW, 1/16 SE 1/32 SE

Other: South of C-4. North end of C-5.

CLASSIFICATION: PFO/PEMy

SOIL:

Series: Aloha **Subclass:** Aquic Xerochrepts

Color:

HYDROLOGIC BASIN: Cedar Creek

SIZE: 1.71 acres

COMMENTS:

This area was delineated as part of the Steeple Chase Country Estates and Cedar Creek Golf Course projects by Shapiro and Associates, Inc., and is included in the Mitigation Plan (Mitigation area 2).

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded
PSS = palustrine scrub-shrub
y = seasonal
PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-16**

LOCATION:

Legal: T2S R1W Section 36, 1/4 SE, 1/16 SE

Other: East of Highway 99W and west of Elwert Road.

CLASSIFICATION: PFOy

SOIL:

Series: Huberly **Subclass:** Typic Fragiaquepts

Color: 10YR 2/1 with mottles

HYDROLOGIC BASIN: Cedar Creek

SIZE: 2.12 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
Pinus ponderosa	*Salix* sp.	*Phalaris arundinacea*
Fraxinus latifolia	*Spirea douglasii*	*Juncus effusus*
	Carex species	

COMMENTS:

This area is currently a pasture and has been disturbed from grazing. This wetland is a tributary of Cedar Creek. The hydrology has been altered by both Highway 99W and Elwert Road.

Wetland Classification Codes:
PFO = palustrine forested
PSS = palustrine scrub-shrub
PEM = palustrine emergent
k = artifically flooded
y = seasonal
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code # C-17**

LOCATION:

Legal: T2S R1W Section 30, 1/4 SW

Other: North of Highway 99W and south of C-18.

CLASSIFICATION: PFOy

SOIL:

Series: Huberly **Subclass:** Typic Fragiaquepts

Color: 10YR 2/2 with mottles

HYDROLOGIC BASIN: Cedar Creek

SIZE: 11.5 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
Pinus ponderosa	*Salix* sp.	*Phalaris arundinacea*
Fraxinus latifolia	*Rosa* sp.	*Juncus effusus*
Salix sp.		*Ranunculus repens*
Thuja plicata		

COMMENTS:

Forested tributary of Cedar Creek. Connects to C-4 hydrologically via a culvert under Highway 99W. Creek narrows towards Highway 99W.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code #** C-18

LOCATION:

Legal: T2S R1W Section 30, 1/4 SW, 1/16 NE

Other: South of C-9.

CLASSIFICATION: PFO/PEMy

SOIL:

Series: Huberly **Subclass:** Typic Fragiaquepts

Color: 10YR 2/2 with mottles

HYDROLOGIC BASIN: Cedar Creek

SIZE: 6.17 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
Salix sp.	*Lonicera involucrata.*	*Phalaris arundinacea*
Thuja plicata	*Salix* sp.	*Glecoma hederacea*
Fraxinus latifolia		*Ranunculus repens*

COMMENTS:

This is a forested tributary of Cedar Creek. It runs through agricultural uses on the south end (possible headwaters). Agricultural crops were unidentifiable.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 27, 1992 **Wetland Code #** C-19

LOCATION:

Legal: T2S R1W Section 30, 1/4 NW, 1/16 SE, 1/32 SW

Other: North of Edy Road.

CLASSIFICATION: PFOy

SOIL:

Series: N/A **Subclass:** Xerochrepts and Haploxerolls

Color: 10YR 2/1

HYDROLOGIC BASIN: Cedar Creek

SIZE: 1.20 acres

DOMINANT VEGETATION:

Overstory	Understory	Ground cover
Salix sp.	*Lonicera involucrata*	*Ranunculus repens*
Thuja plicata		*Glecoma hederacea*
Fraxinus latifolia		

COMMENTS:

This is a forested tributary of Cedar Creek. It runs through agricultural uses on the south end (possible headwaters). Agricultural crops were unidentifiable.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-1

LOCATION:

Legal: T 2S R 1W Section 29 1/4 NE

Other: North of Edy Road. Northwest of junk yard

CLASSIFICATION: PEMy

SOIL:

Series: Wapato **Subclass:** Fluvaguentic Haplaquolls

Color: 10 yr 4/1 with bright mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 100,620 sq ft (2.3 ac)

COMMENTS:

Wetland extends to the southwest from the Onion Flats. One small pond has been excavated within the year. Wetland composed of reed canary grass (*Phalaris arundinacea*). Surrounded by a forested area on the east, development west of the pond, Edy Rd. to the south, and agriculture use on the north.

Wetland Classification Codes:
PFO = palustrine forested
PSS = palustrine scrub-shrub
PEM = palustrine emergent
k = artifically flooded
y = seasonal
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code # R-2**

LOCATION:

Legal: T 2S R 1W Section 29 1/4 NE

Other: Rock Creek, north of Edy Rd and west of junk yard

CLASSIFICATION: PFOy

SOIL:

Series: Wapato **Subclass:** Fluvaguentic Haplaquolls

Color: 10 yr 3/1

HYDROLOGIC BASIN: Rock Creek

SIZE: 32,015 sq ft (0.73 ac)

COMMENTS:

Forested riparian area along Rock Creek.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code # R-3**

LOCATION:

Legal: T 2S R 1W Section 29 1/4 SE, 1/16 NE,

Other: Excavated portion of Rock Creek south of Edy Rd

CLASSIFICATION: PFOyx

SOIL:

Series: Wapato **Subclass:** Fluvaguentic Haplaquolls

Color: 10 yr 3/1 with gleyed mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 20,255 sq ft (0.46 ac)

COMMENTS:

Rock Creek was excavated with the construction of Edy Rd. Two large box culverts were installed. Trees line the western banks of the creek.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code # R-4**

LOCATION:

Legal: T 2S R 1W Section 28 1/4 SW, 1/16 NW, 1/32 SE

Other: South of Edy Rd. and east of railroad crossing

CLASSIFICATION: PEMc

SOIL:

Series: Huberly **Subclass:** Typic Fragiaquepts

Color: 10 yr 3/2 with mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 88,544 sq ft (2.03 ac)

COMMENTS:

Highly disturbed area. Ditch with hydrophytic vegetation has been excavated and altered the hydrology of the area. Some fill has been placed on the top. Hydric soils and wetland hydrology are present. One ash (*Populus trichocarpa*) with reed canary grass (*Phalaris arundinacea*) growing around the bottom is the only vegetation left after the plowing.

On the north side of Edy road, hydric soils confirm, but hydrology and vegetation have been altered. No vegetation was present.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded
PSS = palustrine scrub-shrub
y = seasonal
PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code # R-5**

LOCATION:

Legal: T 2S R 1W Section *

Other: Rock Creek

CLASSIFICATION: PEMy

SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 2,153,728 ft (49.4 ac)

COMMENTS:

Sec 29SE1/4
Sec 28SW1/4
Sec 33NW1/4

This is Rock Creek. This portion of Rock Creek is boarded on the north by SW Tualatin-Sherwood Road, and the Urban Growth Boundary on the south. This wetland has been disturbed and hydrologically manipulated over the years. Reed canary grass (*Phalaris arundinacea*) is the dominant species.

Wetland Classification Codes:
PFO = palustrine forested
PSS = palustrine scrub-shrub
PEM = palustrine emergent
k = artifically flooded
y = seasonal
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-6

LOCATION:

Legal: T 2S R 1W Section 29 1/4 SE

Other: West of Rock Creek

CLASSIFICATION: PEMc

SOIL:

Series: Aloha, Huberly **Subclass:** Aquatic Xerochrepts, Argixerolls Fragiaquepts

Color: 10 yr 3/1 with gleyed mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 1,029,573 sq ft (23.64 ac)

COMMENTS:

Disturbed area wetland. Vegetation is dominated by FACW and FACU species. Three flat terraces make up this wetland. Each terrace is approximately 5 feet higher in elevation than the eastern one. Soils range in color from 10 yr 3/1 to 7.5 yr 3/2 with gley (5/1) mottles. Wetland hydrology present across entire field, except southern end.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code # R-7**

LOCATION:

Legal: T 2S R 1W Section 29 1/4 SE, 1/16 SE, 1/32 NE

Other: Northern water treatment pond

CLASSIFICATION: PFOkzx

SOIL:

Series: not identified by SCS **Subclass:** NA

Color: N 4/ (Probably Cove soil)

HYDROLOGIC BASIN: Rock Creek

SIZE: 126,510 sq ft (2.90 ac)

COMMENTS:

Former water treatment facility. Now heavily vegetated with willow (Salix sp), cattail (*Typha latifolia*), and reed canary grass (*Phalaris arundinacea*). No longer contains open water as indicated by NWI and SCS maps.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-8

LOCATION:

Legal: T 2S R 1W Section 29 1/4 SE, 1/16 SE, 1/32 SE

Other: Southern water treatment pond

CLASSIFICATION: PFOkzx

SOIL:

Series: not identified by SCS **Subclass:** NA

Color: N 4/ (Probably Cove)

HYDROLOGIC BASIN: Rock Creek

SIZE: 144,034 sq ft (3.31 ac)

COMMENTS:

Former water treatment pond. Has opening on northeast side to Rock Creek. Heavily vegetated now with reed canary grass (*Phalaris arundinacea*), willow (*Salix*), and cattail (*Typha latifolia*). No longer contains open water as indicated on NWI and SCS maps.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-9

LOCATION:

Legal: T 2S R 1W Section 28 1/4 SW, 1/16 SW, 1/32 SW

Other: Southeast corner of Oregon Street and Tonquin Road

CLASSIFICATION: PEMy

SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 34,287 sq ft (0.79 ac)

COMMENTS:

Outside city limits. Small pond recently excavated (within last 6 months) below ground water. Vegetation is heavily grazed upon by cows, with the exception of softrush (*Juncus effusus*).

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-10

LOCATION:

Legal: T 2S R 1W Section 33 1/4 NW, 1/16 NW,

Other: East of Murdock Road. Tributary to Rock Creek

DEN

CLASSIFICATION: PEMyx

SOIL:

Series: N/A **Subclass:** Xerochrepts-Rock outcrop

Color: 10 yr 3/1

HYDROLOGIC BASIN: Rock Creek

SIZE: 29,660 sq ft (0.68 ac)

COMMENTS:

According to USGS maps, there was a small drainage running on the west side of Murdock Road down to Rock Creek. This drainage has been re-routed with the development of a housing subdivision and Murdock Apartments. Currently this tributary crosses Murdock Creek and is R-10. A small pond has formed where the creek makes a northern turn. Soils are non-hydric with hydric inclusions. Hydrophytic vegetation is growing along the water course.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code # R-11**

LOCATION:

Legal: T 2S R 1W Section 32 1/4 NE, 1/16 NE

Other: Tributary to Rock Creek west of Murdock Road

CLASSIFICATION: PEMyx

SOIL:

Series: Briedwell, Cove **Subclass:** Ultic Haploxerolls, Vertic Haplaquolls

Color: 10 yr 3/1

HYDROLOGIC BASIN: Rock Creek

SIZE: 20,188 sq ft (0.46 ac)

COMMENTS:

See R-10. This part of the small drainage has been excavated. Hydrophytic vegetation (reed canary grass [*Phalaris arundinacea*], cattail [*Typha latifolia*]) is found only within the well defined banks, even though hydric soils extend further.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-12

LOCATION:

Legal: T 2S R 1W Section 32 1/4 SE, 1/16 NE

Other: Roy Street Park

DEN

CLASSIFICATION: PEMyx

SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 10,785 sq ft (0.25 ac)

COMMENTS:

Southern segment of R-11 and R-10. Excavated for subdivision. Portion between R-12 and R-11 will be culverted and have a road over the top. The portion not excavated is covered by Blackberry (*Rubus discolor*), with reed canary grass (*Phalaris arundinacea*) at the very southern end. Because this wetland will be filled upon completion of the construction, this wetland has been removed from the LWI (Concurrence with DSL on May 12, 1992).

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-13

LOCATION:

Legal: T 2S R 1W Section 32 1/4 SE, 1/16 NE, 1/32 SE,

Other: Roy Street Park

CLASSIFICATION: PEMy

SOIL:

Series: Quatama **Subclass:** Aquultic Haploxeraefs

Color: 10 yr 3/1 mottles, 10 yr 4/3 mottles, N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 19,047 sq ft (0.44 ac).

COMMENTS:

Pond surrounded by hills on all four sides. Reed canary grass (*Phalarais arundinacea*) and willow (*Salix* sp.) vegetate this small wetland area.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-14

LOCATION:

Legal: T 2S R 1W Section 32 1/4 SW, 1/16 NW, 1/32 SW,

Other: East of murdock, south of Barn (south of curve)

CLASSIFICATION: PEMy

SOIL:

Series: N/A **Subclass:** Xerochrepts-Rock outcrop

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 27,027 sq ft (0.62 ac)

COMMENTS:

Small depression in topography. Man-hole for sewer system on southern end. No connections with other wetlands found. This area is vegetated with reed canary grass (*Phalaris arundinacea*).

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code # R-15**

LOCATION:

Legal: T 2S R 1W Section 33 1/4 SW, 1/16 SW, 1/32 NE,

Other: Southeast of curve in Murdock Road

CLASSIFICATION: PEMy

SOIL:

Series: N/A **Subclass:** Xerochrepts-Rock outcrop

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 91,478 sq ft (2.10 ac)

COMMENTS:

Pond surrounded by hills on all sides. No connections with other wetlands found. This area is vegetated with reed canary grass (*Phalaris arundinacea*), aster (*Aster* sp.), and curly dock (*Rumec crispa*).

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded
PSS = palustrine scrub-shrub
y = seasonal
PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-16

LOCATION:

Legal: T 2S R 1W Section 32 1/4 SE, 1/16 NE, 1/32 SE

Other: South of Sunset Road and Murdock Road intersection

CLASSIFICATION: PFOyh

SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 38,428 sq ft (0.88 ac)

COMMENTS:

Possible headwater for R-17. Murdock Rd. has separated the two without a culvert connection. This small area is diked by Murdock Road. This area is vegetated with Oregon ash (*Fraxinus latifolia*), reed canary grass (*Phalaris arundinacea*), and curly dock (*Rumex crispa*).

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded

PSS = palustrine scrub-shrub
y = seasonal

PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-17

LOCATION:

Legal: T 2S R 1W Section *

Other: Creek east of Murdock Road.

CLASSIFICATION: PEMy

SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 114,055 sq ft (3.31 ac)

COMMENTS:

*Sec 32 SE 1/4, SE 1/16, NE 1/32
Sec 33 SW 1/4, SW 1/16, SW 1/32

Wide wetland on valley floor. The northern end is completely dominated by Himalayan blackberry (*Rubus discolor*). Reed canary grass (*Phalaris arundinacea*) dominates where it gets wider. On the southern city limits a property owner has diked it to form a year round lake for aesthetic purposes in their back yard. South of the impounded lake, the drainage is diked again by a driveway crossing. The driveway contains a culvert that is too small to handle the amount of water that flows down this drainage.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded
PSS = palustrine scrub-shrub
y = seasonal
PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-18

LOCATION:

Legal: T 2S R 1W Section 29 1/4 SE 1/16 SW 1/32 SW

Other:

DEQ

CLASSIFICATION: PFOyx

SOIL:

Series: Verboort **Subclass:** Typic Argialbolls

Color: 10 yr 2/1, 2/2 with mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 33,773 sq ft (0.78 ac)

COMMENTS:

Small creek that flows through a walnut and apple tree orchard. Slough sedge (*Carex obnupta*) and willow (*Salix* sp.) line the creek bed and flood plains. The creek has been excavated on the southern side. Where hydric soils end, so does hydrophytic vegetation. Red alder (*Alnus rubra*) and sword fern (*Polystichum munitum*) line the banks. Culverted on northeastern end. Could not final northern end of culvert. Probably outfalls somewhere in R-6. An additional man-hole was located further north of R-6 culvert, but no culvert outfall was located.

Wetland Classification Codes:
PFO = palustrine forested
k = artifically flooded
PSS = palustrine scrub-shrub
y = seasonal
PEM = palustrine emergent
z = intermittently

WETLAND SUMMARY SHEET

Date of Field Verification: May 19, 1992 **Wetland Code #** R-19

LOCATION:

Legal: T 2S R 1W Section 32 1/4 NW, 1/16 NE,

Other:

CLASSIFICATION: PEMy

SOIL:

Series: Verboort **Subclass:** Typic Argialbolls

Color: 10 yr 2/1

SIZE: 27,748 sq ft (0.64 ac)

COMMENTS:

Obviously R-19 and R-18 were once connected. Mill has an outfall into R-18 that supplies some water to small creek. No culvert opening was found for the eastern end of R-19. R-19 is a small wetland located in a depression. Culvert found under road to farm yard on the west, but wetland limits do not extend that far. Area is mowed.

Wetland Classification Codes:
PFO = palustrine forested
PSS = palustrine scrub-shrub
PEM = palustrine emergent
k = artifically flooded
y = seasonal
z = intermittently

APPENDIX E

Routine On-site Data Forms

David Evans and Associates, Inc.
2828 SW Corbett Avenue, Portland Oregon 97201 (503) 223-6663 FAX (503) 223-2701

WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 1
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Riparion corridor

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Fraxinus latifolia	FACW	H	20
2 Salix hoolariana	FACW	H	40
3 Pseudotsuga menziesii	-	T	10
4 Spiraea douglasii	FACW	T	40
5 Rubus spectabilis	FAC	S	10
6		S	
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 60

SOILS

Series/Phase: Hillsboro
Is the soil on the hydric soils list? Y/N N — Undetermined
Matrix Color? 10YR 3/2 — Soil Mottled? Y/N Y — Mottle Color? bright — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N Y
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y — 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y — 1987; Y/N Y
Rationale: There is water running in the creek. Soils are saturated to the toe of the slope. Wetland limits are confined to the toe of the slope.

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 2
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Vegetation has been slightly altered from grazing. Riparion corridor.

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Pseudotsuga menziesii	-	T	40
2		H	20
3			
4			
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 0

SOILS

Series/Phase: Xenohrepts & Haploxerolls
Is the soil on the hydric soils list? Y/N ____ Undetermined ____
Matrix Color? 10YR 3/3 Soil Mottled? Y/N N Mottle Color? ____ Gleyed? Y/N N
Other hydric soil indicators: ____

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation: N

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N N
Is the hydric soil criterion met? Y/N N
Is the specific hydrology criterion met? 1989; Y/N N — 1987; Y/N N
Is this plant community a wetland? 1989; Y/N N — 1987; Y/N N
Rationale: Riparion boundry is limited to the toe of the slope.

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 3
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Forested stand

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Pseudotsuga menziesii	-	T	80
2		T	80
3		S	40
4		S	80
5		H	
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 40

SOILS

Series/Phase: Hillsboro
Is the soil on the hydric soils list? Y/N N — Undetermined
Matrix Color? 10YR 3/3 — Soil Mottled? Y/N N — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? >20 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N N
Is the hydric soil criterion met? Y/N N
Is the specific hydrology criterion met? 1989; Y/N N — 1987; Y/N N
Is this plant community a wetland? 1989; Y/N N — 1987; Y/N N
Rationale: Upland forested area

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 4
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Cattle grazing in it.

Do normal environmental conditions exist at the plant comunity? Y/N N
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N Y

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Juncus effusus	FACW+	H	40
2		H	80
3			
4			
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 100

SOILS

Series/Phase: Wapato
Is the soil on the hydric soils list? Y/N Y — Undetermined
Matrix Color? 10YR 2/1 — Soil Mottled? Y/N N — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? at 10 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y — 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y — 1987; Y/N Y
Rationale: Cedar Creek itself has been ditched and is culverted in this area.

David Evans and Associates, Inc.
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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 6
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Forested riparion area

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Acer macrophyllum	FACU	T	20
2		T	40
3		T	80
4		H	80
5		H	40
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 40

SOILS

Series/Phase: Wapato
Is the soil on the hydric soils list? Y/N Y — Undetermined
Matrix Color? 10YR 3/3 — Soil Mottled? Y/N N — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators: Soils are 10 YR 2/1 inside the creek bed, 3/3 on the bank.

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation: Water running in the creek.

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N N
Is the hydric soil criterion met? Y/N N
Is the specific hydrology criterion met? 1989; Y/N Y — 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N N — 1987; Y/N N
Rationale: Hydrophytic vegetation is met because it is a Riparion creek bed. Wetland is restricted to the top of the bank.

David Evans and Associates, Inc.
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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 7
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Pasture, vegetation has been grazed.

Do normal environmental conditions exist at the plant comunity? Y/N N
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N Y

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Juncus effusus	FACW+	H	20
2		H	90
3		T	10
4			
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 100

SOILS

Series/Phase: Huberly
Is the soil on the hydric soils list? Y/N Y — Undetermined
Matrix Color? 10YR 2/2 — Soil Mottled? Y/N Y — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators: Soils have seeps at 10 inches.

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? at 18 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y — 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y — 1987; Y/N Y
Rationale:

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 8
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: agricultural field but is not in production

Do normal environmental conditions exist at the plant comunity? Y/N N
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Bromus species	-	H	80
2		H	20
3			
4			
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 0

SOILS

Series/Phase: Huberly
Is the soil on the hydric soils list? Y/N Y — Undetermined
Matrix Color? 10YR 3/3 — Soil Mottled? Y/N N — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? None
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N N
Is the hydric soil criterion met? Y/N N
Is the specific hydrology criterion met? 1989; Y/N N — 1987; Y/N N
Is this plant community a wetland? 1989; Y/N N — 1987; Y/N N
Rationale:

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 9
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Forested area, former drainage, now sheep pasture.

Do normal environmental conditions exist at the plant comunity? Y/N N
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N Y

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Thuja plicata	FAC	T	20
2		T	80
3		S	20
4		S	80
5		H	10
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 100

SOILS

Series/Phase: Huberly
Is the soil on the hydric soils list? Y/N Y — Undetermined
Matrix Color? 10YR 2/1 — Soil Mottled? Y/N N — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N Y — Soil Saturated? Y/N Y
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y — 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y — 1987; Y/N Y
Rationale:

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 10
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Forested riparion area

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Pseudotsuga menziesii	-	T	20
2		T	80
3		T	20
4		S	40
5		H	40
6		S	5
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 25

SOILS

Series/Phase: Huberly
Is the soil on the hydric soils list? Y/N Y — Undetermined
Matrix Color? 10YR 2/2 — Soil Mottled? Y/N Y — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation: Creek is dry but there are cracked soils and s

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y — 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y — 1987; Y/N Y
Rationale: On edge of forested wetland.

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham
Plot or Pit No. 11
Applicant/Owner: City of Sherwood
Date: 5/27/92
County: Washington
State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Field

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Juncus effusus	FACW+	H	35
2		H	80
3			
4			
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 100

SOILS

Series/Phase: Huberly
Is the soil on the hydric soils list? Y/N Y Undetermined
Matrix Color? 10YR 2/1 Soil Mottled? Y/N N Mottle Color? Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N Soil Saturated? Y/N N
Depth to free standing water in test pit? at 18 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y 1987; Y/N Y
Rationale: Wet swale. Impounded by Sunset Blvd.

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 12
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Field being taken over by Scotch broom.

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N Y

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Festuca arundinacea	FACU-	H	80
2		S	40
3			
4			
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 0

SOILS

Series/Phase: Quatam
Is the soil on the hydric soils list? Y/N N — Undetermined
Matrix Color? 10YR 3/4 — Soil Mottled? Y/N N — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation: No

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N N
Is the hydric soil criterion met? Y/N N
Is the specific hydrology criterion met? 1989; Y/N N — 1987; Y/N N
Is this plant community a wetland? 1989; Y/N N — 1987; Y/N N
Rationale:

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham
Plot or Pit No. 13
Applicant/Owner: City of Sherwood
Date: 5/27/92
County: Washington
State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Stella Olson Park

Do normal environmental conditions exist at the plant comunity? Y/N N
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N Y

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Typha latifolia	OBL	H	100
2		H	80
3		T	30
4		T	80
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 100

SOILS

Series/Phase: Xerochrepts & Haploxerolls
Is the soil on the hydric soils list? Y/N N Undetermined
Matrix Color? N4 Soil Mottled? Y/N N Mottle Color? Gleyed? Y/N Y
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N Soil Saturated? Y/N Y
Depth to free standing water in test pit? at 5 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y 1987; Y/N Y
Rationale:

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 14
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Agriculturely disturbed site

Do normal environmental conditions exist at the plant comunity? Y/N N
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N Y

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Vicia sativa	-	H	20
2		H	40
3		H	10
4			
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 0

SOILS

Series/Phase: Quatam
Is the soil on the hydric soils list? Y/N N — Undetermined
Matrix Color? 10YR 3/3 — Soil Mottled? Y/N N — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N N
Is the hydric soil criterion met? Y/N N
Is the specific hydrology criterion met? 1989; Y/N N — 1987; Y/N N
Is this plant community a wetland? 1989; Y/N N — 1987; Y/N N
Rationale: This is a upland area

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 15
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Forested area

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N Y

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Thuja plicata	FAC	T	20
2		T	80
3		S	20
4		S	40
5		H	10
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 100

SOILS

Series/Phase: Xerochrepts & Haploxerolls
Is the soil on the hydric soils list? Y/N N — Undetermined
Matrix Color? 10YR 2/2 — Soil Mottled? Y/N Y — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N Y
Depth to free standing water in test pit? at 16 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y — 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y — 1987; Y/N Y
Rationale: This is a forested wetland. The hydrology has been impounded by the normal railroad tracks.

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 16
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Large meadow

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Holcus lanatus	FAC	H	80
2		T	60
3		S	35
4		H	5
5		T	10
6		H	20
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 100

SOILS

Series/Phase: Huberly
Is the soil on the hydric soils list? Y/N Y — Undetermined
Matrix Color? 10YR 2/2 — Soil Mottled? Y/N Y — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N Y
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y — 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y — 1987; Y/N Y

Rationale: Soil is cracked, moist to wet soils at 18 inches. The soil is very cracked on the surface. Rating on Wild life habitat would be high given the adjancey to a forested and this really large wet meadow area. The wet meadow is also bordered by a dry meadow.

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham
Plot or Pit No. 17
Applicant/Owner: City of Sherwood
Date: 5/27/92
County: Washington
State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Dry meadow area

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Festuca arundinacea	FACU-	H	80
2		H	20
3		H	40
4		H	50
5		H	20
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC?

SOILS

Series/Phase: Quatam
Is the soil on the hydric soils list? Y/N N Undetermined
Matrix Color? 10YR 3/3 Soil Mottled? Y/N N Mottle Color? Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N Soil Saturated? Y/N N
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation: N

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N N
Is the hydric soil criterion met? Y/N N
Is the specific hydrology criterion met? 1989; Y/N N 1987; Y/N N
Is this plant community a wetland? 1989; Y/N N 1987; Y/N N
Rationale:

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 18
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions:

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Carex obnupta	OBL	H	90
2		H	20
3		H	90
4			
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 100

SOILS

Series/Phase: Huberly
Is the soil on the hydric soils list? Y/N Y — Undetermined
Matrix Color? 10YR 2/1 — Soil Mottled? Y/N Y — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N Y — Soil Saturated? Y/N Y
Depth to free standing water in test pit? at 10 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y — 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y — 1987; Y/N Y
Rationale: Soil is damp on the surface

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham
Plot or Pit No. 19
Applicant/Owner: City of Sherwood
Date: 5/27/92
County: Washington
State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Heavily grazed pasture

Do normal environmental conditions exist at the plant comunity? Y/N N
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N Y

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Phalaris arundinacea	FACW	H	80
2		H	40
3		H	100
4			
5			
6			
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 100

SOILS

Series/Phase: Wapato
Is the soil on the hydric soils list? Y/N Y Undetermined
Matrix Color? 10YR 2/2 Soil Mottled? Y/N Y Mottle Color? bright red Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N Soil Saturated? Y/N @ 18"
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation: Wet at 18 inches

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N Y 1987; Y/N Y
Is this plant community a wetland? 1989; Y/N Y 1987; Y/N Y
Rationale: Saying yes to hydrology based on plants and vegetation.

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WETLAND ROUTINE ONSITE DETERMINATION DATA SHEET

Project Location: Cedar Creek Basin
Field Investigator(s): Susan Counningham — Plot or Pit No. 20
Applicant/Owner: City of Sherwood — Date: 5/27/92
County: Washington — State: OR

Prevailing Weather Conditions: Sunny
General Site Conditions: Forested riparion corridor.

Do normal environmental conditions exist at the plant comunity? Y/N Y
Has the vegetation, soils, and/or hydrology been significantly disturbed? Y/N N

VEGETATION

Dominant Plant Species:	Indicator Status	Stratum	% Cover
1 Pinus ponderosa	FACU-	T	40
2		T	10
3		H	20
4		S	30
5		T	80
6		S	40
7			
8			

Percent of dominant species that are OBL, FACW, and/or FAC? 80

SOILS

Series/Phase: Mc Bee
Is the soil on the hydric soils list? Y/N N — Undetermined
Matrix Color? 10YR 2/1 — Soil Mottled? Y/N N — Mottle Color? — Gleyed? Y/N N
Other hydric soil indicators:

HYDROLOGY

Surface Inundated? Y/N N — Soil Saturated? Y/N N
Depth to free standing water in test pit? >18 inches
Other field evidence of surface inundation or soil saturation:

DEA WETLAND DETERMINATION

Is the hydrophytic vegetation criterion met? Y/N Y
Is the hydric soil criterion met? Y/N Y
Is the specific hydrology criterion met? 1989; Y/N N — 1987; Y/N N
Is this plant community a wetland? 1989; Y/N Y — 1987; Y/N Y
Rationale:

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Susan Cunningham Date: 1-13-92
Project/Site: City of Sherwood State: OR County: Washington
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes _____ No ✓
Matrix Color: 10 YR 4/1 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: _____
Is the soil saturated? Yes _____ No ✓
Depth to free-standing water in pit/soil probe hole: 6"
List other field evidence of surface inundation or soil saturation.
oxidized root channels and rhizospheres
Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

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[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

* For all data forms ">" = greater than; "<" = less than.

pit 2

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Susan Cunningham Date: 1-13-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back) Evidence of historic grazing

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Unidentified grass		Herb	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: Hydrophytic vegetation criterion is indeterminate at this time pending a positive vegetative determination in the summer

SOILS

Series/phase: Subgroup:[2] Xeric Dystrochrepts - Rock outcrop
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 4/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.
Oxidized root channels
Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: Area is within flood plain of Rock Creek. Area gets wet, but not long enough to support hydrophytic vegetation

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: absence of hydrology and vegetation

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 3

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): S. Cunningham Date: 1-13-92
Project/Site: City of Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back) Evidence of historic grazing

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Unidentified grass		Herb	11.		
2. Phalaris arundinacea	FACW	Herb	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 50
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: need positive identification in spring

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 4/1 Mottle Colors: ____
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: ____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 8"
List other field evidence of surface inundation or soil saturation.
oxidized rhizospheres
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: Vegetation should be rechecked in spring for positive identification of grasses

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 4

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-13-92
Project/Site: Sherwood Lndf State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Thuja plicata	FAC	T	11.		
2. Berberis aquifolium	-	S	12.		
3. Polystichum munitum	-	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 33
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: N/A Subgroup:[2] Xerochrept - Rock outcrop
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 3/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 5

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-13-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: ____ Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

Area has been fenced into grazing pastures. Cow tracks and other evidence of livestock presence. Historic grazing.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Ranunculus repens	FACW	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: ____

SOILS

Series/phase: Cove Subgroup:[2] Typic Hapiaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ____ Gleyed? Yes ✓ No ____
Matrix Color: N 4/ Mottle Colors: ____
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 6"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: ____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 6

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-13-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-11
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Small drainage has been excavated - Wetland condition found only within well defined banks.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Plants outside ditch			11.		
2. have been mowed.			12.		
3. Too hard to identify			13.		
4. after disturbance			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale:

SOILS

Series/phase: Bridwell Subgroup:[2] Ultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 3/3 Mottle Colors: not observed
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: With the excavation of the ditch, the hydrology has been altered. Wetland conditions occur only within well defined banks of creek.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 7

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LD1 State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Drainage excavated recently for placement of culverts for Subdivision

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Coe Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 3/2 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale: not mottled.

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.
Water drainage patterns.
Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: This is the top end of small drainage. Area will be cultivated in near future.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydrology was not present. Small drainage corridor.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 8

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-14
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100 %
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: _____ Subgroup:[2] Xerochrepts - Rock outcrop
Is the soil on the hydric soils list? Yes _____ No ✓ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes ✓ No _____
Matrix Color: N 4/ Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No _____ Surface water depth: 2"
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 9

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LAN1 State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Cirsium vulgare	FAC	H	12.		
3. Rumex acetosella	FACU	H	13.		
4. Cytisus scoparius	–	S	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 25 %
Is the hydrophytic vegetation criterion met? Yes _____ No ✓
Rationale: _____

SOILS

Series/phase: _____ Subgroup:[2] Xerochrepts - Rock outcrops
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes _____ No ✓
Matrix Color: 5 yr 3/3 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes _____ No ✓
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: _____
Is the soil saturated? Yes _____ No ✓
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes _____ No ✓
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No ✓
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 10

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-16
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Construction of Murdock Rd has diked this area and left it isolated

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix sp	FACW	T	11.		
2. Rosa sp	NI	S	12.		
3. Phalaris arundinacea	FACW	H	13.		
4. Bumex crispa	FACW	H	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100 %
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: _____

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: 0-8" 10yr 3/1; >8" N4/ Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 11

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood UW1 State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-17
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Construction of Murdock R has altered hydrology and vegetation.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Rubus discolor	FACU-	S	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC Ø
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: _____

SOILS

Series/phase: Core Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N 4/ Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 0 to >8"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: Blackberry is out-competing other vegetation. Growing along [illegible], very dense.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pt 12

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-17
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

Construction of Murdock Rd housing developments, and diking of creek further downstream has affected hydrology

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Scirpus microcarpus	OBL	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 4"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-17
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back) Diked drainage to form pond in private yard.
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Populus trichocarpa	FAC	T	11.		
2. Salix sp	FACW	T	12.		
3. Scirpus microcarpus	OBL	H	13.		
4.			14.		
5. * other vegetation outside			15.		
6. water has been mowed			16.		
7. and landscaped for			17.		
8. aesthetic purposes.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Coe Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N 4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 7/8"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: Pit on wetland edge. Would expect the hydrology criteria to be met in a growing season.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: Wetland inside banks of embanked pond. Wetland continues beyond via culvert under Water Control Structure.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 14

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood Hwy State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-15
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Aster species	FACW-OBL	H	12.		
3. Rumex crispus	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: ____

SOILS

Series/phase: ____ Subgroup:[2] Xerochrept - Rock outcrop
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N4/ Mottle Colors: ____
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 1/4"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 2"
List other field evidence of surface inundation or soil saturation.
Sulfurous smell
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: ____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 15

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood NWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-13
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Glyceria sp (?)	OBL	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3. Salix sp	FACW	T	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Quistamo Subgroup:[2] Aquultic Haploxeralfs
Is the soil on the hydric soils list? Yes _____ No ✓ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes ✓ No _____ Gleyed? Yes _____ No ✓
Matrix Color: 10yr 4/2 Mottle Colors: gleyed in color
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No _____ Surface water depth: 2"
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 7-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea (PHAR)	FACW	H	11.		
2. unidentified grass	?	H	12.		
3. Rubus ursinus	NI	S	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: Need positive identification on unknown grass to make a determination

SOILS

Series/phase: Quatama Subgroup:[2] Aquultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 4/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydrology and soils are not hydric.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 17

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: ____ Plant Community #/Name: R-17
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Cow pasture. Recent excavation down to ground water to form pond for cows. This has affected hydrology.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Juncus effusus	FACW	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

heavily grazed

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: ____

SOILS

Series/phase: Cor Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: 0-8" 10yr 3/1; >8" N4/ Mottle Colors: ____
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 8"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: ____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pt 18

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

The culvert at ~~Ex~~ Augon Street crossing of Rock Creek is too small to handle flow. Rock Creek is, in a sense, dike at this point

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix sp	FACW	T	11.		
2. Ranunculus repens	FACW	H	12.		
3. Carex stipata	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Subgroup:[2] Xerochrept - Rock outcrop
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 0-4"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Dot 19

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood UNI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-8
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Abandoned water treatment pond.
Yes _____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No _____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix sp	FACW	T	11.		
2. Typha latifolia	OBL	H	12.		
3. Phalaris arundinacea	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Not identified. Subgroup:[2] _____
Is the soil on the hydric soils list? Yes _____ No _____ Undetermined ✓
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes ✓ No _____
Matrix Color: N 4/ Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No _____ Surface water depth: 2"
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 20

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Berm surrounding water detension pond.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Agrostis tenuis	FAC	H	11.		
2. Cirsium arvense	FACU	H	12.		
3. Plantago lanceolata	FACU+	H	13.		
4. Rubus lacinatus	FACU+	S	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 25
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: undetermined Subgroup:[2]
Is the soil on the hydric soils list? Yes ____ No ____ Undetermined ✓
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 4/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 21

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

May have been affected by placement of retension ponds.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Dyssalus sylvestris	NI	H	12.		
3. Juncus effusus	FACW+	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100 %
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Coe Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N 4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: 0'
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 2"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 22

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood WA State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Unidentified grass		H	11.		
2. Cirsium vulgare	FACU	H	12.		
3. Rosa sp	NI	S	13.		
4. Daucus carota	—	H	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ≤33
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: Need positive identification of unknown grass to make a determination.

SOILS

Series/phase: Briedwell Subgroup:[2] Aldic Haploxerolls
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 5yr 4/1 Mottle Colors: not assessed - dull
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydrology not present. Vegetation leaning towards upland scale.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood (LWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

Hydrology is affected by [illegible] of Oregon State [illegible]

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Coe Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes ✓ No _____
Matrix Color: N 4/ Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Shirwood LWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix sp	FACW	T	11.		
2. Rosa sp	NI	S	12.		
3. Phalaris arundinacea	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Wapato Subgroup:[2] Fluvaquentic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes ✓ No _____ Gleyed? Yes _____ No ✓
Matrix Color: 10yr 2/1 Mottle Colors: bright mottles
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 25

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood Mill State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Populus trichocarpa	FAC	T	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Wapato Subgroup:[2] Fluvaquentic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/2 Mottle Colors: Strong bright mottles.
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 6"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood UA1 State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea L.	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: 0-8" 10yr 3/1; >8" N4/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Susan Cunningham Date: 1-14
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-6
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Site has been disturbed by historic agricultural use. The site has drainage systems and be terraced to alter hydrology,

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Juncus sp.	FACW	H	11.		
2. Daucus carota	—	H	12.		
3. Agrostis tenuis	FAC	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 66
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Aloha Subgroup:[2] Aquic Xerochrepts
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/1 Mottle Colors: mottles are gley in color
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 1"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: Although a disturbed site from historic agricultural use, still meets wetland criteria.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Susan Cunningham Date: 1-14-92
Project/Site: Sherwood WI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-6
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ___ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ___ (If yes, explain on back)

Site has been altered by historic agricultural uses. There is a drainage system, and the land has been terraced to alter hydrology.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix species	FACW	T	11.		
2. Pseudotsuga menziesii	–	T	12.		
3. Daucus Carota	–	H	13.		
4. Agrostis tenuis	FAC	H	14.		
5. Cladonia pyxidata	NI	fungus	15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 50
Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Rationale: FAC to wetter species make-up less dominate species in plot.

SOILS

Series/phase: Huberly Subgroup:[2] Typic Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined ___
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 7.5 YR 3/2 Mottle Colors: 5Y 5/1
Other hydric soil indicators: ___
Is the hydric soil criterion met? Yes ✓ No ___
Rationale: ___

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ___ Surface water depth: 2"
Is the soil saturated? Yes ✓ No ___
Depth to free-standing water in pit/soil probe hole: ___
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ___
Rationale: ___

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ___
Rationale for jurisdictional decision: Although a disturbed site, it still meets wetland criteria.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 29

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Plantago sp.	FAC-FACW	H	11.		
2. Agrostis tenuis	FAC	H	12.		
3. Daucus carota	—	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ≥ 33
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: Not positive identification of unknown grass to make determination.

SOILS

Series/phase: Quatama Subgroup:[2] Aquultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 4/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 7/8"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydric soils and hydrology are not present.

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[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 30

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Construction of RR crossing and retension pond [illegible] formed this little [illegible]

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris Brunsdinacea	FACW	H	11.		
2. Typha latifolia	OBL	H	12.		
3. Rosa sp	NI	S	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: _____

SOILS

Series/phase: Aloha Subgroup:[2] Aquatic Xerochrupts
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 2/2, 2/1 Mottle Colors: bright strong mottles
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 2"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-2
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, expiain on back)

There has been some excavation of rock cuts by Hi road construction on Edy Rd.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Hedera helix	—	V	11.		
2. Rubus discolor	FACW	S	12.		
3. Rubus lacinatus	FACW-	S	13.		
4. Populus trichocarpa	FAC	T	14.		
5. Salix spp	FACW	T	15.		
6. Pseudotsuga menziesii	—	T	16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 33
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: Wapato Subgroup:[2] Fluvaquentic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Vegetation and hydrology not present

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-1
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: ____

SOILS

Series/phase: Quatama Subgroup:[2] Aquetic Haploxeralfs
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 4/1 Mottle Colors: bright mottles
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 7/8"
List other field evidence of surface inundation or soil saturation.
Oxidized root channels
Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: 10 feet north of this pit - further into the Phalaris field - hydrology (standing water) can be found within 8" of the surface.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: On edge of wetland.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 7-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Site has been partially filled for access road to perform agricultural use

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Rubus discolor	FACWT	S	11.		
2. Plantago lanceolata	FACWT	H	12.		
3. Quercus garryana	—	H	13.		
4. Crocosmia aurea	FACW	H	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC Ø
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: Quatama Subgroup:[2] Aquultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 4/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LW1 State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Unidentified grass		H	11.		
2. Daucus carota	—	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ≤50
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: Positive indentification of unknown grass needed to make determination

SOILS

Series/phase: Huberley Subgroup:[2] Argixerolls Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/2 Mottle Colors: ____
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ____ No ✓
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydric soils and hydrology not present.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood WB1 State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-4
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Ditch down field and recent plowing has altered hydrology

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. No vegetation due to			11.		
2. plowing			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: _____

SOILS

Series/phase: Huberley Subgroup:[2] Typic Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined _____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 3/2 Mottle Colors: bright (exact color not assessed)
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: Soils are hydric below plowed layer.

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 10"
List other field evidence of surface inundation or soil saturation.
Glistening sides at 5"
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: disturbed Wetland.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 36

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LW1 State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Area plowed. No vegetation.
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. no vegetation			11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: _____

SOILS

Series/phase: Quatama Subgroup:[2] Aquultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined _____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 3/3 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ____ No ✓
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood Loop State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-4
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Area plowed. No vegetation. Ditch altered, could have affected hydrology.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. No vegetation			11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ____
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: ____

SOILS

Series/phase: Huberly Subgroup:[2] Typic Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ____
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ____
Matrix Color: 10yr 3/1 Mottle Colors: ____
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 20"
List other field evidence of surface inundation or soil saturation.
Some standing water, but soil is not saturated. Ditch sides @ 10"
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: Disturbed wetland. Hydrology has been altered by construction of Tualatin Sherwood Rd. Hydrophytic vegetation has been replaced with grass seed mix.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood Unit State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back) Plowed field. Hydrology has been altered by ditching
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. No Vegetation			11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale:

SOILS

Series/phase: Aloha Subgroup:[2] Aquetic Xerochrepts
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 2/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: Aloha soil meets color criteria as a hydric soil, but drainage class and low water table do not meet SCS criteria for being listed as hydric.

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: greater than 18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: This plot is higher in elevation than plot #2. Water will probably not rise within 18" of the surface.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood WA State: OR County: WA
Applicant/Owner: ____ Plant Community #/Name: R-19
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Mowed.
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Ranunculus repens	FACW	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3. Unidentified grass		H	13.		
4. Populus trichocarpa	FAC	T	14.		
5. Willow sp.	FACW	T	15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ≥80
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: Mowed grass was not possible to identify

SOILS

Series/phase: Verboort Subgroup:[2] Typic Argiaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 2/2 Mottle Colors: bright
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 10"
List other field evidence of surface inundation or soil saturation.
Distended voids at 5"
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: ____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood WA State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-18
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Ditch through plowed field.
Yes _____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No _____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Carex obnupta	FACW	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Verboort Subgroup:[2] Typic Argialbolls
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes ✓ No _____
Matrix Color: 10yr 5/1 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: – _____ _____
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: >14"
List other field evidence of surface inundation or soil saturation.
Glistening sides at 10"
Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: Ditching has affected hydrology. Ditch is ~3.5 feet deep & 4' wide. Soil on banks is saturated to surface.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: Disturbed wetland. Wetland conditions exist outside of ditch, which do not contain hydric soils.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood WA State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-1S
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Creek has been excavated.
Yes _____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No _____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix species	FACW	T	11.		
2. Populus trichocarpa	FAC	T	12.		
3. Carex obnupta	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Verboort Subgroup:[2] Typic Argiaquolls
Is the soil on the hydric soils list? Yes _____ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes _____ No ✓
Matrix Color: 10YR 5/1 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No _____ Surface water depth: _____
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: 5"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood UGB State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Alnus rubra	FAC	T	11.		
2. Polystichum munitum	—	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 50
Is the hydrophytic vegetation criterion met? Yes _____ No ✓
Rationale: _____

SOILS

Series/phase: Quatama Subgroup:[2] _____
Is the soil on the hydric soils list? Yes _____ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes _____ No ✓
Matrix Color: 10yr 3/3 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes _____ No ✓
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: _____
Is the soil saturated? Yes _____ No ✓
Depth to free-standing water in pit/soil probe hole: 7/8"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes _____ No ✓
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No ✓
Rationale for jurisdictional decision: Pit taken within flood plain of the creek. This area is a forest riparian area, but not a wetland.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-6
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ___ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ___ (If yes, explain on back)

Flow control device installed years ago for access road to barns in abandoned orchards. Creek flows into culvert. Do not know where/if water leaves culvert.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Rationale: _____

SOILS

Series/phase: Aloha Subgroup:[2] Aquatic Xerochrepts
Is the soil on the hydric soils list? Yes ___ No ✓ Undetermined ___
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ___ No ✓ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 2/1 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No ___
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to free-standing water in pit/soil probe hole: 10"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ___
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ___
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood UGB State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Plantago lanceolata	FACU	H	12.		
3. Daucus carota	—	H	13.		
4. Cirsium arvense	FACU+	H	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 25
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: Hubberly Subgroup:[2] Typic Argiaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 3/2 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Soils and vegetation do not meet wetland criteria. As this is slightly higher in elevation, it is doubtful that the water table comes within 18" of the surface.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

APPENDIX F

Steeplechase Country Estates Wetland Delineation

performed by

Shapiro & Associates, Inc.

DAVID EVANS AND ASSOCIATES, INC.
A PROFESSIONAL SERVICES CONSULTING FIRM

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood (W1) State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Plowed area with ditch. Ditch is a very wide swale.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. No vegetation			11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: _____

SOILS

Series/phase: Aloha Subgroup:[2] Aquic Xerochrepts
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined _____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 2/2 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ____ No ✓
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: Not assessed during growing season. Doubtfull that water table rises within 18" of the surface here.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ____
Rationale for jurisdictional decision: This is a disturbed area. Both vegetation and hydrology are absent. Drainage system has on site has altered hydrology.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Jurisdictional Wetland Determination for Steeplechase Country Estates in Sherwood, Oregon

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April 3, 1990

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APPENDICES
Appendix A

I. INTRODUCTION

A. GENERAL SITE DESCRIPTION

The Steeplechase Country Estates site (SHAPIRO #318582) includes a number of parcels within the City of Sherwood (Section 31 and the northwest quarter of Section 6, Township 2 South, Range 1 West). The site lies between S.W. Pacific Highway (99W), Old Highway 99, and the Southern Pacific Railroad, and Sherwood High School (Figure 1).

Located within the Tualatin drainage basin, the site is characterized by gently undulating topography and finely branched water courses. A main tributary to Cedar Creek flows from west to east across the central portion of the site from S.W. Pacific Highway (99W) to the Southern Pacific railroad. Two side tributaries north and south of this main tributary also occur on the site. The main tributary is steeply incised in the western portion and a series of beaver ponds exists in the central portion. Other drainages exist in the extreme northern and southern portions of the site. In addition, three man-made ponds occur in the southern portion of the site. Much of the site has been or is currently used for pasture, crops, holly orchards, and hazelnut groves. A forested area with a drainage flowing through its southern end covers much of the northwest quarter of the site. Homes on several acres exist along Sunset Boulevard (Wilsonville Road).

B. WETLAND DEFINITION AND AUTHORITY

Pursuant to the Clean Water Act and through the Section 404 permitting process, the Corps of Engineers (Corps) has been given the responsibility and authority to regulate the discharge of dredged or fill materials into waters and adjacent wetlands of the United States (Federal Register, 1986).

Oregon State Division of State Lands (DSL) administers Oregon's Removal-Fill Permit Program. The following definition of wetlands is used by the Corps in the Section 404 permit program (Federal Register, 1980, 1982), Oregon DSL in Oregon's Removal-Fill permit program (State of Oregon, 1985) and Senate Bill 3 (State of Oregon, 1989):

> "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands inlcude swamps, marshes, bogs and similar areas."

Due to the site conditions that suggest wetlands are present, and federal and state regulations that control development activities in wetlands, the presence and extent of wetlands should be determined in order to assess the implication this may have on any future development plans.

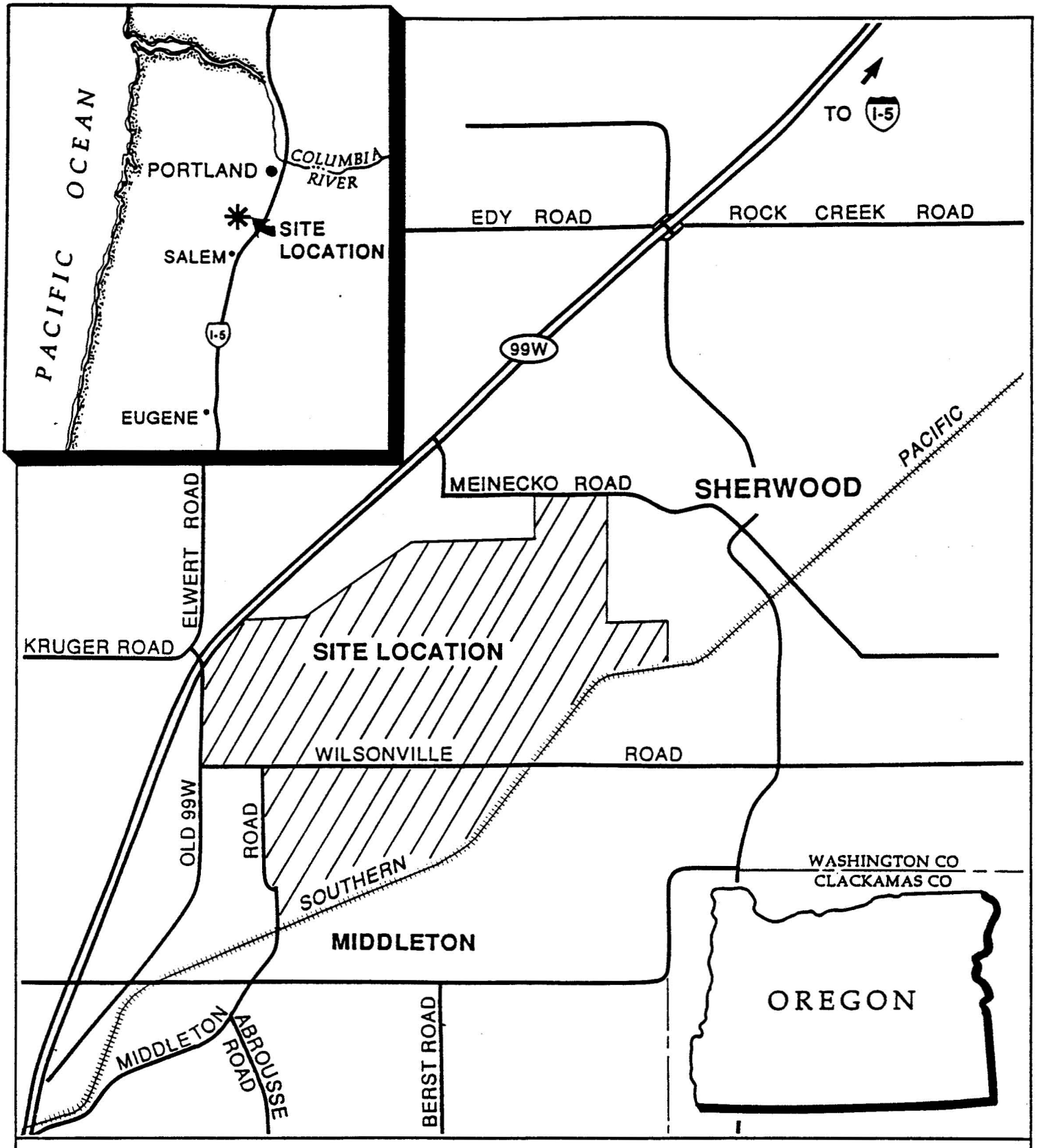


FIGURE 1

SITE VICINITY

NOT TO SCALE

STEEPLECHASE COUNTRY ESTATES
UNIFIED FEDERAL METHODOLOGY

SHAPIRO & ASSOCIATES, INC.

II. OBJECTIVE

The purpose of this study was to use methods suggested in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989) to determine the presence and extent of wetlands on the subject property in accordance with Section 404 of the Clean Water Act, Oregon's Removal-Fill permit program, and Oregon's Senate Bill 3. If wetlands were determined to be present, the wetland boundaries were delineated.

III. METHODOLOGY

The analysis of wetlands conducted on this site was based on the methodology developed by the Corps and other federal agencies for implementation of Section 404 of the Clean Water Act. This methodology is commonly referred to as the Unified Federal Methodology (Federal Interagency Committee for Wetland Delineation, 1989). Two levels of investigation have been conducted for the analysis of the wetlands on the subject property; (1) review and analysis of existing site-specific literature; and (2) a site specific investigation to adequately determine the presence and extent of wetlands. The methodologies used in each of these two tasks are described below.

A. LITERATURE REVIEW

A review of existing information was conducted to identify any wetlands or any site characteristics that would indicate wetlands on the subject property. Several valuable resource documents were available for preliminary review of the site conditions, including (see Reference Section for complete listing).

- Washington County Significant Natural Resources Map (1984)
- U.S. Fish and Wildlife Service National Wetland Inventory Map, Sherwood, Oregon Quadrangle (1981)
- U.S. Soil Conservation Service, Hydric Soils of the United States (1987)
- U.S. Soil Conservation Service, Soil Survey of Washington County, Oregon (1982)
- U.S. Soil Conservation Service, Washington County Hydric Soils List

Data sources were reviewed and used to gather preliminary information about the vegetative, soils and hydrologic characteristics of the site prior to the site investigation.

B. SITE-SPECIFIC INVESTIGATION

An Intermediate-level Onsite Determination Method (Federal Manual for Identifying and Delineating Jurisdictional Wetlands 1989, pp. 35-39) was

used to determine the wetland boundaries. Using this methodology, vegetative, soil and hydrologic parameters were examined for wetland characteristics.

In order to determine the presence and extent of existing wetlands on the site, representative sampling plots were established. The plots were located in the central portion of areas with homogeneous vegetation. A homogeneous area of vegetation can be composed of a single species, such as one species of grass, or can be comprised of a number of species that together make up a distinctive plant community. If an area of homogeneous vegetation extended over a range of topographic levels, a sampling plot was located within each topographic level. At each sampling plot, vegetation, soils, and hydrology field data were collected and recorded on a data form (see Appendix A).

After several plots were investigated, plant communities of similar composition and character were identified. Where these plant communities re-occurred, additional sampling points were not deemed necessary to accurately determine the presence and extent of wetland areas. Wherever new plant communities or community composition variation was observed, additional sampling points were established and the sampling procedure implemented.

1. Vegetation

Plants must be specifically adapted for life under saturated or anaerobic conditions to grow in wetlands. Such plants are commonly referred to as hydrophytic vegetation. The Corps and the U.S. Fish and Wildlife Service have determined the estimated probability of each plant species' occurrence in wetlands and have assigned an "indicator status" to each species which reflects their findings. Accordingly, plants may be categorized as obligate (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), or upland (UPL). Definitions for each indicator status are listed in Table 1. Species with an indicator status of OBL, FACW, or FAC are considered to adapted for life in saturated or anaerobic soil conditions.

Table 1

DEFINITIONS OF INDICATOR STATUS

Indicator Symbol	Definition
OBL	Obligate. Species that occur almost always (estimated probability >99%) in wetlands under natural conditions.
FACW	Facultative wetland. Species that usually occur in wetlnads (estimated probability 67 to 99%), but occasionally are found in nonwetlands.
FAC	Facultative. Species that are equally likely to occur in wetlands or nonwetlands (estimated probility 34-66%).

FACU — Facultative upland. Species that usually occur in nonwetlands (estimated probability 67-99%), but occasionally are found in wetlands.

UPL — Upland. Species that occur almost always in nonwetlands under normal conditions (estimated probability >99%).

NI — No indicator. Species for which insufficient information was available to determine an indicator status.

Sources: Federal Interagency Committee for Wetland Delineation, 1989. Reed, 1988.

At each sampling plot, vegetation was described by the percent cover of the different plant species occurring within the herb, shrub and tree strata. For each sampling plot, trees within a thirty foot radius, and shrubs within a five foot radius of the center of the plot were identified and recorded on the data form. All species within the plot were recorded in descending order of abundance and dominant species were determined. Dominant species are those that, when cumulatively totaled in descending order of abundance, immediately exceed 50% of the aerial cover for each vegetative stratum, plus any additional species individually representing 20% or more of the total aerial cover for each vegetative stratum. The indicator status of the dominant species within each vegetative strata was used to determine the presence of wetland vegetation.

A sampling plot was considered to have wetland vegetation if greater than 50% of the number of dominant species present have an indicator status of FAC, FACW, or obligate OBL. In addition, if 50% of the dominant species were FACU or FAC, and hydric soils and wetland hydrology were present, then the vegetation was identified as hydrophytic.

2. Soils

One characteristic of wetlands is hydric soils. Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile (USDA SCS, 1987). The SCS, in cooperation with the National Technical Committee for Hydric Soils (NTCHS), has compiled a list of hydric soils in the United States. The list identifies soil series mapped by the SCS that meet hydric soil criteria. A map unit of upland (non-wetland) soil may have inclusions of hydric soil, and vice versa. These inclusions may not be delineated on the SCS maps; therefore, field examination of soil conditions is important in order to determine if hydric soil inclusions exist.

Due to wet, anaerobic conditions, hydric soils exhibit certain characteristics that can be observed in the field. Such characteristics or indicators include: high organic content, accumulation of sulfidic material, greenish or bluish grey color (gley formation), spots or blotches of orange color (mottling), dark soil colors (low soil chroma). Hydric soil indicators are summarized in Table 2.

Table 2

HYDRIC SOIL INDICATORS

Hydric Indicator	Diagnostic Criteria
Organic content	. >50% by volume
Sulfidic material	. "Rotten egg" odor.
Soil color	. Mottling.
	. Dark soil matrix color.
	. Gleyed colors.
Water saturation	. Groundwater table at less than 1.5 feet from the surface for a significant period (usually a week or more) during the growing season.

Sources: Federal Interagency Committee for Wetland Delineation, 1989.
U.S.D.A. 1975.

Soil samples were obtained at each representative sampling plot either by digging a soil pit or using a soil auger to excavate down to a depth of at least 18 inches. Soil samples were then examined for hydric indicators. Organic content was estimated visually and texturally, sulfidic material was determined by the presence of sulfide gases ("rotten egg" odor), and soil colors were determined by using a Munsell soil color chart (Munsell Color, 1988). Munsell soil color charts standardize soil color by utilizing three color components: hue, value, and chroma. Additionally, if soils were found to be saturated within 18 inches of the surface during the field investigation, they were identified as hydric.

Hydric soils were assumed to be present in any sampling plot where the vegetation community consists of either all dominant species with an indicator status of obligate, or all dominant species with an indicator status of facultative wetland or obligate, and an abrupt wetland boundary exists, so that in those areas, soil data were not collected.

3. Hydrology

Water must be present in order for wetlands to exist; however, it need not be present throughout the entire year. Wetland hydrology is considered to be present when there is permanent or periodic inundation, or soil saturation for a significant period (usually a week or more) during the growing season (Federal Interagency Committee for Wetland Delineation, 1989).

Indicators of wetland hydrology, including areas of ponding or soil saturation, evidence of previous water inundation or saturation such as dry algae on bare soil or soil mottling along live root channels, and drainage patterns were examined at each sampling plot. Where positive indicators of wetland hydrology were observed, it was assumed that wetland hydrology occurs for a significant period of the growing season. Table 3 summarizes some of the hydrologic regimes that can be encountered and their wetland characteristics.

Table 3

HYDROLOGIC REGIMES AND WETLAND CHARACTERISTICS

Degree of Inundation or Saturation	Duration* of Inundation or Saturation	Wetland Characteristics
Permanently inundated**	100%	present
Semipermanently to nearly permanently inundated or saturated***	>75% - <100%	present
Regularly inundated or saturated	>25% - <75%	usually present
Seasonally inundated or saturated	>12.5% - <25%	often present
Irregularly inundated or saturated	>5% - <12.5%	often absent
Intermittently or never inundated or saturated	<5%	absent

*percent of growing season
**inundation > 6.6 ft. mean water depth
***inundation < or = 6.6 ft. mean water depth

Sources: Corps of Engineers Wetlands Delineation Manual, January 1987.
Clark and Benforado, 1981.

4. Wetland Determination

Vegetation, soil, and hydrology data for each sampling plot were examined to determine the presence or absence of wetlands. Under the Unified Federal Methodogy, if all three parameters exhibited wetland characteristics, or normally would have exhibited wetland characteristics, for a significant period (usually one week or more) during the growing season, then a positive

wetland determination was made for that area of homogeneous vegetation cover represented by the sampling plot. If any one of the parameters did not exhibit positive wetland indicators, the area was determined to be upland (nonwetland), unless problem or disturbed areas were encountered.

IV. RESULTS

The Steeplechase Country Estates site was investigated for the presence of wetlands February 21-23, 1990 and February 26-March 1, 1990. Ten wetland, upland, and riparian habitat types occur on the site and include grassland, scrubland, mixed and coniferous forests, orchards, forested wetland, scrub-shrub wetland, emergent marsh, and open water. All of these habitat types were investigated. Transects spaced approximately 150 apart were walked through forested areas. Nineteen sampling plots were established within areas of homogeneous vegetation and are shown in Figure 2. The vegetation, soils, and hydrology data collected at each sampling plot are recorded on data forms and presented in Appendix A. The following discussion summarizes the field data for the three wetland criteria.

A. FEDERAL METHODOLOGY FOR WETLAND DELINEATION INVESTIGATION

1. Vegetation

A variety of vegetative communities exist on the site and make up upland, wetland, and riparian habitat types. Wetlands occur along the main tributary to Cedar Creek and its northern and southern side tributaries, in a depressional swale in the forested area in the northern portion of the site, in a drainage swale at the northern end of the site, and in drainage swales and man-made ponds in the southern half of the site. The location, extent, and habitat types of five wetland systems and an isolated wetland are dicussed below. Numbered wetland systems discussed below are identified on Figure 4. A description of the species composition of wetland and upland habitat types follows this discussion.

Wetland System Descriptions

Wetland System I: A drainage swale in the northwestern corner of the site drains from west to east and then northward off of the site into a pond. Emergent marsh exists on the site while a forested and open water wetland lies north of the property boundary. This drainage eventually flows into Cedar Creek to the north of Highway 99W.

Wetland System II: A forested and emergent wetland system exists in the forested area in the northern portion of the site. Emergent marsh is present at the eastern end of this system in a low-lying swale. This system ends in a drain located in a thin band of young deciduous forest between fields. The pasture to the east of the drain has been effectively drained. No surface hydrological connection to either the northern side

tributary of the main tributary to Cedar Creek or the main tributary exists on the site. Water is probably piped from this drain south to the main tributary to Cedar Creek.

Wetland System III: The largest wetland system on the site is associated with the main tributary to Cedar Creek and its northern and southern side tributaries. The northern side tributary to the main tributary on the site begins as an intermittent drainage on the west side of the forested area in the northern portion of the site. Forested swamp extends from the headwaters of this tributary to its confluence with the main tributary. An emergent marsh in a low-lying drainage swale west of this forested area drains into a drainage ditch along the forest-shrubland border and eventually joins the northern side tributary.

The main tributary to Cedar Creek flows through a steeply incised ravine at the western end of the site. Coniferous forest occurs on the steep slopes of the ravine and on the flat ground above the creek. From the steeply incised reach of the creek to its confluence with the southern side tributary, a series of beaver ponds exist. Forested wetland extends from where the ravine becomes less incised and the first large beaver pond to the east. Scrub-shrub, emergent and open water wetland habitat types occur from the large open water wetland (diked pond) to the Southern Pacific railroad tracks on the eastern side of the property. The central portion of the creek occurs in a fairly incised channel and much of the scrub-shrub vegetation exists around the periphery and to a lesser extent within the open water area. Segments of emergent marsh are common in the central portion of the creek. East of its confluence with both the northern and southern side tributaries, the creek channel is less incised, beaver ponds do not exist, and pockets of emergent marsh are common in low-lying areas adjacent to the creek. Both the northern side tributary and the eastern end of the main tributary have experienced considerable disturbance from grazing.

An emergent marsh surrounded by a unmaintained hazelnut grove is the headwaters of the southern side tributary to the main tributary. A drainage swale in a plowed field and a man-made pond drain into the southern side tributary from the south. From the confluence of the southern side tributary and this drainage from the south, the creek is characterized by scrub-shrub and open water wetland habitat types and is located in a defined channel. Minor beaver activity and man-made ponds exist on this stretch of the side tributary. Thick walls of blackberry line the outer edge of scrub-shrub vegetation on both the main tributary and the southern tributary. The eastern end of this side tributary is similar to the eastern end of the main tributary.

Wetland System IV: A low-lying swale drains into a man-made pond in the southern end of the site. The headwaters of this swale are located within a pasture. The pond is bermed on three sides and an controled outflow pipe exists on the southern end of the pond. A forested wetland extends in a low-lying drainage swale from the the pond south to the Southern Pacific railroad tracks.

Wetland System V: At the southeastern edge of the site, a man-made pond surrounded by large black cottonwoods and willows drains east into another tributary to Cedar Creek. A small patch of emergent marsh occurs at the uphill (western) end of this pond.

In addition to the previously described wetland systems associated with drainages, an isolated forested wetland exists in a depressional area within the ponderosa pine forest at the southern edge of the site.

Habitat Type Descriptions

As mentioned earlier, wetland communities include forested wetland, scrub-shrub wetland, emergent marsh, and open water. Coniferous and mixed forest, shrubland, orchards, and grassland comprise the upland communities. The following paragraphs briefly describe the composition of these communities. Common and scientific names of wetland and upland plant species observed at the site are presented in Tables 4 and 5, respectively. Scientific nomenclature for all plant species discussed in this document follows Hitchcock and Cronquist (1976). These community descriptions are based on species observed during winter months. Most annual and many perennial plants were not visible or identifiable at the time of the field investigations.

In general, emergent vegetation occurs in drainage swales within abandoned or currently plowed fields. Common velvet grass is the most common species in this community. Other species include soft rush, other rushes, sedges, reed canarygrass, and willow herb. Emergent marsh at the headwaters of the southern side tributary consists of small-fruited bulrush, a few cattails, and three-stem rush in addition to the previously mentioned species.

Scrub-shrub wetland habitat types typically are composed of willow and rose along the edges of beaver ponds within the main and side tributaries. Pacific willow, black cottonwood, red alder, and spirea occur intermittently in this community. Emergent species such as cattail, small-fruited bulrush, soft rush, veronica, and skunk cabbage are found in scattered patches.

Three types of forested wetland exist on the site. Pacific willow, black cottonwood, and other willow species occur along the periphery of man-made ponds. Red alder and western red cedar surrounding beaver ponds is typical of forested wetlands in the western end of the main tributary to Cedar Creek. Other forested wetland areas on the site consist of an Oregon ash canopy and ground cover of predominately of slough sedge. Pacific willow, skunk cabbage, broadleaf arrowhead, Pacific water parsley, veronica, and creeping buttercup are common in this community.

Coniferous forest occurs predominately in the southern half of the forested area in the northern portion of the site and along the western end of the main tributary to Cedar Creek. Douglas firs tend be the dominant species in the canopy. Understory species include young Douglas fir, vine maple, hazelnut, snowberry, Oregon grape, salal, sword fern, and Pacific blackberry. Western red cedar is the

dominant tree on the steep ravine slopes along the western end of the main tributary to Cedar Creek. Red alder and black cottonwood occur to a lesser degree. Understory species include species previously mentioned as well as Indian plum and elderberry. Himalayan blackberry dominates the open areas and ivy covers the top bank and ravine slopes near the highway. The southern end of the forested area in the northern portion of the site is composed of large, old Douglas fir and a variety of species and of different aged trees creating a diverse and open forest. The southern end of the large forested area provides valuable wildlife habitat. In addition to the large, old Douglas fir, special habitat features such as snags and large nesting trees are present. Forested wetland within a drainage swale crosses through the southern end of the large forested area.

Mixed forest occurs in the northern part of the forested area in the northern portion of the site and the patch of forest in the southern end of the site. The forest community in the southern portion of the site is much different to that in the northern area. In the southern area patches of ponderosa pine are interspersed within a canopy composed of Douglas fir, black cottonwood, and black hawthorn. Understory of sparse patches of salal, snowberry, and sword fern or solely a thick layer of pine needles exist under the ponderosa pine canopy. Black hawthorn, black cottonwood, and Douglas fir are the main overstory species surrounding the patches of ponderosa pine. Mixed forest in the northern part of the northern forested area consists of areas with a canopy dominated by Douglas fir and other areas with a black hawthorn dominated canopy. Ponderosa pine are scattered throughout this community. The understory typically is more dense under the black hawthorn canopy and is composed of hazelnut, salal, snowberry, Oregon grape, sword fern, and Pacific blackberry. In some areas, Himilayan and evergreen blackberry are encroaching.

Abandoned hazelnut orchards are scattered throughout the site. Pacific, Himalayan, and evergreen blackberry, rose, and black hawthorn are quickly taking over the open ground between the rows of trees. A maintained holly orchard is located north of Sunset Boulevard (Wilsonville Road) near the eastern end of the site.

Shrubland exits in abandoned fields and is a transitional stage between grassland and forest communities. Rose and Himalayan, evergreen, and Pacific blackberry are the main species. Thick bands of blackberries and rose line the top bank along much of the main tributary and southern side tributary.

Grassland exists in patches throughout the site. In the southern part, the fields are still plowed. In other areas, abandoned fields or pastures exist and the dominant species include variety of grasses, Queen Anne's lace, and thistle. Pacific blackberry is common along the edges of abandoned fields.

Using the methods described in the Federal Manual for Delineating Jurisdictional Wetlands, fourteen of the nineteen sample plots have hydrophytic vegetation. A summary of these results is presented in Table 6. For a more detailed description of the vegetation observed within each sample plot, refer to the data sheets presented in Appendix A.

Table 4

LIST OF OBSERVED PLANT SPECIES IN WETLAND AREAS
AT THE STEEPLECHASE COUNTRY ESTATES SITES
IN SHERWOOD, OREGON

Scientific Name	Common Name	Wetland Indicator Status*
Trees:		
Alnus rubra	red alder	FAC
Fraxinus latifolia	Oregon ash	FACW
Populus trichocarpa	black cottonwood	FAC
Salix lasiandra	Pacific willow	FACW+
Thuja plicata	western red cedar	FAC
Shrubs and Small Trees:		
Acer circinatum	vine maple	FACU+
Corylus cornuta	hazelnut	NI
Cornus stolonifera	red-osier dogwood	FACW
Crataegus douglasii	black hawthorn	FAC
Rosa sp.	native rose	FACU-UPL
Rubus discolor	Himalayan blackberry	FACU-
Rubus laciniatus	evergreen blackberry	FACU+
Rubus spectabilis	salmonberry	FAC
Salix spp.	willow	OBL-FACU
Spiraea douglasii	spiraea	FACW
Grasses and Forbs:		
Agrostis sp.	bentgrass	FACW-FACU**
Bacopa rotundifolia	waterhyssop	OBL
Botrychium sp.	moonwort	FACW-FAC
Carex obnupta	slough sedge	OBL
Carex spp.	sedge	OBL-FAC
Cirsium arvense	Canadian thistle	FACU+
Daucus carota	Queen Anne's lace	FACU**
Epilobium watsonii	Watson's willow-herb	NI
Epipactis gigantea	giant hellborine	FACW+
Festuca arundinacea	tall fescue	FACU-
Holcus lanatus	common velvetgrass	FAC
Juncus effusus	soft rush	FACW+
Juncus ensifolius	three-stem nesh	FACW
Juncus spp.	nesh	OBL-FACW
Lemna minor	common duckweed	OBL
Lysichitum americanum	skunk cabbage	OBL
Montia sp.	miner's lettuce	OBL-FAC

Table 4 (continued)

LIST OF OBSERVED PLANT SPECIES IN WETLAND AREAS
AT THE STEEPLECHASE COUNTRY ESTATES SITES
IN SHERWOOD, OREGON

Scientific Name	Common Name	Wetland Indicator Status*
Oenanthe sarmentosa	Pacific water-parsley	OBL
Phalaris arundinacea	reed canarygrass	FACW
Polystichum munitum	swordfern	FACU**
Ranunculus repens	creeping buttercup	FACW
Rubus ursinus	Pacific blackberry	NI
Rumex crispus	curly dock	FACW
Sagittaria latifolia	broadleaf arrowhead	OBL
Scirpus microcarpus	small-fruited bulrush	OBL
Typha latifolia	common cattail	OBL
Urtica dioica	stinging nettle	FAC+
Veronica peregrina	purslane speedwell	OBL
Veronica spp.	speedwell	OBL-FAC

* As defined in Table 1.
** Species which do not appear on the National List (Reed, 1988) were assigned an indicator status based on field observations and habitat information from the literature.

Table 5

LIST OF OBSERVED PLANT SPECIES IN UPLAND AREAS
AT THE STEEPLECHASE COUNTRY ESTATES SITES
IN SHERWOOD, OREGON

Scientific Name	Common Name	Wetland Indicator Status*
Trees:		
Alnus rubra	red alder	FAC
Pinus ponderosa	ponderosa pine	FACU-
Populus trichocarpa	black cottonwood	FAC
Pseudotsuga menziesii	Douglas fir	NI
Thuja plicata	western red cedar	FAC
Tsuga heterophylla	western hemlock	FACU-
Shrubs and Small Trees:		
Acer circinatum	vine maple	FACU+
Berberis aquifolium	Tall Oregon grape	UPL**
Berberis nervosa	shining Oregon grape	NI
Corylus cornuta	hazelnut	NI
Crataegus douglasii	black hawthorn	FAC
Gaultheria shallon	salal	NI
Ilex sp.	holly	FACU**
Oemleria cerasiformis	Indian plum	NI
Rosa sp.	native rose	FACU-UPL
Rubus discolor	Himalayan blackberry	FACU-
Rubus laciniatus	evergreen blackberry	FACU+
Sambucus sp.	elderberry	FACU
Symphoricarpus albus	common snowberry	FACU
Grasses and Forbs:		
Agropyron spp.	wheatgrass	
Dactylis glomerata	orchard grass	FACU
Daucus cariota	Queen Anne's lace	FACU**
Equisetum laevigatum	scouring-rush	FACW
Festuca arundinacea	tall fescue	FACU-
Glecoma hederacea	ivy	FACU+
Holcus lanatus	common velvetgrass	FAC
Poa spp.	bluegrass	
Polystichum munitum	swordfern	NI
Pteridium aquilinum	bracken fern	FACU
Rubus ursinus	Pacific blackberry	NI
Urtica dioica	stinging nettle	FAC+

* As defined in Table 1.

** Species which do not appear on the National List (Reed, 1988) were assigned an indicator status based on field observations and habitat information from the literature.

Table 6

SUMMARY OF VEGETATION DATA
AT THE STEEPLECHASE COUNTRY ESTATES SITE
IN SHERWOOD, OREGON

Plot #	Vegetation Determination	% of # of dominant species that are FAC, FACW, or OBL
1	Hydrophytic	0*
2	non-Hydrophytic	0
3	Hydrophytic	67
4	Hydrophytic	100
5	Hydrophytic	67
6	non-Hydrophytic	50
7	non-Hydrophytic	33
8	Hydrophytic	80
9	Hydrophytic	UND**
10	non-Hydrophytic	40
11	Hydrophytic	33*
12	Hydrophytic	50*
13	Hydrophytic	100
14	Hydrophytic	100
15	Hydrophytic	100
16	non-Hydrophytic	17
17	Hydrophytic	100
18	Hydrophytic	UND**
19	Hydrophytic	100

* Vegetation is considred hydrophytic if 50% of the dominant species are FACU or FAC and hydric soils and wetland hydrology were present.

** Undetermined due to number of unidentifiable dominant herb species.

2. Soils

Soils in the area of the Steeplechase Country Estates site were developed on silty material originally deposited by water. Because of their silty nature, the soils tend to drain slowly. As a result, soils in the lower and more concave areas of the site exhibit strong hydric characteristics such as mottling and gleying.

Soil series within the Steeplechase Country Estates site have been mapped by the USDA Soil Conservation Service (SCS) (1982). Figure 3 shows the distribution of soils mapped over the site. The following soil descriptions are based on information contained in the Washington County Soil Survey (SCS, 1982).

Soils in the lower and more concave areas of the site have been mapped as Huberly and Wapato series. The SCS identifies the Huberly series in its Washington County hydric soils list. Huberly series consist of poorly

drained silt loam that is dark in color in the surface layer, grayish in the subsurface and contains distinct dark mottles just below the upper surface layer. Inclusions of non-hydric Aloha and Quatama series soils may occur in areas mapped as Huberly series. Huberly soils tend to occur in drainage swales which are commonly the headwaters of tributaries within the Cedar Creek drainage.

Wapato series soils consist of a poorly drained silty clay loam. As with Huberly series soils, Wapato series soils have been identified as hydric. Wapato soils have similar hydric characteristics to the Huberly series in that they are dark in color in the surface layer, grayish in the subsurface and contain distinct dark mottles just below the upper surface layer. In the Steeplechase Country Estates area, Wapato soils occur in a narrow band along the main tributary to Cedar Creek, and along the south side tributary (see Figure 3).

Upland areas within the Steeplechase Country Estates site contain non-hydric soils of the Aloha, Quatama and Willamette series. The SCS (1982) describes the Aloha series as somewhat poorly drained silt loam. It is lighter in color in the surface layer than either the Huberly or Wapato series, yellowish-brown in the subsurface and contains only faint mottles in the subsurface layer. Inclusions of hydric Huberly series soils may occur in the areas mapped as Aloha series.

Quatama series soils consist of moderately well drained loam and are similar in color to the Aloha series soils, but without the presence of mottles. Hydric Huberly inclusions may occur in areas mapped as Quatama series. Willamette series soils consist of well-drained silt loam which is dark in the upper surface layer, and dark grayish-brown with no mottles in the subsurface layer.

Soils examined during the field investigation are generally consistent with soils as mapped and described by the SCS (1982). Soils occurring in the lower-lying swales and concave portions of the site are poorly drained silty loam soils which exhibit varying amounts of mottling. In addition to splotches of mottling, the soils in many of the low-lying areas contain numerous reddish brown iron concretions, another indicator of hydric conditions when found in combination with dark colored soils. In portions of the site that were inundated during the field investigation, the soils were found to exhibit gleying.

In several areas mapped by the SCS (1982) as non-hydric Aloha or Quatama series soils, inclusions of hydric soils were observed which closely match the Huberly series description. Areas of hydric soil inclusions occur in the southern and central parts of the forested area in the northern portion of the site, and in the central part of the ponderosa pine forested area in the southern portion of the site.

Soils in the upland portions of the site were observed to be generally lighter in color in the upper surface layer, and less gray colored in the lower layers than soils occuring in the low-lying portions of the site. Along the transition zone between the upland and lowland portion of the site, soils are light in color but were observed to exhibit some faint mottling.

Table 7 presents a summary of the soils data collected during the field investigation. For a more detailed description of the soil characteristics observed within each sample plot, please see the data sheets presented in Appendix A.

Table 7

SUMMARY OF SOILS DATA
AT THE STEEPLECHASE COUNTRY ESTATES SITE
IN SHERWOOD, OREGON

Plot #	Hydric Determination	Basis for Determination
1	hydric	gley and mottles
2	non-hydric	light soil color, no mottles
3	hydric	mottles, dark soil color
4	hydric	mottles, dark soil color
5	hydric	mottles, dark soil color
6	hydric	mottles, dark soil color
7	non-hydric	light soil color, mottles faint
8	hydric	strong mottles, gray soil color
9	hydric	strong mottles, gray soil color
10	non-hydric	light soil color, mottles faint
11	hydric	mottles, dark soil color
12	hydric	gley and mottles
13	NDC*	open water pond
14	hydric	gley and mottles
15	non-hydric	mottles faint, no saturation
16	hydric	distinct mottles, saturation
17	NDC*	inundated soils
18	hydric	gley, mottles
19	non-hydric	light soil color, no mottles

* No Data Collected

3. Hydrology

The Steeplechase Country Estates site is located on a level to gently rolling terrace lying to the south of the Tualatin River. The site is drained by several natural streams and swales, as well as several man-made ponds and drainage ditches. In addition, some portions of the site are artificially drained by underground drainage tiles, and some flat, low-lying portions of the site contained saturated soils and ponded water. Water draining off the middle portion of the site flows generally to the east, while water draining off the northern portion of the site flows generally northward and water draining off the southern portion of the site flows toward the south. All water draining off the site eventually flows into Cedar Creek, which flows northward into Chicken Creek, a tributary to the Tualatin River.

The middle portion of the site is drained by a main tributary to Cedar Creek. This main tributary to Cedar Creek flows from west to east across the entire site. In the western portion of the site, the tributary to Cedar Creek flows within a well-incised channel lying approximately 20 feet below the flat lying terrace surface. Steep banks occur on either side of the channel separating it from the upland terrace above. The channel itself varies in width from approximately three to ten feet in the western-most portion of the site, to approximately 100 to 150 feet in the central portion of the site where beaver dams have created numerous large ponded areas.

In the eastern portion of the site, the banks of the tributary to Cedar Creek are less steep. The channel in this portion of the site is approximately three to ten feet wide, with limited beaver activity and a moderately narrow band of riparian wetland on either side. Along small segments of the tributary, the banks flatten considerably, leaving flat lying areas adjacent to the channel. These low, flat-lying areas are poorly drained and receive seepage from the surrounding uplands.

Two side tributaries join the main tributary to Cedar Creek, one on the north (the north side tributary) and one on the south (the south side tributary). The south side tributary is the larger of the two and varies in width from approximately two to five feet. There is evidence of some minor beaver activity on this side tributary. The south side tributary is fed by two headwater areas. The northern of the headwater areas is an area of groundwater seepage which contained saturated soils and standing water at the time of the field investigation. The southern area is an artificially created pond located adjacent to S.W. Sunset Boulevard which drains cultivated fields. A swale area containing saturated soils and ponded water at the time of the field investigation is located uphill and drains into this pond.

The north side tributary drains a portion of the forested area in the northern part of the site. The channel of the north side tributary varies in width from approximately two to 12 feet near its confluence with the main Cedar Creek tributary, and looses its channel morphology becoming a swale area fed by groundwater seepage approximately 500 feet above the confluence. This portion of the site also is drained by a ditch flowing from north to south along the western edge of this forested area. Water from this drainage ditch eventually flows into the north side tributary.

A swale area located north of the north side tributary and within the forested area in the northern portion of the site drains toward the east. This swale contained standing water and saturated soils at the time of the field investigation. Water from this swale area eventually flows into underground drainage tiles located in a band of trees between two fields.

The northeastern portion of the site is drained by a swale area which contained saturated soils and ponded water at the time of the field investigation. This swale area drains eastward and then northward and is the headwaters of a tributary to Cedar Creek.

The southern portion of the site is drained by two artificial ponds and several natural swale areas. One pond is located adjacent to the railroad tracks along the eastern boundary of the site. A swale area which contained saturated soils and ponded water at the time of the field investigation feeds into this pond, draining the fields above it. The second pond is associated with the forested area in the southern end of the site. A swale also feeds into this second pond which in turn feeds into a swale area located within the ponderosa pine forested area. This swale area was marked by saturated soils and areas of standing water during the site investigations. Additionally, a flat-lying area located to the east of the swale area and within the ponderosa pine forested area contained saturated soils and some small areas of ponding during the time of the field investigation.

Hydrology data were collected at each of the sampling plot locations. Where inundation or saturated soils within 18 inches of the surface, were encountered, the sampling plot and area was considered to exhibit wetland hydrology. A summary of hydrology data collected is presented in Table 8. For a more detailed description of the hydrology observed within each sample plot, please see the data sheets presented in Appendix A. In general, wetland hydrology was found to occur along the stream corridors, along the edges of ponds, and within low-lying swale areas. In the low-lying swale areas, the area of saturated soils tends to shrink and swell with the wet and dry seasons of the year. The size of the saturation zone along the edges of streams, and around the perimeter of the ponds is related to topography. Where slopes are steeper along the streams and edges of the ponds, the zone of saturation is very narrow, and in areas where the streams and ponds are bordered by gentle slopes, the zone of saturation is larger. As with swale areas, the zone of saturation around these ponds tends to shrink and swell with the dry and wet seasons.

Table 8

SUMMARY OF HYDROLOGY DATA
AT THE STEEPLECHASE COUNTRY ESTATES SITE
IN SHERWOOD, OREGON

Plot	Hydrology Determination	Basis for Determination
1	wetland	soil saturation at 14" bgs*
2	upland	no soil saturation/no hydric soil
3	wetland	inundation/soil saturation within 18" bgs
4	upland	no soil saturation
5	wetland	inundation/soil saturation within 18" bgs
6	wetland	soil saturation at 12" bgs
7	upland	no soil saturation/no hydric soil
8	wetland	inundation/soil saturation within 18" bgs
9	wetland	inundation/soil saturation within 18" bgs

Table 8 (continued)

SUMMARY OF HYDROLOGY DATA
AT THE STEEPLECHASE COUNTRY ESTATES SITE
IN SHERWOOD, OREGON

Plot	Hydrology Determination	Basis for Determination
10	upland	no soil saturation/no hydric soil
11	wetland	soil saturation at 12" bgs
12	wetland	soil saturation at 16" bgs
13	wetland	inundation
14	wetland	inundation/soil saturation within 18" bgs
15	upland	no soil saturation/no hydric soil
16	wetland	soil saturation at 12" bgs
17	wetland	inundation
18	wetland	inundation/soil saturation within 18" bgs
19	upland	no soil saturation/no hydric soil

* bgs = below ground surface

4. Wetland Determination

National Wetland Inventory Maps (U.S. Fish and Wildlife Service, 1981) identify palustrine forested wetland along the main tributary to Cedar Creek and palustrine forested and emergent wetland along the southern side tributary. Palustrine forested wetland has also been identified along the drainage swales at the northern and southern ends of the site. Two of the three man-made ponds in the southern portion of the site have been identified as palustrine open water wetlands. Washington County's Significant Natural Areas Map (1984) identifies "water areas and wetland and fish and wildlife habitat" in all of the areas previously mentioned. Based on the Unified Federal Methodology, 11 of the sample plots were determined wetland and eight upland. Table 9 is a summary of the vegetation, soils, and hydrology data for the wetland investigation. The Unified Federal Methodolgy requires that all three wetland criteria (vegetation, soils, and hydrology) must be present for the sampling plot to be determined wetland unless disturbed or problem area wetlands are encountered. Figure 4 shows the approximate location of the wetlands on the Steeplechase Country Estates site. The size and outline of the wetland boundary is only approximate and should not be used for site planning purposes; a more accurate mapping of the wetland boundary can be determined by a professional survey of the flagging.

Table 9

SUMMARY OF THE VEGETATION, SOILS, AND HYDROLOGY DATA
AT THE STEEPLECHASE COUNTRY ESTATES SITE
IN SHERWOOD, OREGON

Plot #	Vegetation	Soils	Hydrology	Wetland Determination
1	Hydrophytic	Hydric	Wetland	Wetland
2	non-Hydrophytic	non-Hydric	Upland	Upland
3	Hydrophytic	Hydric	Wetland	Wetland
4	Hydrophytic	Hydric	Upland	Upland
5	Hydrophytic	Hydric	Wetland	Wetland
6	non-Hydrophytic	Hydric	Wetland	Upland
7	non-Hydrophytic	non-Hydric	Upland	Upland
8	Hydrophytic	Hydric	Wetland	Wetland
9	Hydrophytic	Hydric	Wetland	Wetland
10	non-Hydrophytic	non-Hydric	Upland	Upland
11	Hydrophytic	Hydric	Wetland	Wetland
12	Hydrophytic	Hydric	Wetland	Wetland
13	Hydrophytic	NDC*	Wetland	Wetland
14	Hydrophytic	Hydric	Wetland	Wetland
15	Hydrophytic	non-Hydric	Upland	Upland
16	non-Hydrophytic	Hydric	Wetland	Upland
17	hydrophytic	NDC*	Wetland	Wetland
18	Hydrophytic	Hydric	Wetland	Wetland
19	Hydrophytic	non-Hydric	Upland	Upland

* No Data Collected

V. SUMMARY

Pursuant to the Clean Water Act, and through the Section 404 permitting process, the Corps of Engineers has been given the responsibility and authority to regulate the discharge of fill materials into wetlands of the United States. In January 1989, the Federal Interagency for Wetland Delineation released the Federal Manual for identifying and Delineating Jurisdictional Wetlands which discusses the criteria and recommends methods to identify and delineate wetlands. Under this methodology, wetland vegetation, hydric soils, and wetland hydrology all must be present in order to have a positive wetland determination, unless problem or disturbed areas are encountered. Using this methodology, the Steeplechase Country Estates (SHAPIRO #318582) site was investigated on February 21-23, 1990 and February 26-March 1, 1990 for the presence of wetlands.

Five wetland systems and a small, isolated forested wetland exist on Steeplechase Country Estates site. Emergent marsh forms the headwaters to a tributary to Cedar Creek in the northern most end of the site (wetland system I). A forested and emergent wetland system (wetland system II)

exists in the forested area in the northern part of the site; emergent marsh exists in a drainage swale to a drain pipe on the eastern edge of a field. Forested, scrub-shrub, emergent and open water wetlands are associated with the main tributary to Cedar Creek and its northern and southern side tributaries (wetland system III). In the southern end of the site, partially plowed swales drain into two man-made ponds (wetland systems IV and V). Both ponds are support open water and forested wetland habitat types. Forested wetland extends from the outflow of the pond in wetland system IV to the Southern Pacific railroad. Wetland system V drains to the east into a tributary of Cedar Creek. A small, isolated forested wetland occurs in a depressional area within the ponderosa pine forest at the southern end of the site. Upland habitat types on the site include coniferous and mixed forest, grassland, shrubland, and orchards. The western end of the main tributary to Cedar Creek supports coniferous and mixed forest on the steep ravine slopes and in the flat area above the ravine.

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. Publ. #FWS/OBS-79/31. 131 p.

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

Federal Interagency Committee for Wetland Delineation, 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S.D.A. Soil Conservation Service, Washington, D.C. Cooperative technical publication. 138 pp.

Federal Register, 1986. "33 CFR Parts 320 through 330 Regulatory Programs of the Corps of Engineers; Final Rule," Vol. 51, No. 219, pp. 41206-41259, U.S. Government Printing Office, Washington, D.C.

Federal Register, 1982. "Title 33: Navigation and Navigable Waters; Chapter II, Regulatory Programs of the Corps of Engineers," Vol 47, No. 138, p. 31810, U.S. Government Printing Office, Washington, D.C.

Federal Register, 1980. "40 CFR Part 230: Section 404 (b) (1) Guidelines for Specification of Disposal Sites of Dredged or Fill Material," Vol. 45, No.249 pp. 85352-85353, U.S. Government Printing Office, Washington, D.C.

Hitchcock, C. L. and A. Cronquist, 1976. Flora of the Pacific Northwest. University of Washington Press, Seattle, Washington.

Reed, P.B., Jr., 1988. National List of Plant Species that occur in Wetlands: National Summary. U.S. Fish and Wildlife Service. Washington, DC. Bio. Rpt. 88(24). 244 pp.

Reppert, R.T., Sigleo W., Stakhiv, E., Messman, L. and C. Beyers, 1979. Wetland Values Concepts and Methods for Wetland Evaluation. U.S. Army Corps of Engineers, Institute for Water Resources, Fort Belvoir, Virginia 109 pp.

State of Oregon, 1989. Senate Bill 3.

State of Oregon, 1985. Administrative Rules for Oregon's Removal-Fill Permit Program.

U.S. Department of Agriculture, Soil Survey Staff, 1975. Soil Taxonomy. A Basic System for Making and Interpreting Soil Surveys. U.S. Department of Agriculture, Soil Conservation Service, Washington, C.D. 754 pp.

U.S. Department of Agriculture, Soil Conservation Service, 1987. Hydric Soils of the United States. Prepared in cooperation with the National Technical Committee for Hydric Soils.

U.S. Department of Agriculture, Soil Conservation Service, 1982. Soil Survey of Washington County, Oregon.

U.S. Department of Agriculture, Soil Conservation Service, Hydric Soils List for Washington County, Oregon.

U.S. Department of the Interior, Fish and Wildlife Service, 1981. National Wetlands Inventory Maps Sherwood Quadrange.

U.S. Department of the Interior, Geological Survey, 1961 (photo revised 1985). 7.5 Minute Topographic Series, Sherwood Quadrangle, scale 1-:24,000.

APPENDIX A

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood Golf Course
Field Investigation(s): CH₂/CG
Veg. Unit #: 1
Date: 2/22/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Festuca arundinacea	FACU-	98%	7	98.0	1	*
3	Holcus lanatus	FAC	<5	7	3.0	2	
4							
5							
6							
7							
8							
9							
10							
			Sum of Midpoints		101.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				50.5		

	Shrub Species						
1	(yng) Corylus cornuta shoots	NI	<5	1	3.0	1	*
2							
3							
4							
5							
6							
7							
			Sum of Midpoints				
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Sapling Species					
1						
2	none					
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Tree Species (% Cover)					
1						
2	none					
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

Percent of dominant species that are OBL, FACW and/or FAC 0
Hydrophytic vegetation? YES **

Comments: Grassy area occurs in gradually sloping area to a
Adjacent to creek & Pacific willow, few Tose, PTQU
** Dominant species FACU or FAC, wetland hydrology and hydric soils are present, vegeta identified as Hydrophyt

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (85.5); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 1
Field Investigator(s): CTb/CG **Date:** 2/22/90

SOILS

Series/phase: SCS mapped as Wapato silty clay Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ (B Horizon) No ___ Gleyed? Yes ✓ No ___

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Control	Mottle Color	Gley Color	Organic Content
A	0-10"	6"	silt loam	10YR 3/2	—	—	<5%
B	10-18"	14"	silt loam	5Y 5/1	10YR 4/6	Matrix Color	<5%

Comments: B horizon — heavily mottled. Matrix color = gley color, gleyed 10"-18"+.

Hydric Soils? YES Basis gley, mottling 10-18"

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ 14"
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	✓	Wetland drainage patterns
___	Water-borne sediment deposits	✓	Morphological plant adaptations

Additional hydrologic indicators: Vegetation (grass) in hummocks. Adjacent to tributary to Cedar Creek. Main tributary flows through site.
Comments: Creek banks fallaway gradually. Other areas along creek are steeper banked.
Wetland Hydrology? YES Basis saturation

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? yes Basis Present grazing; old filbert (hazelnut) farm on slopes of creek + uplands above the creek.
Problem Area? no Basis _____
Comments: Veg. altered due to agricultural + farming practices

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: 3 criteria for wetlands met. Vegetation considered hydrophytic because hydric soils and wetland hydrology are present and 50% of the dominant vegetation are FACU or FAC.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHo / CG
Veg. Unit #: 2
Date: 2/27/92

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**
1						
2	Festuca onindinacea	FACU-	95	6	85.5	1
3	Juncus effusus	FACW	<5	1	30	2
4	Dactylis glomerata	FACU	<5	1	3.0	
5						
6						
7						
8						
9						
10						
			Sum of Midpoints		88.5	
	Dominance Threshold Number Equals 50% x Sum of Midpoints				44.25	

	Shrub Species					
1						
2	none					
3						
4						
5						
6						
7						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Sapling Species					
1						
2	none					
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Tree Species (% Cover)					
1						
2	none					
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

Percent of dominant species that are OBL, FACW and/or FAC: 0
Hydrophytic vegetation? NO

Comments:

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood GC **Veg. Unit #:** 2
Field Investigator(s): CHo/CC **Date:** 2/22/90

SOILS

Series/ phase: Mapped as Quatama loam on SCS
Subgroup:** _____
Is the soil on the hydric soils list? Yes ___ No ✓
Undetermined _____
Is the soil a Histosol? Yes ___ No ✓
Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ___ No ✓
Gleyed? Yes ___ No ✓

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
* A	0-18"		loam	10YR 3/3			
* B	18"+		loam	10YR 4/3			

Comments: *SOIL AUGER USED — Horizon depths are approximate Below 20" gray soil chroma; some mottles
Hydric Soils? NO Basis lack of hydric indicators

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to the free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: On slope of creek bank —
Wetland Hydrology? NO Basis lack of hydrology w/in 18" and no hydric soil

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? Yes Basis agricultural use (former)
Problem Area? NO Basis ✓
Comments: Hazelnut orchard. Presently grazed (occassionally)

Is the hydrophytic vegetation criterion met? Yes ___ No ✓
Is the hydric soil criterion met? Yes ___ No ✓
Is the wetland hydrology criterion met? Yes ___ No ✓
Is the vegetation unit or plot wetland? Yes ___ No ✓
Rationale for jurisdictional decision: 3 criteria for wetlands not met.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Shamwood Golf Course
Field Investigation(s): CHA/CE
Veg. Unit #: 3
Date: 2/22/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Festuca arundinacea	FACU-	90	6	85.5	1	*
3	Holcus lanatus	FAC	28	4	38.0	2	*
4	Juncus effusus	FACW	24	3	20.5	3	
5							
6							
7							
8							
9							
10							
				Sum of Midpoints	144.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				72.0		

	Shrub Species						
1							
2	none						
3							
4							
5							
6							
7							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Sapling Species						
1							
2	Crataegus douglasii	FAC	10	2	10.5	1	*
3							
4							
5							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Tree Species (% Cover)						
1							
2	none						
3							
4							
5							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

Percent of dominant species that are OBL, FACW and/or FAC: 67%
Hydrophytic vegetation? YES

Comments: Abiv species in both vegetation units. CHA, NHE (other)

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 3
Field Investigator(s): CHB/CG **Date:** 2/22/90

SOILS

Series/phase: Huberly silt loam
Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___
Undetermined _____
Is the soil a Histosol? Yes ___ No ✓
Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___
Gleyed? Yes ___ No ✓

	Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
*	A	0-8"	6"	silt loam	10YR 3/3			
*	B	8-18"	12"	silt loam	10YR 4/1	7.5YR 4/4		

Comments: * SOIL AUGER USED; Horizon depths are approximate. Soil Map (SCS) shows thin band of Huberly silt loam extending east to west in area.

Hydric Soils? YES Basis Chroma & mottles

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ___ in some areas. Surface water depth: 0-12" Inundation (perched)
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ surface to approximately 12" below the surface
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	✓	Wetland drainage patterns
___	Water-borne sediment deposits	✓	Morphological plant adaptations (hummocks)

Additional hydrologic indicators: Algae in inundated areas. East end of swale water flows into a drain tile. Pasture to the east successfully well drained.
Comments: Inundated in lowest part of swale. Saturated soils on edges of shallow swale.
Wetland Hydrology? YES Basis Saturated & inundated soils

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? yes Basis Former pasture; vegetation hasn't been plowed in last 10 yrs.
Problem Area? no Basis _____
Comments: low drainage
Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: 2 criteria for wetland met.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHo / CG
Veg. Unit #: 4
Date: 2/22/00

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**
1						
2	Lolium lanatus	FAC	98	7	98.0	1
3						
4						
5						
6						
7						
8						
9						
10						

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Shrub Species

1						
2						
3						
4						
5						
6						
7						

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Sapling Species

1						
2						
3						
4						
5						

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Tree Species (% Cover)

1						
2						
3						
4						
5						

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Percent of dominant species that are OBL, FACW and/or FAC: 100
Hydrophytic vegetation? YES

Comments:

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 4
Field Investigator(s): CHo/CG **Date:** 2/22/90

SOILS

Series/phase: SCS mapped as Aleha silt loam
Subgroup:**
Is the soil on the hydric soils list? Yes ___ No ✓
Undetermined ___
Is the soil a Histosol? Yes ___ No ✓
Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ B horizon
Gleyed? Yes ___ No ✓

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
✗ A	0-14"		silt loam	10YR 3/3	—	—	<50
✗ B	14-18"+		silt loam	10YR 4/2	7.5 4/4	—	<50

✗ SOIL AUGER USED; horizon depths are approximate.

Comments: Probably edge between UPL & hydric soils

Hydric Soils? yes Basis Chroma & mottling in B horizon

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: ___
Is the soil saturated? Yes ___ No ✓
Depth to the free-standing water in pit/soil probe hole: 0
Mark other field indicators of surface inundation of soil saturation below:

___ Oxidized root zones
___ Water marks
___ Drift lines
___ Water-borne sediment deposits
___ Water-stained leaves
___ Surface scoured areas
___ Wetland drainage patterns
___ Morphological plant adaptations

Additional hydrologic indicators: No current hydrology observed.

Comments: Upslope of saturated and inundated area

Wetland Hydrology? No Basis No

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? yes Basis Agricultural field
Problem Area? no Basis ___
Comments: ___

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ___ No ✓
Is the vegetation unit or plot wetland? Yes ___ No ✓
Rationale for jurisdictional decision: Hydrology criteria not met. Vegetation FAC (Holcus lanatus) and soils exhibit mottles and a chroma of 2 below ~14" below the surface. Marginal indication of hydrology in soils; hydrology not assumed. Upslope of more hydric/inundated area.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHb / CG
Veg. Unit #: 5
Date: 2/23/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Holcus lanatus	FHC	45	4	38.0	2	*
3	Juncus effusus	FACW	<5	1	3.0	3	
4	Rubus ursinus	NI	60	5	63.0	1	*
5	Daucus carota	UPL	<5	1	3.0	3	
6	Cirsium arvense	FACU+	<5	1	3.0	3	
7	Sagittaria latifolia	OBL	<5	1	3.0	3	
8							
9							
10							
				Sum of Midpoints	113.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				56.5		

	Shrub Species						
1							
2	Salix sp. (juv.)	FAC-OBL	<5	1	3.0	1	*
3	Rubus laciniatus	FACU+	<5	1	3.0	1	*
4	Spirea douglasii	FACW	<5	1	3.0	1	*
5							
6							
7							
				Sum of Midpoints	9.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				4.5		

	Sapling Species						
1							
2	Osmoporus douglasii	FAC	50	4	28.0	1	*
3							
4							
5							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Tree Species (% Cover)						
1							
2							
3							
4							
5							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

Percent of dominant species that are OBL, FACW and/or FAC: 67%
Hydrophytic vegetation? YES

Comments:
Alnus rubra / Impatiens sp. boundary between FACW, RDD, & not established (an occasional FHD).

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 5
Field Investigator(s): CH, TG **Date:** 2/23/90

SOILS

Series/ phase: Hubbard silt loam Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
A	0-9"	9	silt loam	10YR 3/2			<50%
B	9-14"+	11"	silt loam	10YR 4.5/2	7.5YR 4/4		<50%

Comments: Mottles in B horizon - strong brown and yellowish.

Hydric Soils? YES Basis Mottles chroma 2's & Huberly description matches soils

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ 9"
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	✓	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: some areas - outside of unit - are inundated.

Comments: Hubbard loam in area (boundary) is variable - ± mottled.

Wetland Hydrology? YES Basis saturation; hydric indicators

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? YES Basis former pasture. Veg. reestablishing
Problem Area? ___ Basis _____
Comments: Hydrology + soils

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: 3 criteria for wetland

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): Chris CC
Veg. Unit #: 6
Date: 2/23/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2							
3	Holcus lanatus	FAC	60	5	63.0	1	*
4							
5							
6	Rubus ursinus	FACU	30	5	63.0	1	*
7							
8							
9							
10							
				Sum of Midpoints	126.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				63.0		

	Shrub Species						
1							
2							
3							
4							
5							
6							
7							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Sapling Species						
1							
2	Crataegus monogyna	FAC	15	2	10.5	1	*
3							
4							
5							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Tree Species (% Cover)						
1	Pseudotsuga menziesii	UPL	30	3	20.5	1	*
2	Pinus ponderosa	FACU-	10	2	10.5	2	*
3							
4							
5							
				Sum of Midpoints	31		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				15.50		

31
20
620

Percent of dominant species that are OBL, FACW and/or FAC 50 2/4
Hydrophytic vegetation? NO

Comments: Vegetation - successional mixed bag of stuff
RUUR - NI not included in determination, Midpoint & dominant
+ Downhill FAC Acer & Pipo - 5-20 under 40 ft tall Acer macro

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood GC **Veg. Unit #:** 6
Field Investigator(s): CHo / CE **Date:** 2/23/90

SOILS

Series/phase: appears to be Huberly silt loam ? Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
A	0-12		silt loam	10YR 3/2			<50%
B	12+"		silt loam	10YR 4.5/2	7.5YR 4/4		<50%

Comments: _____

Hydric Soils? YES Basis Chroma & mottles

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ 12' below surface
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: _____

Wetland Hydrology? YES Basis Saturation @ 12"

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? Yes Basis Formerally cleared area; successional
Problem Area? no Basis _____
Comments: _____

Is the hydrophytic vegetation criterion met? Yes ___ No ✓
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ___ No ✓
Rationale for jurisdictional decision: Vegetation criteria is not met. UPL vegetation in sampling unit. Transitional area. Pockets of wetter areas around patches of upland vegetation. Pseudosuga Menziesii and Pinus Ponderosa establishing in formerally cleared pasture.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): Hydric

Veg. Unit #: 7
Date: 2/23/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2							
3	Equisetum sylvaticum	FACW	10	2	10.5	1	*
4	Polystichum munitum	UPL	15	2	10.5	1	*
5							
6	Moss						
7							
8							
9							
10							
			Sum of Midpoints		21.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				10.5		

	Shrub Species						
1							
2	Gaultheria shallon	UPL	20	4	38.5	1	*
3	Rubus spectabilis	FAC	45	4	38.5	2	
4							
5							
6							
7							
			Sum of Midpoints		77		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				38.5		

	Sapling Species						
1							
2	Tsuga heterophylla	FAC	10	2	10.5	1	*
3	Pseudotsuga menziesii	FAC	15	2	10.5	1	*
4							
5							
			Sum of Midpoints		21		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				10.5		

	Tree Species (% Cover)						
1							
2	Thuja plicata	FAC	45	5	63.0	1	*
3							
4							
5							
			Sum of Midpoints		63.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				31.5		

Percent of dominant species that are OBL, FACW and/or FAC 33
Hydrophytic vegetation? NO

Comments: Mix between F+ FU
All species not included in total

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Cherrycod **Veg. Unit #:** 7
Field Investigator(s): CH, JC **Date:** 3-23-90

SOILS

Series/phase: Dubois silt loam Subgroup:** _____
Is the soil on the hydric soils list? Yes ___ No ✓ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ (faint) Gleyed? Yes ___ No ✓

	Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
*	A	0-15"		silt loam	10YR 3/3			<50
*	B	15-18"+		silt loam	10YR 4/3	faint mottles		<50

Comments: * SOIL AUGER USED — boundary depths are approximate

Hydric Soils? NO Basis Chroma, no hydric indicators

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ about 18"
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: Interface between FA + FO

Wetland Hydrology? NO Basis Marginal — H2O @ 18" and no strong hydric indicators

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ✓ No ___
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ___ No ✓
Disturbed Area? NO Basis _____
Problem Area? NO Basis _____
Comments: _____

Is the hydrophytic vegetation criterion met? Yes ___ No ✓
Is the hydric soil criterion met? Yes ___ No ✓
Is the wetland hydrology criterion met? Yes ___ No ✓
Is the vegetation unit or plot wetland? Yes ___ No ✓
Rationale for jurisdictional decision: Borderline wetland.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHa, CG
Veg. Unit #: 8
Date: 2/23/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Carex obnupta	OBL	85	6	85.5	1	*
3	Rubus ursinus	NI	20	3	20.5	2	
4	Lysichiton americana	OBL	<5	1	3.0	3	
5	Polystichum munitum	UPL					
6							
7							
8							
9							
10							
			Sum of Midpoints		109.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				54.5		

Shrub Species

1							
2	Rubus spectabilis	FAC	8	2	10.5	1	*
3	Rosa sp.	?	<5	1	3.0	2	*
4							
5							
6							
7							
			Sum of Midpoints		13.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints					3.5 / 26 / 260	

Sapling Species

1							
2	Acer circinatum	FACW	20	3	20.5	1	*
3							
4							
5							
			Sum of Midpoints				
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

Tree Species (% Cover)

1							
2	Fraxinus latifolia	FAC	70	5	85.5	1	*
3							
4							
5							
			Sum of Midpoints		85.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				42.75		

Percent of dominant species that are OBL, FACW and/or FAC: 80 (4/5)
Hydrophytic vegetation? YES

Comments:
POMU on hummocks@base of trees. RUUR on edges, esp. near Road.

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (85.5); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 8
Field Investigator(s): CHb, CG **Date:** 2/23/90

SOILS

Series/ phase: Inclusion of Huberly silt loam **Subgroup:**** _____
Is the soil on the hydric soils list? Yes ✓ No ___ **Undetermined** _____
Is the soil a Histosol? Yes ___ No ✓ **Histic epipedon present?** Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ **Gleyed?** Yes ___ No ✓

	Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
*	A	0-15"		silt loam	10YR 3/1.5	2.5YR 2.5/4	—	<50
*	B	15-18"+		silt loam	10YR 5/1.5	10YR 4/4	—	<50

Comments: *SOIL AUGER USED; Horizon depths are approximate. B horizon strongly mottled. A horizon mottles to the surface
Hydric Soils? YES **Basis** Chroma, mottles

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ___ **Surface water depth:** 0-2"
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: to the surface
Mark other field indicators of surface inundation of soil saturation below:

✓	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	✓	Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: Slightly hummocked
Wetland Hydrology? YES **Basis** saturation and inundation

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ✓ No ___
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ___ No ✓
Disturbed Area? NO **Basis** _____
Problem Area? NO **Basis** _____
Comments: _____

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: 3 criteria for wetlands met.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHb, CG
Veg. Unit #: 9
Date: 2/23/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**
1						
2	Holcus lanatus	FAC	10	2	10.5	1 *
3						
4	unidentifiable					
5	native sp					
6	Buckwheat	?	75			
7	herbs					
8						
9						
10						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Shrub Species					
1						
2	N/A					
3						
4						
5						
6						
7						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Sapling Species					
1						
2	N/A					
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Tree Species (% Cover)					
1						
2	N/A					
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

Percent of dominant species that are OBL, FACW and/or FAC: undetermined
Hydrophytic vegetation? YES (assumed)

Comments:
Assume vegetation is FACW or wetter based on identifiable vegetation, hydric soils, and wetland hydrology

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (85.5); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 9
Field Investigator(s): CH, CG **Date:** 2/23/90

SOILS

Series/ phase: Tuscarilla silt loam Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
A	0-12"	8"	silt loam	10YR 3/3	faint mottles		<5%
B	12-18"+	16"	silt loam	10YR 5/2	7.5YR 4/4	—	<5%

Comments: Strong mottles in B horizon.

Hydric Soils? YES Basis Strong mottles in B horizon. Soils fit SCS description of Tuscarilla silt loam

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ 8" and below
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	✓	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: Upper edge of organic. (Mottle, gradual change) Unmottled is lower - with thin layer of humus

Wetland Hydrology? YES Basis saturation

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ✓ No ___
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ___ No ✓
Disturbed Area? See note Basis _____
Problem Area? No Basis _____
Comments: Lower — firm wall used for comparative purposes. VIRG, POTR, CRDO, RUDI

Is the hydrophytic vegetation criterion met? Yes ✓ No ___ — (Assumed)
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: Vegetation is predominated due to unidentifiable annual herbaceous cover, hydric soils and wetland hydrology. (Vegetation, assumed)

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood Veg. Unit #: 10
Field Investigator(s): CHz, CG Date: 2/23/90

SOILS

Series/phase: SCS mapped as Aloha silt loam Subgroup:** _____
Is the soil on the hydric soils list? Yes ___ No ✓ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ___ No ✓ Gleyed? Yes ___ No ✓

	Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Control	Mottle Color	Gley Color	Organic Content
*	A	0-10"		loam	10YR 3/4	—	—	<50
*	B	10-18"+		loam	10YR 4/4	Faint	—	<50

Comments: *SOIL AUGER USED; Horizon depths are approximate.

Hydric Soils? NO Basis Lack of hydric indicators

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to the free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: Uphill of gradual swale area. H2O below 18" from the surface

Wetland Hydrology? NO Basis Lack of hydric indicators

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No___
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ___ No___
Disturbed Area? See Note Basis _____
Problem Area? ___ Basis _____
Comments: Former agricultural field; reverting back to forest + shrubland

Is the hydrophytic vegetation criterion met? Yes ___ No ✓
Is the hydric soil criterion met? Yes ___ No ✓
Is the wetland hydrology criterion met? Yes ___ No ✓
Is the vegetation unit or plot wetland? Yes ___ No ✓
Rationale for jurisdictional decision: 3 criteria not met

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood G.C.
Field Investigation(s): CG, CHo
Veg. Unit #: 10
Date: 2/23/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Holcus lanatus	FAC	70	5	85.5	1	*
3	Daucus carota	UPL	40	4	38.0	2	*
4	Rubus ursinus	NI	<5	1	3.0	3	
5							
6							
7							
8							
9							
10							
			Sum of Midpoints		126.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				63.25		

	Shrub Species						
1							
2	Rubus discolor	FACU	<5	1	3.0	1	*
3							
4							
5							
6							
7							
			Sum of Midpoints		3.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Sapling Species						
1	Corylus cornuta	FACU	10	2	10.5	2	*
2	Crataegus douglasii	FAC	25	3	20.5	1	*
3							
4							
5							
			Sum of Midpoints		31		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				15.5		

	Tree Species (% Cover)						
1							
2	none						
3							
4							
5							
			Sum of Midpoints				
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

Percent of dominant species that are OBL, FACW and/or FAC 40 2/5
Hydrophytic vegetation? NO

Comments: Pasture or agricultural land reverting back to shrub – forest. ymg, PSME, CRGO, COCO, RUDI encroaching on grassland.

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (85.5); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHo, CE
Veg. Unit #: 11
Date: 2/23/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Holcus lanatus	FAC	90	6	85.5	1	*
3	?						
4							
5	MOSS						
6							
7							
8							
9							
10							
			Sum of Midpoints		85.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Shrub Species						
1							
2	Rubus discolor	FACU-	45	4	38.0	1	
3							
4							
5							
6							
7							
			Sum of Midpoints		38.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Sapling Species						
1	Corylus cornuta	NI	20	3	20.5	1	*
2							
3							
4							
5							
			Sum of Midpoints		20.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				10.25		

	Tree Species (% Cover)						
1							
2							
3							
4							
5							
			Sum of Midpoints				
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

Percent of dominant species that are OBL, FACW and/or FAC 33%
Hydrophytic vegetation? YES **

Comments: ** FACU or wetter vegetation w/ Hydric soils and Hydrology
Corylus cornuta assumed non-wetland; Rubus discolor - grows in disturbed areas;

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 11
Field Investigator(s): CH, CC **Date:** 2/23/90

SOILS

Series/ phase: Hubbardy silt loam Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ Gleyed? Yes ✓ No ___

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
A	0-15"+	10"	silt loam	10YR 4/1	5YR 5/6		<50%

Comments: Heavily mottled and some clay formation MCHIs along live root channels.
Hydric Soils? YES Basis MCHIs, gley, dark soil chroma

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ 12" below the surface
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: Inundated area slightly downhill of plot. Entire area - spongy.
Comments: _____
Wetland Hydrology? YES Basis saturation

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ✓ No ___
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ___ No ✓
Disturbed Area? NO Basis _____
Problem Area? NO Basis _____
Comments: Emergent area surrounded by Beaver dam

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: 3 criteria for wetland determination met.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CH2 (12)
Veg. Unit #: 12
Date: 2/20/91

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Juncus effusus	FACW	10	2	10.5	3	
3	Festuca arundinacea	FACU-	50	4	38.0	1	*
4	Juncus ensifolius	FACW	10	2	10.5	3	
5	Scirpus microcarpus	OBL	10	2	10.5	3	
6	Holcus lanatus	FAC	20	3	20.5	2	*
7							
8							
9							
10							
				Sum of Midpoints	90.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				45.0		

	Shrub Species						
1							
2	none						
3							
4							
5							
6							
7							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Sapling Species						
1							
2	none						
3							
4							
5							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Tree Species (% Cover)						
1							
2	none						
3							
4							
5							
				Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

Percent of dominant species that are OBL, FACW and/or FAC: 50 **
Hydrophytic vegetation? YES

Comments: ** 50% of dominant veg. is FACU (invasive) species
10+ in transect adjacent to the creek. Soils and wetland hydrology
absent, thus veg. is hydrophytic

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood — Veg. Unit #: 12
Field Investigator(s): CHn, CG — Date: 2/28/90

SOILS

Series/phase: SCS mapped as Wapato silt loam — Subgroup:** ____
Is the soil on the hydric soils list? Yes ✓ No ___ — Undetermined ____
Is the soil a Histosol? Yes ___ No ✓ — Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ — Gleyed? Yes ✓ No ___

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
A	0-16"	2	silt loam	10YR 3/3			<5%
B	16"+	17"	silt loam	10YR 4/2	5YR 3/4	5Y 4/1	<5%

Comments: A horizon occasional mottles; B horizon w/ concretions - somewhat gravelly due to concretions
Hydric Soils? YES — Basis chroma mottles and gley in B horizon

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ — Surface water depth: ____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ 16" & below
Mark other field indicators of surface inundation of soil saturation below:

___ Oxidized root zones — ___ Water-stained leaves
___ Water marks — ___ Surface scoured areas
___ Drift lines — ___ Wetland drainage patterns
___ Water-borne sediment deposits — ___ Morphological plant adaptations

Additional hydrologic indicators: ____

Comments: Low-lying area adjacent to the main creek. Slope to flat area
Wetland Hydrology? YES — Basis saturation

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ✓ No ___ see comment
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ___ No ✓
Disturbed Area? not presently — Basis ____
Problem Area? no — Basis ____
Comments: Plant community is a natural

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: 3 criteria met; adjacent to scrub-shrub wetland along main creek

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Shurwood
Field Investigation(s): CH, CC
Veg. Unit #: 13
Date: 2/20/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Ranunculus repens	FACW	25	1	3.0	1	*
3							
4							
5							
6							
7							
8							
9							
10							
				Sum of Midpoints	3.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				1.5		
	Shrub Species						
1	Cornus stolonifera	FACW	20	3	20.5	1	*
2	Saliv sp.	FAC-OBL	5	1	3.0	2	
3							
4							
5							
6							
7							
				Sum of Midpoints	23.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				11.75		
	Sapling Species						
1	Crataegus douglasii	FAC	5	1	3.0	1	*
2							
3							
4							
5							
				Sum of Midpoints	3.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				1.5		
	Tree Species (% Cover)						
1	Populus trichocarpa	FAC	45	4	38.0	1	*
2	Saliv Pasiandra	FACW+	40	4	38.0	1	*
3							
4							
5							
				Sum of Midpoints	76.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				38.0		

Percent of dominant species that are OBL, FACW and/or FAC 100%
Hydrophytic vegetation? YES

Comments: Vegetation bordering man-made pond. Upland vegetation exists further up berm around pond.

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood Veg. Unit #: 13
Field Investigator(s): CTB, RC Date: 2/28/90

SOILS

Series/phase: SCS mapped as Heberly silt loam Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ___ Histic epipedon present? Yes ___ No ___
Is the soil Mottled? Yes ___ No ___ Gleyed? Yes ___ No ___

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content

Comments: NO SOIL DATA COLLECTED / INUNDATED; AGRICULTURAL POND
Hydric Soils? YES Basis Inundation

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ___ Surface water depth: >3' in some areas ?? undetermined depth
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ surface
Mark other field indicators of surface inundation of soil saturation below:

___ Oxidized root zones
✓ Water marks
___ Drift lines
___ Water-borne sediment deposits
___ Water-stained leaves
___ Surface scoured areas
✓ Wetland drainage patterns
✓ Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: Man-made pond. Saturated and inundated drainage swale drains into pond on southeastern end.
Wetland Hydrology? YES Basis saturation and inundation

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ✓ No ___
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ___ No ✓
Disturbed Area? no Basis _____
Problem Area? no Basis _____
Comments: Original wetland / drainage pattern altered by agricultural practices and creation of this pond.
Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: 3 criteria for wetland determination met.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHa, CE
Veg. Unit #: 14
Date: 7/23/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Holcus lanatus	FAC	95	6	85.5	1	*
3	Agrostis sp	?	<5	1	3.0		
4							
5							
6							
7							
8							
9							
10							

Sum of Midpoints: 88.5
Dominance Threshold Number Equals 50% x Sum of Midpoints: 44.25

	Shrub Species					
1						
2	none					
3						
4						
5						
6						
7						

Sum of Midpoints:
Dominance Threshold Number Equals 50% x Sum of Midpoints:

	Sapling Species					
1						
2	none					
3						
4						
5						

Sum of Midpoints:
Dominance Threshold Number Equals 50% x Sum of Midpoints:

	Tree Species (% Cover)					
1						
2	none					
3						
4						
5						

Sum of Midpoints:
Dominance Threshold Number Equals 50% x Sum of Midpoints:

Percent of dominant species that are OBL, FACW and/or FAC: 100
Hydrophytic vegetation? YES

Comments: Planted Grid.

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 14
Field Investigator(s): CH, CG **Date:** 2/28/90

SOILS

Series/phase: Hydraulic silt loam Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ Gleyed? Yes ✓ No ___

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
Ap	0-14"+	10"	silt loam	10YR 3/1	5YR 3/3	5Y 5/1	45%

Comments: Soil mottled throughout 16" soil sample pit.

Hydric Soils? YES Basis Mottles gleying and dark (10YR 3/1) soil chroma.

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ 6" and below
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: Ponded water in slightly lower portion of swale. Swale flows into pond.

Comments: _____

Wetland Hydrology? YES Basis Observation.

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? YES Basis Planted field
Problem Area? ___ Basis _____
Comments: Currently planted field.

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: Meets criteria for wetland. MSL.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHo, CE
Veg. Unit #: 15
Date: 2/23/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**
1						
2	Holcus lanatus	FAC	98	7	93.0	1 *
3	Rubus ursinus	NI	<5	T		
4						
5						
6						
7						
8						
9						
10						
			Sum of Midpoints		98.0	
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Shrub Species					
1						
2						
3						
4						
5						
6						
7						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Sapling Species					
1						
2						
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Tree Species (% Cover)					
1						
2						
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

Percent of dominant species that are OBL, FACW and/or FAC 100
Hydrophytic vegetation? YES

Comments:

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 15
Field Investigator(s): CHo, CG **Date:** 2/28/90

SOILS

Series/phase: Huberly silt loam Subgroup:** _____
Is the soil on the hydric soils list? Yes ___ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ (faint) Gleyed? Yes ___ No ✓

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
Ap	0-15"	10"	silt loam	10YR 3/2	—	—	<50
B	15-18"+	16"	silt loam	10YR 5/2	10YR 3/4	—	<50

Comments: B horizon mottles are faint and only occur below 15" from the soil surface

Hydric Soils? NO Basis Lack of hydric indicators

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to the free-standing water in pit/soil probe hole: ∅
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: Plot higher than gentle swale area (location of plot 14) Field has been successfully drained in most areas

Wetland Hydrology? NO Basis No hydric indicators (no saturated or inundated soils)

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? YES Basis Plowed field
Problem Area? no Basis _____
Comments: _____

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ___ No ✓
Is the wetland hydrology criterion met? Yes ___ No ✓
Is the vegetation unit or plot wetland? Yes ___ No ✓
Rationale for jurisdictional decision: 3 criteria for wetlands are not met. Vegetation is Holcus lanatus [illegible] — a commonly planted grass species. Soils and hydrology parameters do not meet criteria for wetlands.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHo, CE
Veg. Unit #: 16
Date: 2/28/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Moss						
3	Polystichum munitum	UPL	20	2	20.5	1	*
4							
5							
6							
7							
8							
9							
10							
			Sum of Midpoints		20.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				10.25		

	Shrub Species						
1	Gaultheria shallon	UPL	10	2	10.5	1	*
2	Ilex sp.	UPL	45	1	3.0	2	
3							
4							
5							
6							
7							
			Sum of Midpoints		13.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				6.75		

	Sapling Species						
1							
2	Crataegus douglasii	FAC	30	3	20.5	1	*
3	Corylus cornuta	FACU	10	2	10.5	2	*
4							
5							
			Sum of Midpoints		31.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				15.5		

	Tree Species (% Cover)						
1	Pseudotsuga menziesii	UPL	45	4	38.0	2	*
2	Pinus ponderosa	FACU-	60	5	63.0	1	*
3							
4							
5							
			Sum of Midpoints		101.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				50.5		

Percent of dominant species that are OBL, FACW and/or FAC 17% 1/6
Hydrophytic vegetation? NO

Comments:
Edge of wetland veg. Pinus ponderosa occurs at edge of Carex obnupta dominated bare area

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 16
Field Investigator(s): CHo, CG **Date:** 2/28/90

SOILS

Series/ phase: Huberly silt loam
Subgroup:** _____
Undetermined _____
Is the soil on the hydric soils list? Yes ✓ No ___
Is the soil a Histosol? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___
Histic epipedon present? Yes ___ No ✓
Gleyed? Yes ___ No ✓

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
A	0-11"	8"	silt loam	10YR 3/2	—	—	<50
B	11-18"+	12"	silt loam	10YR 5/2	10YR 4/6	—	<50

Comments: A horizon - no mottles; Marginally hydric

Hydric Soils? YES Basis Mottles within B horizon

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ 12" and below
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: _____

Wetland Hydrology? YES Basis Saturation at 12"+ below

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ___
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ___ No ___
Disturbed Area? _____ Basis _____
Problem Area? _____ Basis _____
Comments: _____

Is the hydrophytic vegetation criterion met? Yes ___ No ✓
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ___ No ✓
Rationale for jurisdictional decision: 3 criteria not met.
Soils - marginally hydric, vegetation dominated by UPL vegetation. Seasonally wet area - not long enough to influence vegetation. UPL species (Pseudotsuga menziesii, Pinus ponderosa) exist in these soils.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CH, CE
Veg. Unit #: 17
Date: 2/28/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Carex obnupta	OBL	80	6	85.5	1	*
3							
4							
5							
6							
7							
8							
9							
10							
			Sum of Midpoints		85.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Shrub Species						
1							
2	Rosa sp.	?	15	2	10.5	1	*
3							
4							
5							
6							
7							
			Sum of Midpoints		10.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Sapling Species						
1							
2	Crataegus douglasii	FAC	25	3	20.5	1	*
3							
4							
5							
			Sum of Midpoints		20.5		
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

	Tree Species (% Cover)						
1							
2	Fraxinus latifolia	FACW	30	4	38.0	1	*
3							
4							
5							
			Sum of Midpoints		38.0		
	Dominance Threshold Number Equals 50% x Sum of Midpoints						

Percent of dominant species that are OBL, FACW and/or FAC 100
Hydrophytic vegetation? YES

Comments:
Band of FAC & wetter veg. in slight depressional area.

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 17
Field Investigator(s): CH, CG **Date:** 2/28/90

SOILS

Series/ phase: SCS mapped as Hydraulic silt loam Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___ Gleyed? Yes ✓ No ___

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content

Comments: NO DATA COLLECTED, INUNDATED

Hydric Soils? YES Basis Inundated, saturated soils. Fit SCS soils description.

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ___ Surface water depth: 0-3"
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ surface and below
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	✓	Wetland drainage patterns
___	Water-borne sediment deposits	✓	Morphological plant adaptations

Additional hydrologic indicators: Drainage swale fairly defined channel, flow observed during site visit

Comments: _____

Wetland Hydrology? YES Basis saturated + inundated

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ✓ No ___
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ___ No ✓
Disturbed Area? NO Basis _____
Problem Area? NO Basis _____
Comments: _____

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: 3 criteria met for wetland determination.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CHo, CG
Veg. Unit #: 18
Date: 7/1/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**	
1							
2	Hydrocotyle ranunculoides	FAC	60	5	63.0	1	*
3	Epilobium watsonii	FACW-	15	2	10.5	4	
4	Agropyron sp. ?		~10	2	10.5	4	
5	Aster sp. ??		~10	2	10.5	4	
6	Unidentifiable herb		40	4	38.0	2	*
7	Poa sp. ??		20	3	20.5	3	
8							
9							
10							
				Sum of Midpoints	153		
	Dominance Threshold Number Equals 50% x Sum of Midpoints				76.5		

	Shrub Species					
1						
2						
3						
4						
5						
6						
7						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Sapling Species					
1						
2						
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Tree Species (% Cover)					
1						
2						
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

Percent of dominant species that are OBL, FACW and/or FAC? Assumed 'yes' due to soils & hydrology
Hydrophytic vegetation? Undetermined due to number of unknowns. dominant or clear herbaceous plant

Comments: Distinctive vegetation break on Aeroplotoropl.

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 18
Field Investigator(s): CH, CE **Date:** 3/1/90

SOILS

Series/ phase: Huberly silt loam
Subgroup:** _____
Is the soil on the hydric soils list? Yes ✓ No ___
Undetermined _____
Is the soil a Histosol? Yes ___ No ✓
Histic epipedon present? Yes ___ No ✓
Is the soil Mottled? Yes ✓ No ___
Gleyed? Yes ✓ No ___

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
A	0-10"	5"	silt loam	10YR 3/2	—	—	<50
B	10-18"	12"	silt loam	10YR 5/1	2.5 3/4	5Y 5/1	<50

Comments: SCS mapped swale as hydric soil. A horizon wet.

Hydric Soils? YES Basis chroma mottling and gley. Close to SCS description of Huberly

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No ___
Depth to the free-standing water in pit/soil probe hole: @ 5"
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

Additional hydrologic indicators: Surface inundation in lowest portion of [illegible] swale.

Comments: Swale has been drained. Four

Wetland Hydrology? YES Basis Saturation

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? YES Basis Planted field
Problem Area? NO Basis _____
Comments: Agricultural area gentle swale.

Is the hydrophytic vegetation criterion met? Yes ✓ No ___ (Assumed)
Is the hydric soil criterion met? Yes ✓ No ___
Is the wetland hydrology criterion met? Yes ✓ No ___
Is the vegetation unit or plot wetland? Yes ✓ No ___
Rationale for jurisdictional decision: [illegible] [illegible] plant. Hydric soils and wetland hydrology (very assumed)

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood
Field Investigation(s): CH, CG
Veg. Unit #: 19
Date: 3/1/90

	Herb & Bryophyte Species	Indicator Status	% Areal Cover	Cover* Class	Midpoint* of Cover Class	Rank**
1						
2	Holcus lanatus	FAC	90	7	98.0	1 *
3	Rubus ursinus	NI	10	2	10.5	2
4						
5						
6						
7						
8						
9						
10						
			Sum of Midpoints		108.5	
	Dominance Threshold Number Equals 50% x Sum of Midpoints				54.25	

	Shrub Species					
1						
2						
3						
4						
5						
6						
7						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Sapling Species					
1						
2						
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

	Tree Species (% Cover)					
1						
2						
3						
4						
5						
			Sum of Midpoints			
	Dominance Threshold Number Equals 50% x Sum of Midpoints					

Percent of dominant species that are OBL, FACW and/or FAC: 100
Hydrophytic vegetation? YES

Comments: FAC wetland vegetation.

* Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

** To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

WETLAND DETERMINATION
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE

Project/Site: Sherwood **Veg. Unit #:** 19
Field Investigator(s): [illegible] **Date:** 21 [illegible]

SOILS

Series/ phase: _____ Subgroup:** _____
Is the soil on the hydric soils list? Yes ___ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ___ Histic epipedon present? Yes ___ No ___
Is the soil Mottled? Yes ___ No ___ Gleyed? Yes ___ No ___

Horizon	Horizon Depth	Sample Depth	Soil Type/ Texture	Matrix Color	Mottle Color	Gley Color	Organic Content
A	0-12"		loam	10YR 4/3			
B	12-18"+		loam	10YR 4/4			

Comments: gradual change from A to B horizon. Mapped as [illegible] loam
Hydric Soils? NO Basis lack of dark chroma or mottles

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓ Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to the free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation of soil saturation below:

___	Oxidized root zones	___	Water-stained leaves
___	Water marks	___	Surface scoured areas
___	Drift lines	___	Wetland drainage patterns
___	Water-borne sediment deposits	___	Morphological plant adaptations

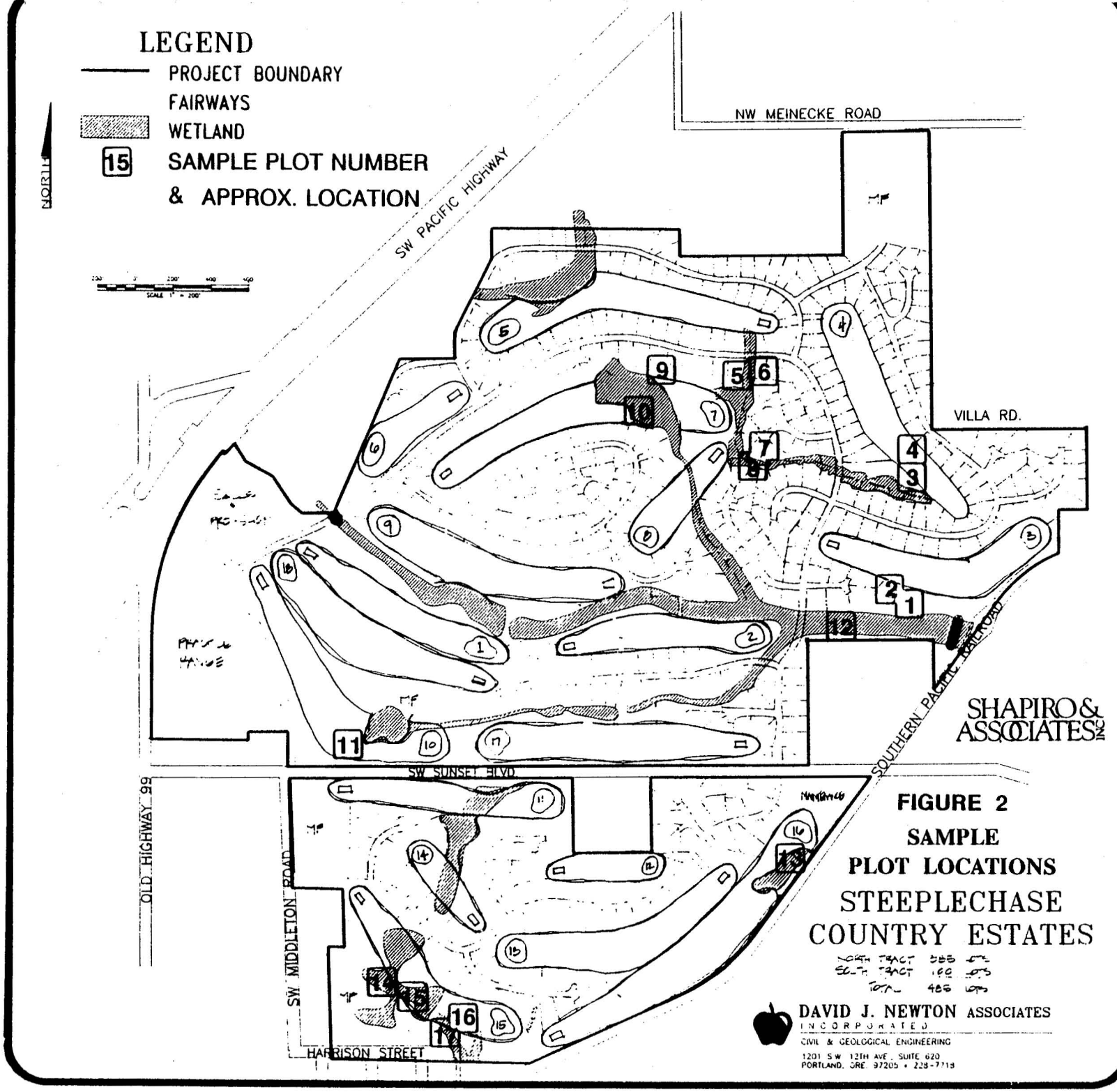
Additional hydrologic indicators: _____

Comments: 11% slope of gentle swale
Wetland Hydrology? NO Basis lack of saturation or inundation

SUMMARY

Do normal environmental conditions exist at the plant community? Yes ___ No ✓
Has the vegetation, soils, and/or hydrology been significantly disturbed? Yes ✓ No ___
Disturbed Area? Yes Basis [illegible]
Problem Area? No Basis _____
Comments: _____

Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Is the hydric soil criterion met? Yes ___ No ✓
Is the wetland hydrology criterion met? Yes ___ No ✓
Is the vegetation unit or plot wetland? Yes ___ No ✓
Rationale for jurisdictional decision: 2 criteria not met. Vegetation facultative wetland species; (Holcus lanatus) Formerally cultivated field


LEGEND
PROJECT BOUNDARY
FAIRWAYS
WETLAND
15 SAMPLE PLOT NUMBER & APPROX. LOCATION
NORTH
NW MEINECKE ROAD
SW PACIFIC HIGHWAY
VILLA RD.
SOUTHERN PACIFIC RAILROAD
SW SUNSET BLVD
OLD HIGHWAY 99
SW MIDDLETON ROAD
HARRISON STREET
SHAPIRO & ASSOCIATES INC
FIGURE 2
SAMPLE
PLOT LOCATIONS
STEEPLECHASE
COUNTRY ESTATES
DAVID J. NEWTON ASSOCIATES
INCORPORATED
CIVIL & GEOLOGICAL ENGINEERING
1201 S.W. 12TH AVE., SUITE 620
PORTLAND, ORE. 97205 • 228-7718

May 10, 1990

SHAPIRO & ASSOCIATES INC

The Smith Tower
Suite 1400
506 Second Avenue
Seattle
Washington 98104
Tel: 206/624 • 9190
Fax: 206/624 • 1901

Mr. Ken Bierly
Oregon Division of State Lands
1600 State Street
Salem, OR 97310

Re: Steeplechase Country Estates Conceptual Mitigation Plan and Joint DSL and Corps Permit Application

Dear Mr. Bierly:

Shapiro and Associates, Inc. has created a conceptual mitigation plan for the Steeplechase Country Estates project located in the City of Sherwood, Oregon. The conceptual mitigation plan for the Steeplechase Country Estates project was designed using the most recent project plan (David J. Newton Associates, Inc., Aerial Map Exhibit 5A dated April 1990). The project grading plan was not available for use in the design of the conceptual mitigation plan.

Since the submittal of the joint permit application for activities in wetlands from the U.S. Army Corps of Engineers and State of Oregon Division of State Lands on April 9, 1990, changes to the project design have occurred. Therefore, the most recent project design (David J. Newton, Associates, Inc., Aerial Map Exhibit 5A dated April 1990) should be consulted for the most accurate information on the Steeplechase Country Estates project. Mr. Don Oakley of David J. Newton Associates, Inc. should be sending you a copy of this most updated site plan.

The enclosed conceptual mitigation plan describes the proposed development, the goals and objectives of the mitigation plan, wetland mitigation design features, planting implementation techniques, monitoring, and standards of success for the mitigation plan. This plan is only conceptual and was designed without a grading plan for the site. The success of this mitigation plan depends on the site grading plan as well as other factors. Should you have any questions concerning the conceptual mitigation plan or joint permit application, please do not hesitate to call.

Sincerely,

SHAPIRO AND ASSOCIATES, INC.

Marc Boule', Senior Vice President
Biological / Physical Resources

Enclosure

cc: Mr. Don Oakley

STEEPLECHASE COUNTRY ESTATES
CONCEPTUAL WETLAND MITIGATION PLAN

Prepared for:

Mr. Don Oakley
David J. Newton Associates
1201 S.W. 12th Avenue
Suite 620
Portland, Oregon 97205

Prepared by:

Shapiro and Associates, Inc.
The Smith Tower, Suite 1400
Seattle, WA 98104
(206) 624-9190

May 10, 1990

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1.0 Introduction

This conceptual mitigation plan is proposed to compensate for expected wetland impacts by the proposed Steeplechase Country Estates project. The project site includes a number of parcels within the City of Sherwood, Oregon located between S. W. Pacific Highway (99W) , Old Highway 99, the Southern Pacific Railroad, and Sherwood High School.

Steeplechase Country Estates is a proposed low density residential planned unit development of 474 single family detached housing units and 119 multiple family dwelling units. The development is situated around a competition qualitly golf course and also includes a golf driving range, pro shop, coffee shop, club house, maintenance facilities, and recreational vehicle storage. The project is designed as a fully walled community with an internal private road system.

2.0 Goals and Objectives

This wetland mitigation plan involves the following goals:

1) to restore and enhance functions of wetlands following disturbance;

2) to enhance the biological productivity of the existing wetlands for wildlife habitat;

3) to create new wetland areas as compensation for a loss of existing wetlands on the site;

4) to provide stormwater detention for the proposed project

5) to create an asthetically pleasing natural design

The following objectives of the mitigation plan are intended to meet these goals:

1) enhance a select number of existing wetlands by removing exotic plant species and replacing with native wetland species

2) create vegetated buffers around the wetlands in some key areas by enhancing the existing upland areas with a variety of upland native plant species and removing exotic plants where necessary

3) vegetate around the stormwater detention/irrigation ponds with a combination of native plant species that would provide habitat for a variety of animal species

4) create forested, scrub-shrub, and emergent wetland habitat types at suitable elevations within the created wetland areas

3.0 Wetland Mitigation Design Features

In order to accomplish the goals of the wetland mitigation plan as listed above, several design features have been incorporated into the Wetland Mitigation Planting Plan.

1. The proposed mitigation wetlands will be an integral element of the proposed stormwater detention/irrigation ponds on the site. The ponds, and mitigation wetlands, will be located largely where wetlands currently exist on the site. It is anticipated that water levels in the ponds will be maintained at a level near that of the outfall for a considerable portion of the year because a seasonally high water table exists on portions of the site. Pond water levels also will be maintained by recirculating water from ponds at lower elevations into ponds located at higher elevations in the drainages. Additional untreated city well water will be introduced into the upstream end of various drainages on the site to maintain pond water levels for irrigation purposes. Plant species adapted to specific water regimes have been proposed for areas of the wetlands and the ponds which are expected to exhibit compatible regimes. For example, emergent marsh plantings are proposed for areas that will remain wet for the longest period of time during the year, and scrub/shrub and forested plantings are proposed for areas more likely to experience saturated soils only on a seasonal basis.

2. The wetland plantings for both the enhancement and creation areas are expected to increase the physical diversity of the existing wetlands on the site and should improve existing wildlife habitat.

3. The plant species selected (see Plant Schedule on the planting plan) are all native plants frequently found in wetlands of the Pacific Northwest. The Conceptual Wetland Mitigation Plans and Plant List contain information on the plant species to be used and planting zones. Plant species have been chosen for their adaptability to the anticipated planting environments and for their commercial availability.

4. Upland forested or shrub buffers around wetlands help to insulate them from the potential negative effects of closely adjacent development. Wildlife may use wetlands which are protected from human disturbance by a surrounding buffer more than those around which there is no buffer. An upland buffer will be planted around key wetland areas. The buffers will be composed of native vegetation simulating the composition of naturally occurring upland woodlands or forests of the Pacific Northwest.

4.0 Planting Implementation Techniques

If followed as specified, the implementation techniques specified below should provide a foundation for successful plant growth in the mitigation wetlands.

Construction and Planting Sequence

Early spring is the most desirable planting time, taking advantage of availablility of bare root vegetation and seasonal rains. An alternative season for planting is the fall of the year. Summer planting may be possible depending on the availability of plant material, the ability to irrigate plantings, and the presence of adequate water levels in the pond. Following excavation of the ponds to elevations appropriate for accomodating the addition of a layer of hydric soil conserved from the site, hydric soil should be spread over the wetland planting areas. Planting of emergent and wetland tree and shrub species should then occur. An area of mulch should then be placed around the plantingsto conservesoil moisture and inhibit weed growth.

Following planting of all trees and shrubs in the wetland, the area will be ready for application of the wetland seed mix (see Plant Schedule on the planting plan). The seed mix can be applied by hydroseeding or broadcast seeding the areas specified. Planting of the upland buffers around the wetland plantings should follow a sequence similar to that described for the wetland plantings and include sequentially: grading, spreading of topsoil, planting of trees and shrubs, mulching, and seeding.

Sources of Plant Material

All plant material is to be supplied by commercial nurseries.

Soil Amendment

Hydric soils existing in the wetland areas proposed for fill activities should be stockpiled for use in planting the mitigation wetlands. The hydric soils are the darkest and most highly organic soils on the site and are particularly conducive to the success of the plantings. There may be propagules and seeds of wetland plant species in the conserved soil, thus contributing to natural revegetation of the planted areas. In the existing upland areas where pond excavation is proposed, the native upland topsoil should also be conserved and stockpiled for use in landscaping the buffer areas and other areas of the site. Soil amendment is proposed for the individual planting holes of the woody species and should include topsoil, granular or tablets of transplanter formula fertilizer, and organic additive such as composted forest products.

Construction Observation

A representative from SHAPIRO should be present on-site during various stages in the implementation of the enhancement plan. This will allow for necessary field adjustments and for the careful observation and direction of planting operations, particularly important to the success of wetland plantings. The phases appropriate for field input from SHAPIRO include: 1) spreading of topsoil/hydric soils; 2) approval of all plant material and its final planting locations prior to planting; and 3) planting of emergent marsh, tree, and shrub species in the mitigation wetlands.

Watering

Planting should be scheduled to occur during the early spring of the year (or fall) when there is generally predictable and adequate rainfall for a period of several months. It may be necessary, however, to do supplemental watering at the time of planting in order to ensure plant survival in both the wetland and buffer plantings. Other watering may also be necessary during the drier months of the year for the first year after planting.

Landscape Maintenance

The objectives for the mitigation plantings are for the created marsh and proposed pond to offer wetland habitat values to the site and to create an
aesthetic amenity for the residents and users of the golf course facilities. Consequently, the only maintenance activities necessary would be those done to ensure those objectives. Some pruning of tree and shrub material may be appropriate periodically, but should be initiated only after seeking input from a professional wetland biologist or landscape architect familiar with the original objectives for the plantings. The created marsh plantings shall not be mowed or trimmed. The upland buffer plantings, like the wetland plantings, shall be left in a natural state as they mature. No spraying of herbicides or other chemicals shall occur within the wetland or its buffer. Commonly used garden chemicals can pose a serious threat to water quality of the wetland and to the wildlife using the habitat.

5.0 Proposed Monitoring

The wetland mitigation and upland buffer plantings will be monitored once a year for a period of three years following construction. Such monitoring will use standardized techniques and

procedures as described below to measure the survival and growth of plant material and the success of the mitigation plan overall. An annual report will be written and submitted to the appropriate agencies for review. This report will describe (and quantify to the extent possible) the level of success of the plan. To be considered in the monitoring strategy are 1) plant species composition and cover values for vegetation in the developing plantings; 2) the development of wetland habitats and values in the mitigation areas; 3) survival rate of originally planted vegetation; 4) wildlife use; 5) water quality and drainage control in the wetland; and 6) changes in the site's soils such as the development of characteristics of hydric soils .

6.0 Standards of Success

It is expected that the canopy cover of shrub species in the scrub/shrub plantings one year after planting will be a minumum of 20-30% of the ground area in which shrub species are massed; after two years, shrub cover is expected to be 30-45%; and after three years cover is expected to be between 45% and 75%. In the emergent wetland plantings, acceptable emergent plant species' cover should be a minimum of 15-30% after one year; 30-60% after two years; and 100% at the end of the third year after planting. In the forested wetland and upland buffer plantings, acceptable woody plant canopy cover for tree species in the tree layer, and for shrubs in the shrub layer, should be a minimum of 10-20% by the end of the first year after planting; 20-30% after the second year; and at least 45% by the end of the third year. Evaluation of the success of the mitigation project will be based on these expected cover percentages and 80% survival rate. These standards will be applied, as appropriate, at the times of yearly monitoring and may be modified (as approved by the appropriate agencies) immediately after plantings have been installed when baseline cover values are estimated.

Monitoring of wildlife use of the pond and mitigation plantings will also occur. Those species of birds, mammals, fish, reptiles, amphibians, and invertibrates which are readily observable without trapping will be identified and recorded. Where possible, notation will be made of the kinds and locations of the habitats with greatest use by each species. Notation will also be made of breeding or nesting activity, particularly of bird species, in the wetlands or buffer plantings.

The planting locations of species proposed on the mitigation plans have been selected based on anticipated pond and groundwater levels. The success of the plantings will be dependent on maintenance of these anticipated water levels. Monitoring of hydrologic conditions in the created wetlands will consist of observation of existing pond elevations or of evidence of seasonal inundation of the wetland plantings. vegetation, and the need to implement a contingency plan (see below).

7.0 Contingency Plan

If, upon monitoring of the created wetlands and upland buffer plantings, it is determined that these areas are not reaching established performance goals (see above) for vegetative cover, plant survival, drainage and water quality controls, or wildlife use, contingencies will be developed to ensure that original goals are met. Depending on the problems addressed, these contingencies could include the alteration of the soil or hydrologic conditions, and/or the replanting of wetland or upland buffer vegetation.

Scientific Name	Common Name	PFO1 Planting	PSS1 Planting*	EM1 Planting*	Upland Buffer Planting
Trees:					
Alnus rubra	Red Alder	x			x
Fraxinus latifolia	Oregon Ash	x			
Pinus ponderosa	Ponderosa Pine				x
Populus trichocarpa	Black Cottonwood	x			
Pseudotsuga menziesii	Douglas Fir				x
Thuja plicata	Western Red Cedar	x			x
Tsuga heterophylla	Western Hemlock				x
Shrubs:					
Acer circinatum	Vine Maple				x
Cornus sericea	Redtwig Dogwood	x	x		x
Corylus cornuta	Hazelnut				x
Crataegus douglasii	Black Hawthorn	x	x		
Gaultheria shallon	Salal				x
Mahonia aquifolium	Tall Oregon Grape				x
Mahonia nervosa	Longleaf Oregon Grape				x
Oemlaria cerasiformis	Osoberry				x
Ribes sanguineum	Western Red Currant				x
Rosa nutkana	Nootka Rose				x
Rubus spectabilis	Salmonberry	x	x		x
Salix spp.	Native Willow Cuttings	x	x		
Sambucus racemosa	Red Elderberry				x
Spiraea douglasii	Hardhack Spiraea		x		
Symphoricarpus albus	Snowberry				x
Emergents:					
Iris pseudocarus	Yellow Flag Iris			x	
Lysichitum americanum	Skunk Cabbage			x	
Nymphaea tuberosa	White Waterlilly			x	
Scirpus acutus	Hardstem Bulrush			x	
Typha latifolia	Common Cattail			x	
Wetland Seed Mix:					
Agrostis alba	Redtop Bentgrass	x	x		
Alopecurus pratensis	Meadow Foxtail	x	x		
Chrysanthemum leucanthemum	Oxeye Daisy	x	x		
Elymus junceus	Russian Wildrye	x	x		
Festuca rubra	Red Fescue	x	x		
Lotus corniculatus	Birdsfoot Trefoil	x	x		
Dry Area Seed Mix:					
Agrostis tenuis	Colonial Bentgrass				x
Chrysanthemum leucanthemum	Oxeye Daisy				x
Dactylus glomerata	Orchard Grass				x
Eschscholzia californica	California Poppy				x
Festuca arundinacea	Tall Fescue				x
Festuca rubra	Red Fescue				x
Festuca rubra commutata	Chewings Fescue				x
Lolium multiflorum	Annual Rye				x
Lolium perenne	Perennial Rye				x
Trifolium repens	White Clover				x

NOTE: PFO1 = Forested Wetland; PSS1 = Scrub/shrub Wetland; EM1 = Emergent Marsh Wetland
Upland buffer plantings are recommended for dryer areas and buffers.
* Plant species in this catagory can also be used in wet biofiltration swales.

FIGURE 2

CONCEPTUAL PLANT LIST

STEEPLECHASE COUNTRY ESTATES

SHAPIRO & ASSOCIATES INC.


LEGEND
PROJECT BOUNDARY
EXISTING STRUCTURE
EXISTING VEGETATION
WETLAND LOCATION AND NUMBER
NORTH
SW PACIFIC HIGHWAY
SW MERIDIAN ROAD
VILLA RD
SW SUNSET BLVD.
NICOLETON RD
HARRISON ST
1
2
3
4
5
6
7
8
9
10
STEEPLECHASE
COUNTRY ESTATES
WETLAND MITIGATION AREAS
APRIL, 1990
DAVID J. NEWTON ASSOCIATES
SHAPIRO & ASSOCIATES

FIGURE 1

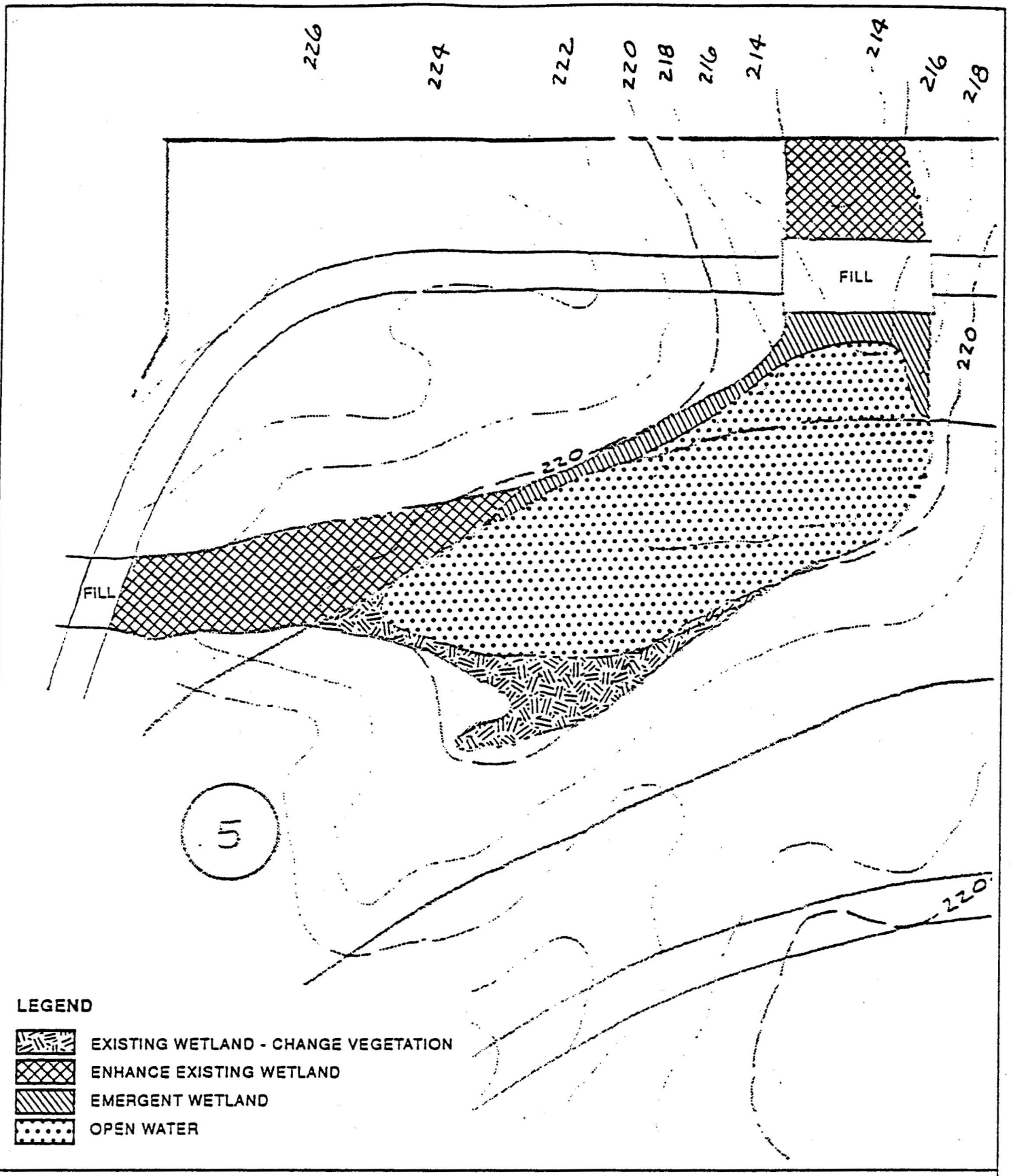


FIGURE 3

WETLAND MITIGATION PLAN - CONCEPTUAL

LOCATION ❶

STEEPLECHASE COUNTRY ESTATES

0 100'

SCALE IN FEET

SHAPIRO & ASSOCIATES INC

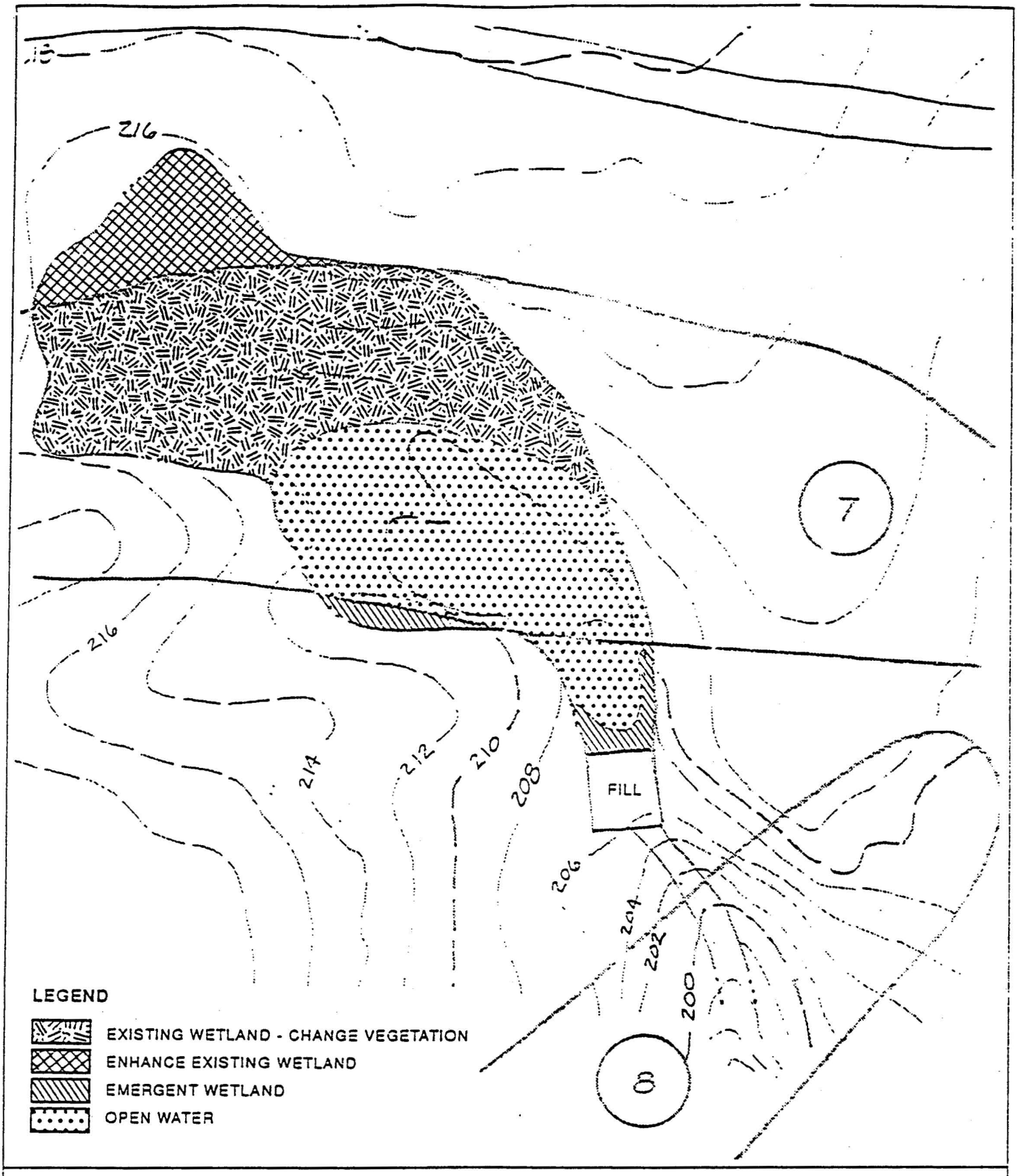


FIGURE 4

WETLAND MITIGATION PLAN - CONCEPTUAL

LOCATION ❷

STEEPLECHASE COUNTRY ESTATES

0 100'

SCALE IN FEET

SHAPIRO & ASSOCIATES, INC.

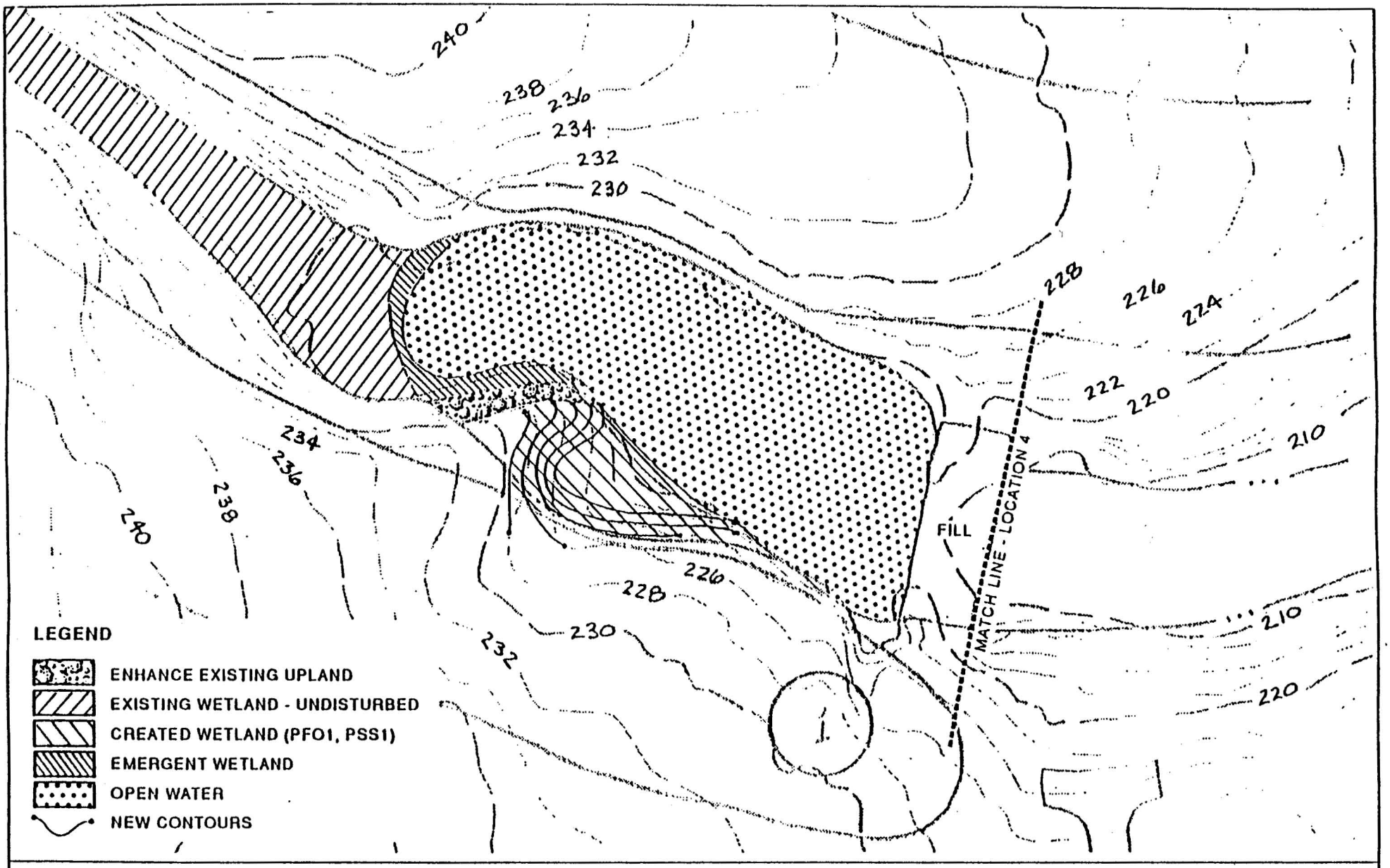


FIGURE 5

WETLAND MITIGATION PLAN - CONCEPTUAL
LOCATION 3

STEEPLECHASE COUNTRY ESTATES

0 100'
SCALE IN FEET

SHAPIRO & ASSOCIATES, INC.

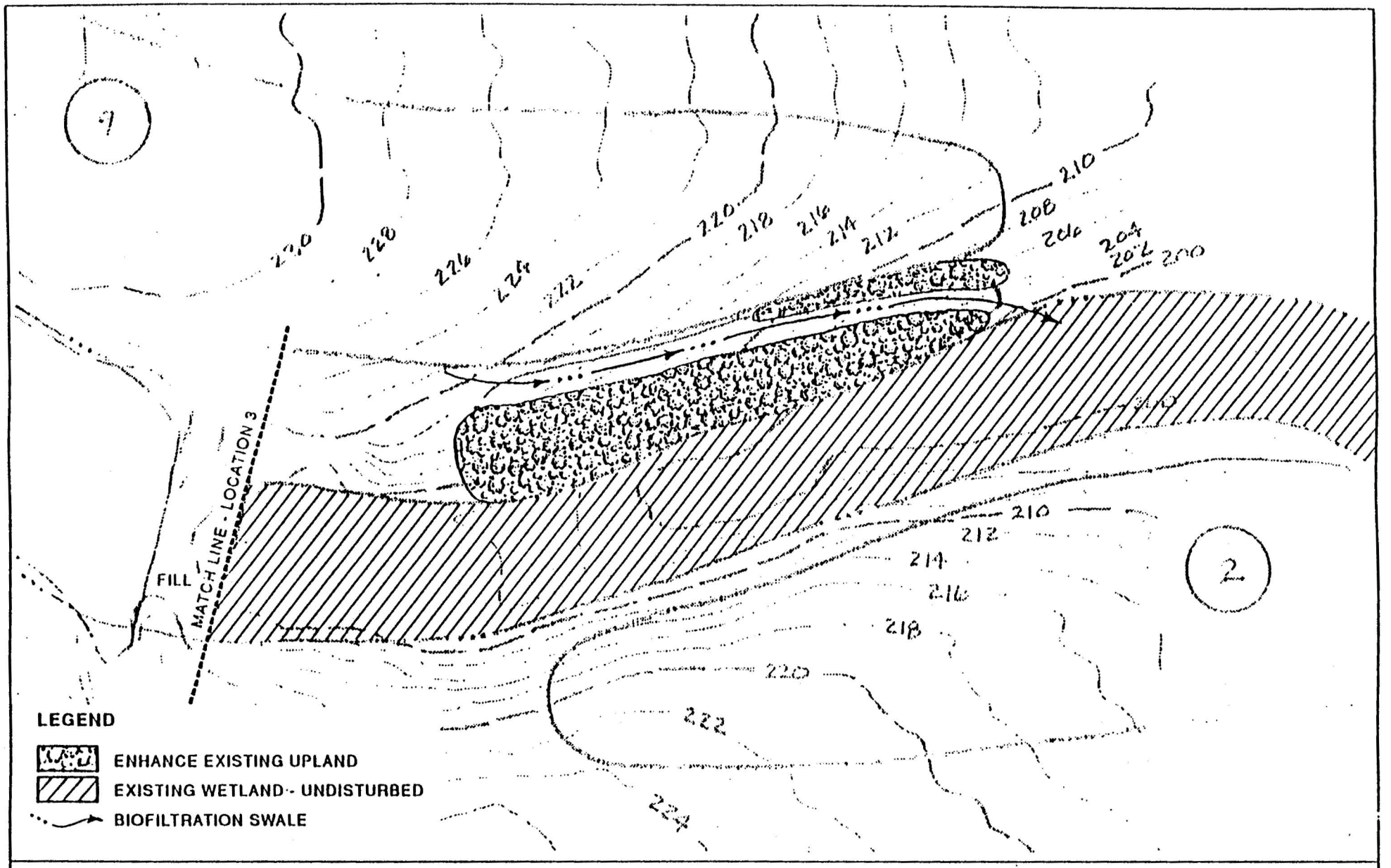


FIGURE 6

WETLAND MITIGATION PLAN - CONCEPTUAL
LOCATION 4

STEEPLECHASE COUNTRY ESTATES

0 100'
SCALE IN FEET

SHAPIRO & ASSOCIATES, INC.

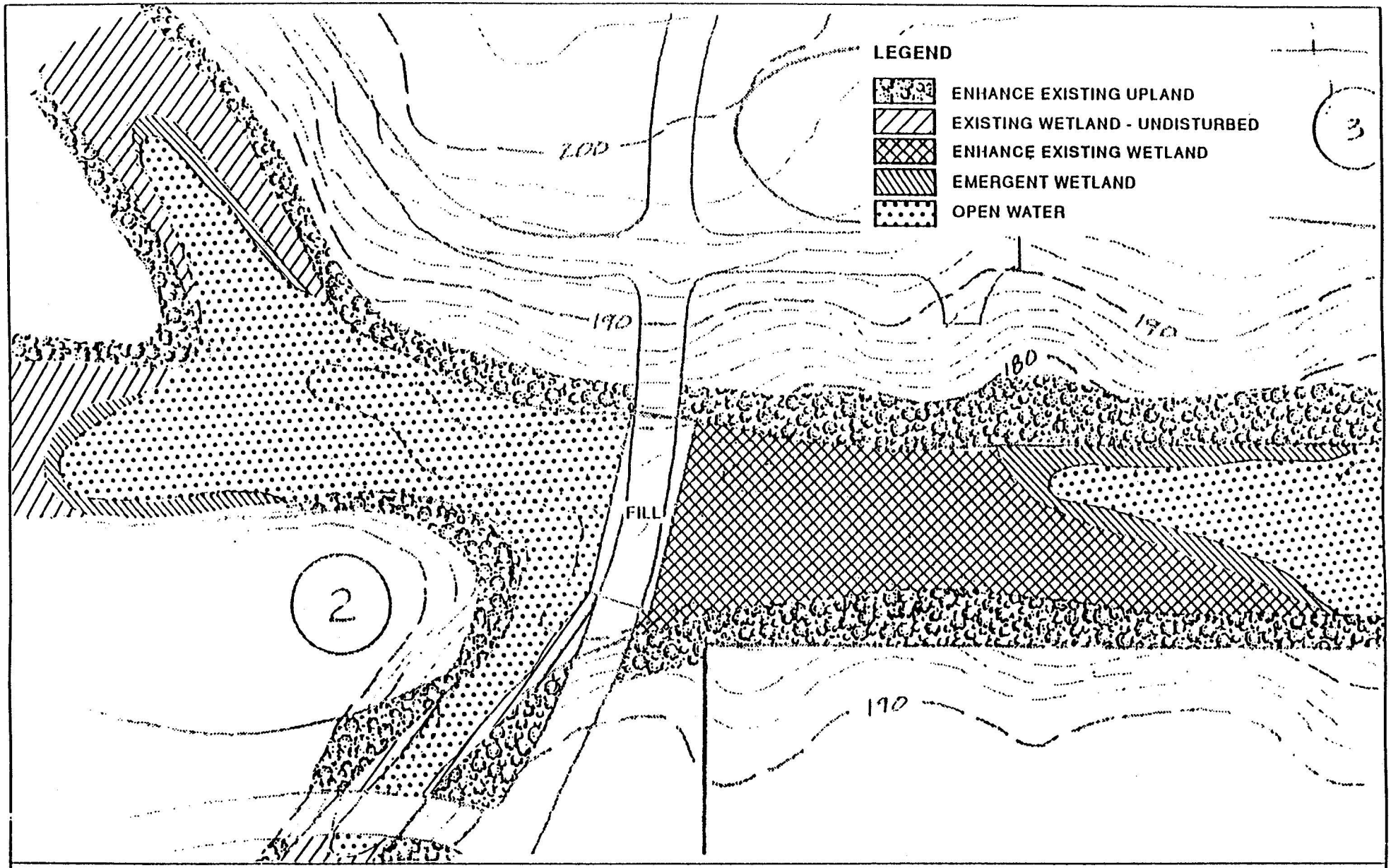


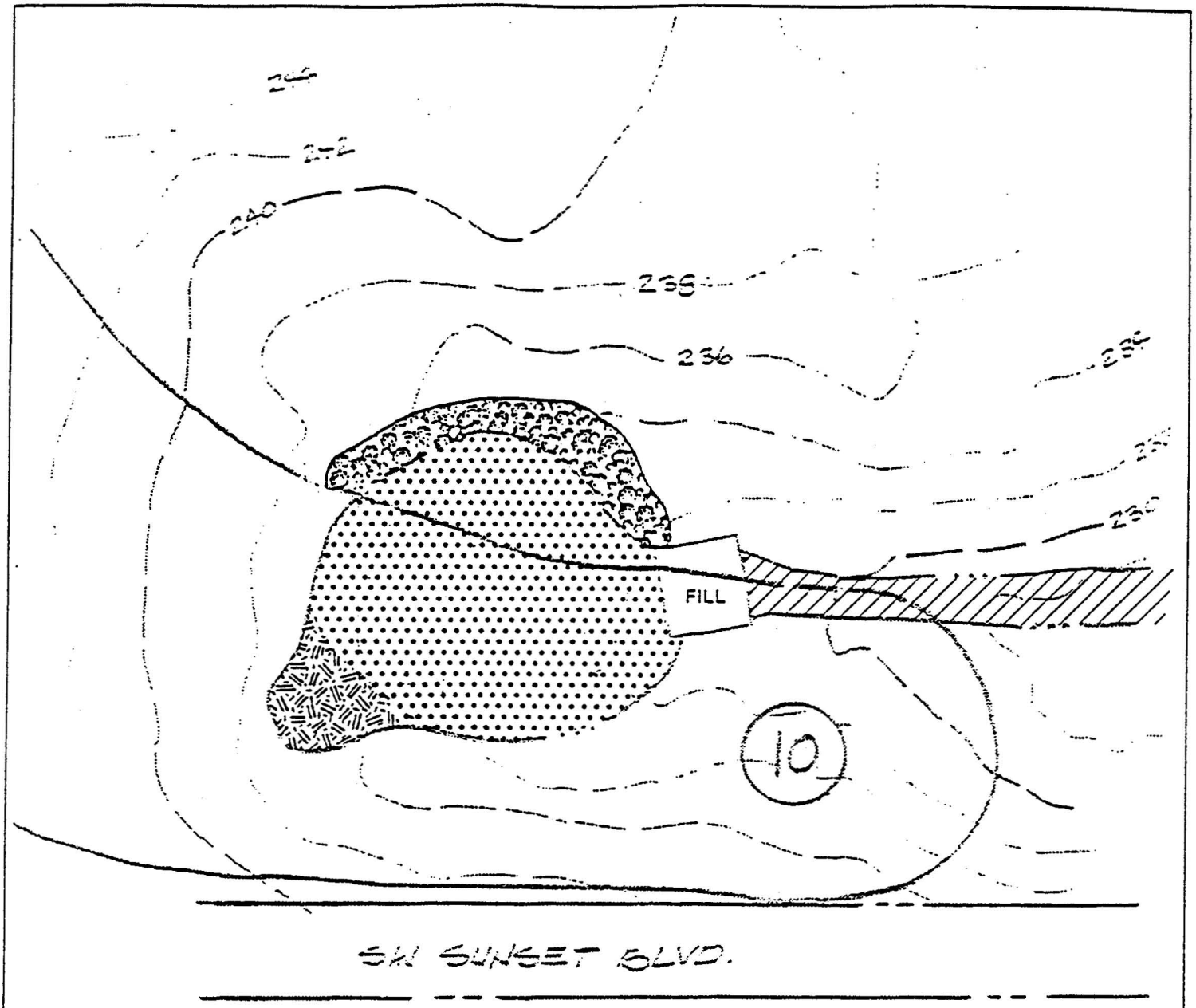
FIGURE 7

WETLAND MITIGATION PLAN - CONCEPTUAL
LOCATION 5

STEEPLECHASE COUNTRY ESTATES

0 100'
SCALE IN FEET

SHAPIRO & ASSOCIATES, INC.



LEGEND

- ENHANCE EXISTING UPLAND
- EXISTING WETLAND - UNDISTURBED
- EXISTING WETLAND - CHANGE VEGETATION
- OPEN WATER

FIGURE 8

WETLAND MITIGATION PLAN - CONCEPTUAL

LOCATION 6

STEEPLECHASE COUNTRY ESTATES

0 100'

SCALE IN FEET

SHAPIRO & ASSOCIATES INC

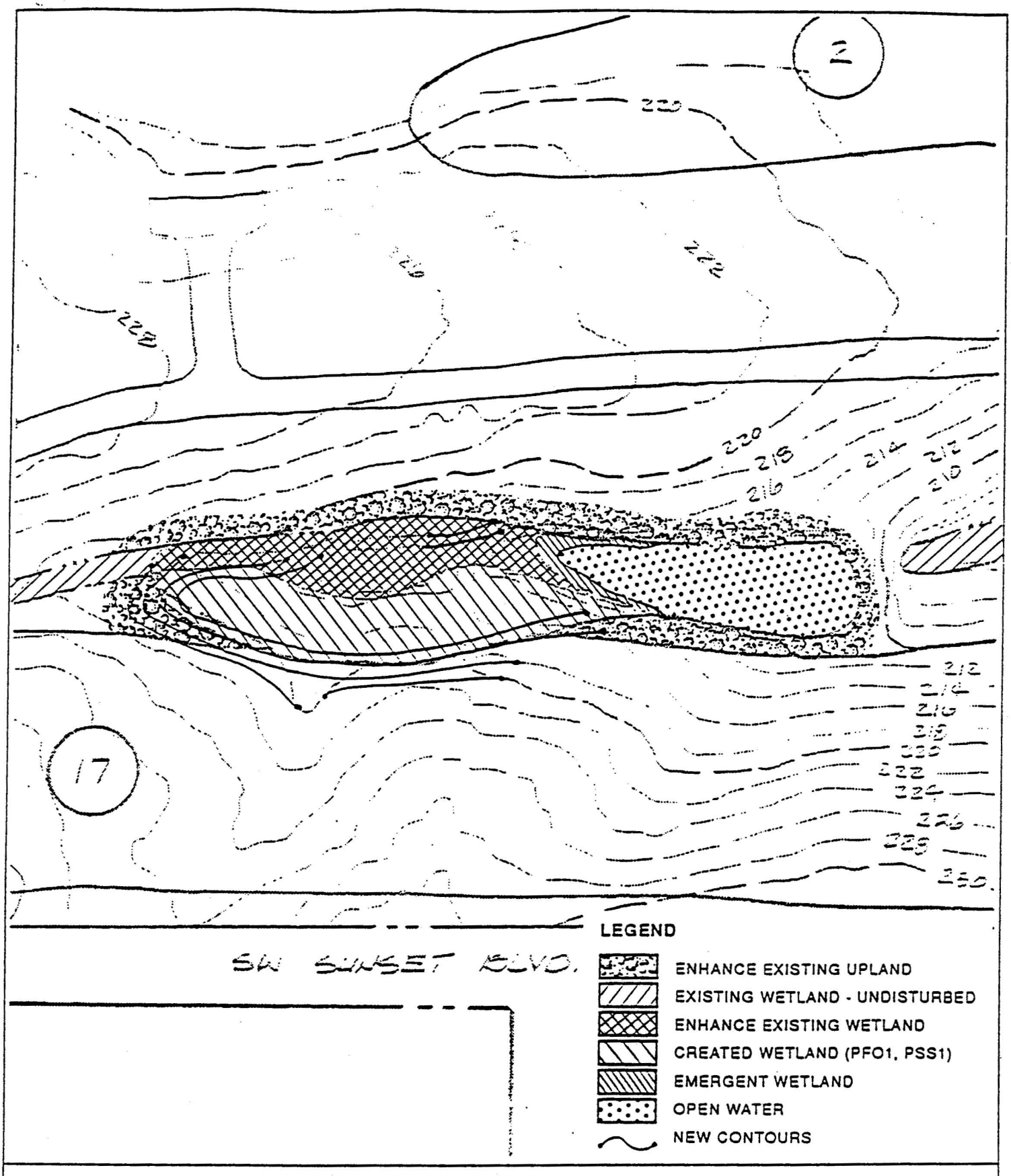


FIGURE 9

WETLAND MITIGATION PLAN - CONCEPTUAL

LOCATION 7

STEEPLECHASE COUNTRY ESTATES

0 100'

SCALE IN FEET

SHAPIRO & ASSOCIATES, INC.

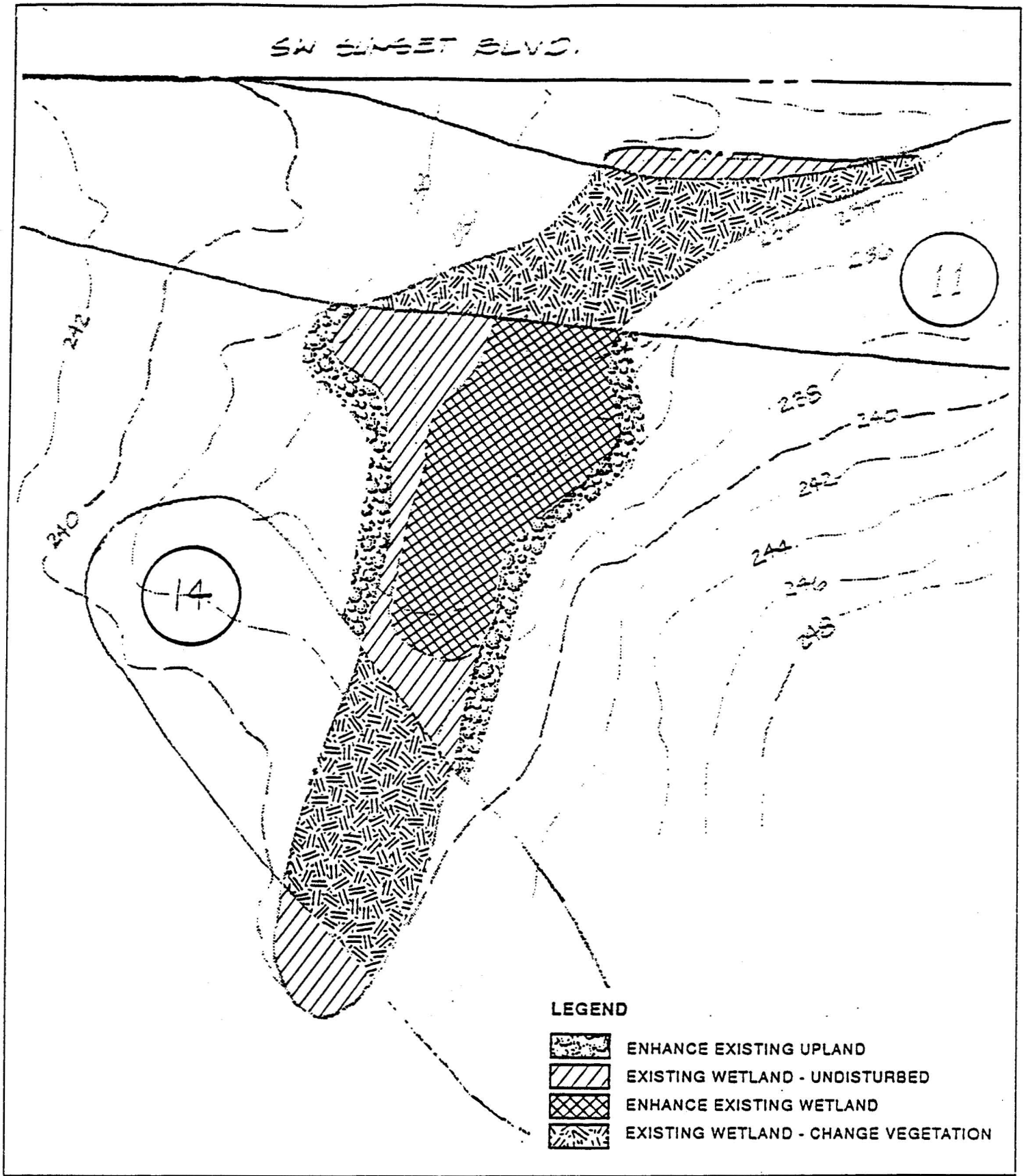


FIGURE 10

WETLAND MITIGATION PLAN - CONCEPTUAL

LOCATION ❽

STEEPLECHASE COUNTRY ESTATES

0 100'

SCALE IN FEET

SHAPIRO & ASSOCIATES INC

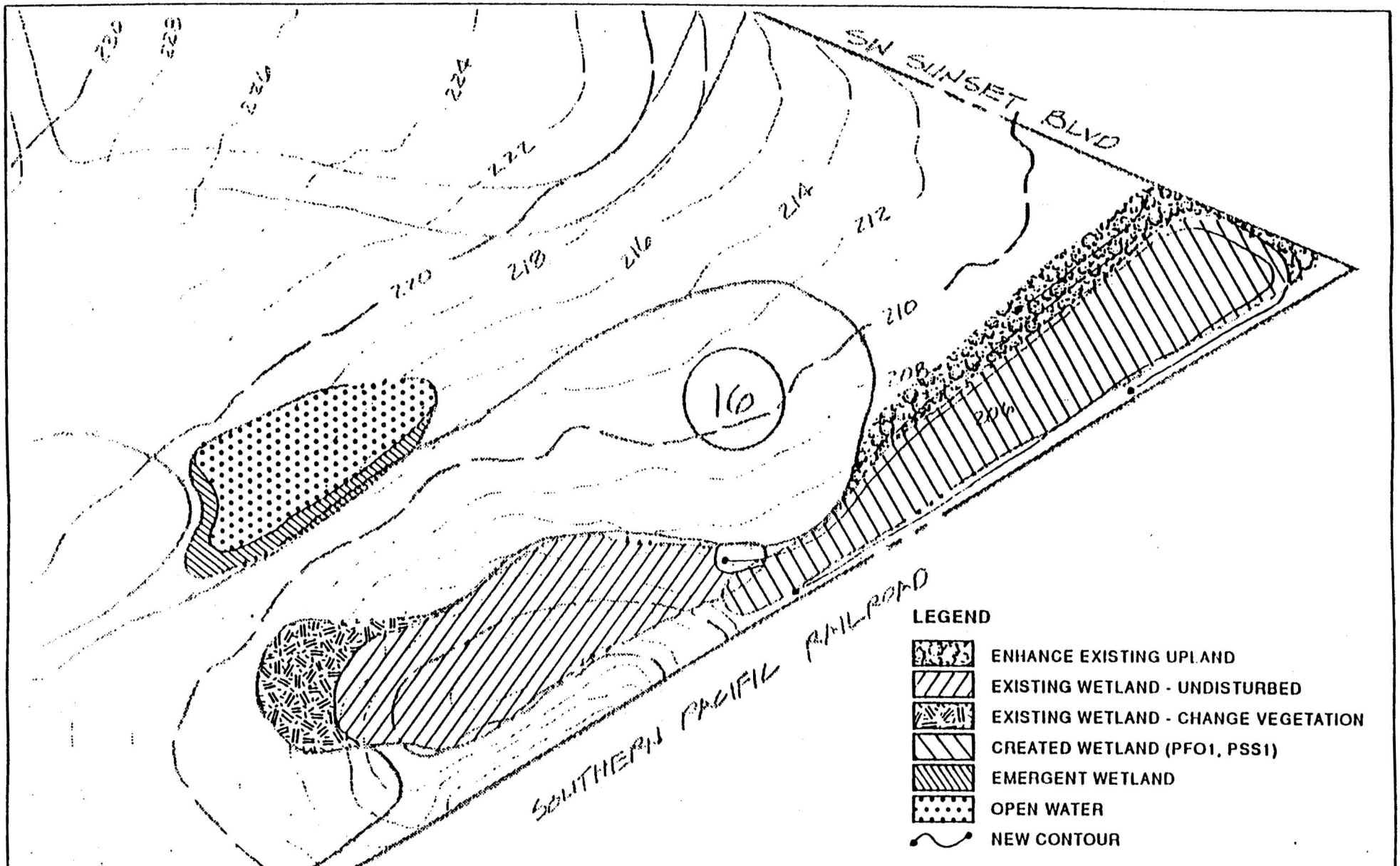


FIGURE 11

WETLAND MITIGATION PLAN - CONCEPTUAL LOCATION 8

STEEPLECHASE COUNTRY ESTATES

SHAPIRO & ASSOCIATES

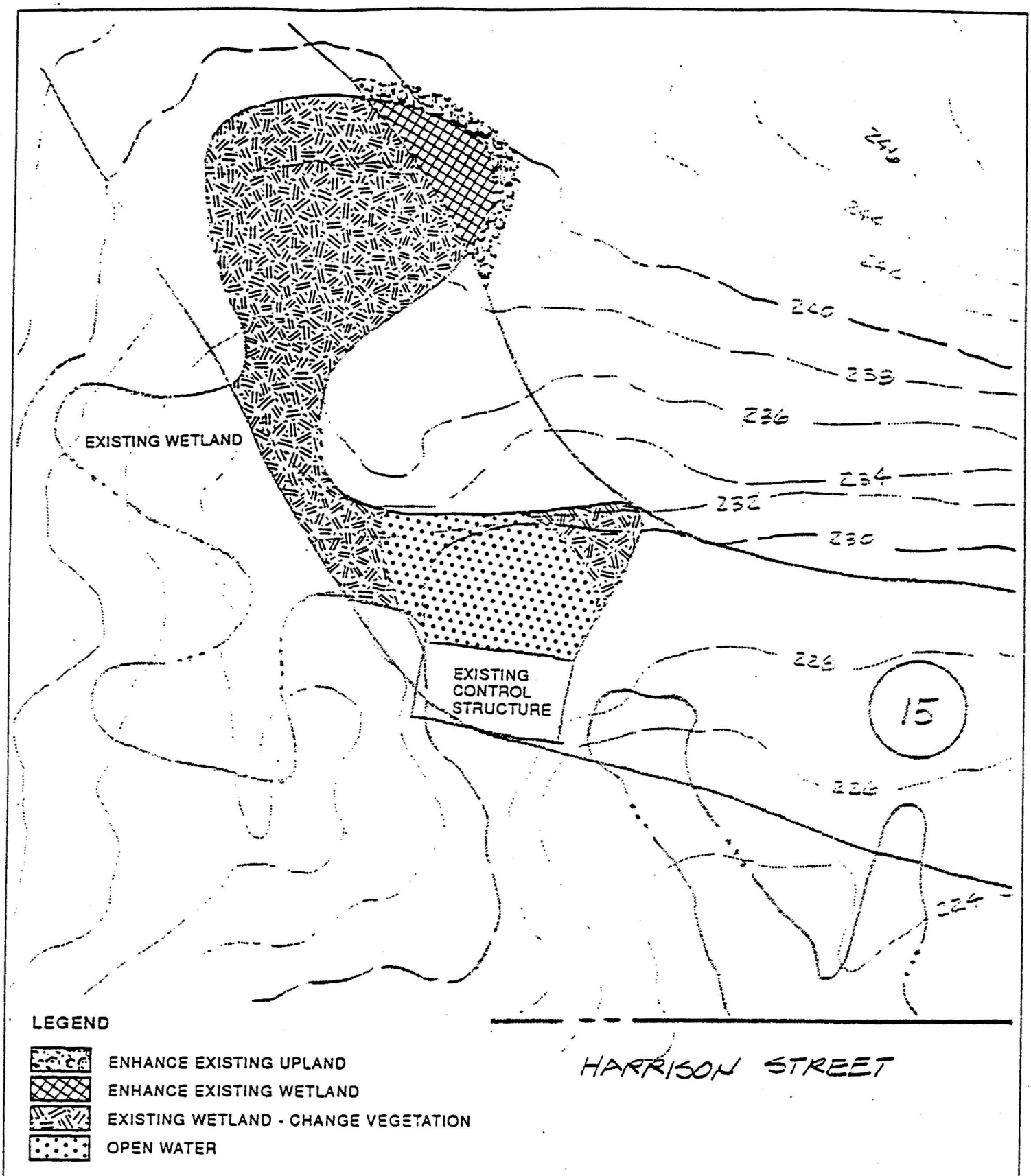


FIGURE 12

WETLAND MITIGATION PLAN - CONCEPTUAL

LOCATION 10

STEEPLECHASE COUNTRY ESTATES

0 100'

SCALE IN FEET

SHAPIRO & ASSOCIATES, INC.

SHERWOOD GOLF COURSE

PERIMETER PROPERTY OWNERS AND ADDRESSES

MARCH 28, 1990

MAP NO.	TAX LOT NO.		NAME AND ADDRESS
2S 1 31A	600	1	BORCHERS, RICHARD E. NORMA R 1360 N.W. MEINECKE ROAD SHERWOOD, OR. 97140
	700	2	BOLIVAR, RAY H. RUSH, JANE A 1440 N.W. MEINECKE ROAD SHERWOOD, OR. 97140
	800	3	BERRY, CHARLES ALBERT MARGARET MARY 1530 N.W. MEINECKE ROAD SHERWOOD, OR. 97140
	1000	4	SALISBURY, ROBERT and LILA BELLE 1765 N.W. MEINECKE ROAD SHERWOOD, OR. 97140
	1001	5	MILBURN, TAD L JANICE E ROUTE 3 BOX 9B SHERWOOD, OR. 97140
	1800	6	MEINECKE, WILLE A DONNA c/o BAHNS, LARRY JANICE P.O. BOX 61 SHERWOOD, OR. 97140
	1801	7	UNION HIGH SCHOOL DIST 9JT 1155 N.W. MEINECKE ROAD SHERWOOD, OR. 97140
	2201	8	JOHNSON, BARBARA J and MYRON A 1124 N.W. HARBOR AVE. LINCOLN CITY, OR. 97367

MAP NO.	TAX LOT NO.		NAME AND ADDRESS
2 S 1 31B	200	9	BENT, RAY Jr. BETTIE JO P.O. BOX 483 SHERWOOD, OR. 97140
	300	10	WEAR, JIM Jr. ROUTE 3 BOX 312 SHERWOOD, OR. 97140
	401	11	SHERWOOD PACIFIC of OREGON, LTD c/o WHITESELL, JOHN J P.O. BOX 12279 SALEM, OR. 97301
	400	12	NOYES, BONNIE c/o FUGERE, KENNETH ROUTE 5 BOX 311 SHERWOOD, OR. 97140
	500	13	HOSLER, MILFORD KENNETH MARIAN JUNE 22822 S.W. PACIFIC HWY. SHERWOOD, OR. 97140

MAP NO.	TAX LOT NO.		NAME AND ADDRESS
2 S 1 31C	400	14	TIMBRELL, BOYD W and BERNADINE F ROUTE 5 BOX 61A1 SHERWOOD, OR. 97140
	500	15	TRAPP, TERRY CRAIG 5238 S.E. 33 AVE. PORTLAND, OR. 97202
	600	16	EATON, I MILES MARTHA E ROUTE 5 BOX 61 SHERWOOD, OR. 97140
	703	17	DRILL, RICHARD D MARY E ROUTE 3 BOX 60 SHERWOOD, OR.

MAP NO.	TAX LOT NO.		NAME AND ADDRESS
2 S 1 31D	200	19	WALDEN, EDWARD T c/o DRENNAN, DAVID A & JOAN ROUTE 5 BOX 53 SHERWOOD, OR. 97140
	300	19	RICHEN, MARGARET S ROUTE 5 BOX 57 SHERWOOD, OR. 97140
	500	20	HAYS, CHARLES DAVID c/o HITCHCOCK, WALTER A and KRISTI ROUTE 3 BOX 209 SHERWOOD, OR. 97140
	507 508 509	21	STEEL TEK INDUSTRIES INC. P.O. BOX 828 SHERWOOD, OR. 97140

MAP NO.	TAX LOT NO.		NAME AND ADDRESS
2 S 1 31AA	900	22	McNEIL, IONE 1225 N.W. MEINECKE ROAD SHERWOOD, OR. 97140
	1000	23	UNION HIGH SCHOOL DIST 9JT 1155 N.W. MEINECKE ROAD SHERWOOD, OR. 97140

MAP NO.	TAX LOT NO.		NAME AND ADDRESS
2 S 1 31 CC	300	24	WEBER, HUBERT JANET C c/o ROGERS, JESSE W ROUTE 3 BOX 61A SHERWOOD, OR. 97140
	400	25	MILLER, PAUL O JUNE W ROUTE 3 BOX 62 SHERWOOD, OR. 97140
	100	26	BARKER, HARVEY W. ET. AL. c/o DYCHES, RONALD D. 3208 S.E. 13th AVE. PORTLAND, OR. 97202

MAP NO.	TAX LOT NO.		NAME AND ADDRESS
3 S 1 6B	100	27	YEAGER, JOHN A & ELEANOR G RT. 5 BOX 79 SHERWOOD, OR. 97140
	200	28	STATE OF OREGON F-44462 DEPT. of VETERANS AFFAIRS c/o BOYD, GEORGE W. ROUTE 5 BOX 77B SHERWOOD, OR. 97140

MAP NO.	TAX LOT NO.		NAME AND ADDRESS
3 S 1 6BB	100	29	JOHNSON, HOWARD M and URSOL c/o PETERS, JAMES L 19120 S. COQUINA COURT OREGON CITY, OR. 97045
	200	30	WESTERLUND, FRANK J and DOROTHY B ROUTE 5 BOX 66A SHERWOOD, OR. 97140
	300	31	RIVETT, STEVE D and AMERILYN C ROUTE 5 BOX 64 SHERWOOD, OR. 97140
	2001	32	ROOS, MICHAEL F and ELIZABETH C ROUTE 5 BOX 63 SHERWOOD, OR. 97140

APPENDIX G

Wetland Delineation for C-11

performed by

Scientific Resources Investigations, Inc.

SRI Scientific Resources, Inc.

11830 S.W. Kerr Parkway
Lake Oswego, OR 97035
503/245-4068

January 19, 1990

John Drennan
11455 SW Greenburg Road
Tigard, Oregon 97223
SRI Project 89127 (90001)

Dear John:

We have completed the work on your proposed development parcel in Sherwood, Oregon, T. 2 S., R. 1 W., Section 31. The site consists of slopes which surround the shallow canyon of Cedar Creek. A tributary ditch which emanates from a 36" square wooden culvert under the massive fill of the Southern Pacific Railroad tracks, was the only other hydrologic feature seen on the site.

In our opinion insufficient hydrology exists on this site for the development of a significant wetland resource. Cedar Creek is an obvious source of hydrology, but the channel, except for one remnant oxbow, is incised. In the bottom of the oxbow, standing water was observed on January 15, 1990. The water level in soil pit A2 was 9 inches. Above the oxbow, at soil pit A1, the water level was 14". Oxidized root channels, a positive indicator of wetland hydrology during the season of plant growth, were found within the old oxbow, at pit A2. The tributary ditch is an intermittent water feature which does not figure prominently in the overall hydrology of the site (Fig. 1).

The Soil Conservation Service (SCS) has mapped some hydric soil on the site which is, interestingly enough, along the tributary ditch floodplain (SCS, 1982; Fig. 2). This is a small mapping unit of Wapato silt loam which is classified as a fluvaquentic haplaquoll. We found this soil at soil pit B1 below 12" depth. The upper 12" was a brown, silt loam at 10YR 3/2 (with no mottles or oxidized root channels) which we interpret as Quatama silt loam. The presence of the Quatama series on top of the Wapato series is probably a result of plowing, erosion, and 100 years of agricultural land use on this parcel. The buried Wapato soil was a 10YR 6/2 gray/brown clayey, mottled subsoil with 20% bright 10YR 5/8 mottles. No evidence of hydrology was found in this soil pit. The floodplain of Cedar Creek has been mapped by the SCS as McBee soil, which is not on the hydric soils list for the County. The higher slopes on the site consist of Quatama loam. At soil pit A1, which was a silty deposit of McBee soil, the A-horizon consisted of a 10YR 3/2 medium textured soil with a few mottles (not measurable) and no oxidized root channels. Within the old oxbow however, the soil yielded the same matrix but oxidized root channels were prominent to the surface of the A-horizon.

Facultative (FAC) or faculative wet (FACW) hydrophytic vegetation, which consisted of some Oregon ash (*Fraxinus latifolia*), Scouler's willow (*Salix scouleriana*), Douglas spiraea (*Spiraea douglasii*), soft rush (*Juncus effusus*), *Juncus tenuis*, *Carex aperta*, creeping buttercup (*Ranunculus repens*), and red alder (*Alnus rubra*) was confined to the incised channels of Cedar Creek or its tributary and the remnant oxbow. The only obligate wetland plants found on the site were clumps of

slough sedge (*Carex obnupta*) and *Ludwigia palustris* that were found in the old oxbow.

Most of the site was vegetated with upland fescue (*Festuca arundinacea*), European bentgrass (*Agrostis tenuis*), clover (*Trifolium repens*) and some remnant forest vegetation such as Douglas fir (*Pseudotsuga menziesii*) and ocean spray (*Holodiscus discolor*).

The incised stream channels including the tributary ditch from edge-to-edge of the incised channel, and the old oxbow are regarded as wetland according to the *Federal Interagency Manual for Delineating and Identifying Wetlands*. The United States Fish and Wildlife Service (USFWS) has mapped the stream channel as a palustrine, forested riparian corridor. This does not reflect the present day condition of the site. Scientific Resources, Inc. (SRI) has staked and flagged the proposed wetland boundary around the old oxbow. We suggest that the civil engineer survey the locations and width of Cedar Creek or the tributary ditch and calculate volumes of fill over these areas, should you wish to install culverts or fill. We also suggest that the attached United States Army Corps of Engineers (COE) permit application to place fill, be completed and submitted to the resource agencies for review.

Even though the proposed development is within the urban growth boundary, and our brief study did not reveal extensive riparian vegetation, you may wish to contact the City of Sherwood and inquire how Sec. 422 of the Washington County code applies to the Cedar Creek area within their jurisdiction.

Cordially,

Stan Geiger, President
Scientific Resources, Inc.

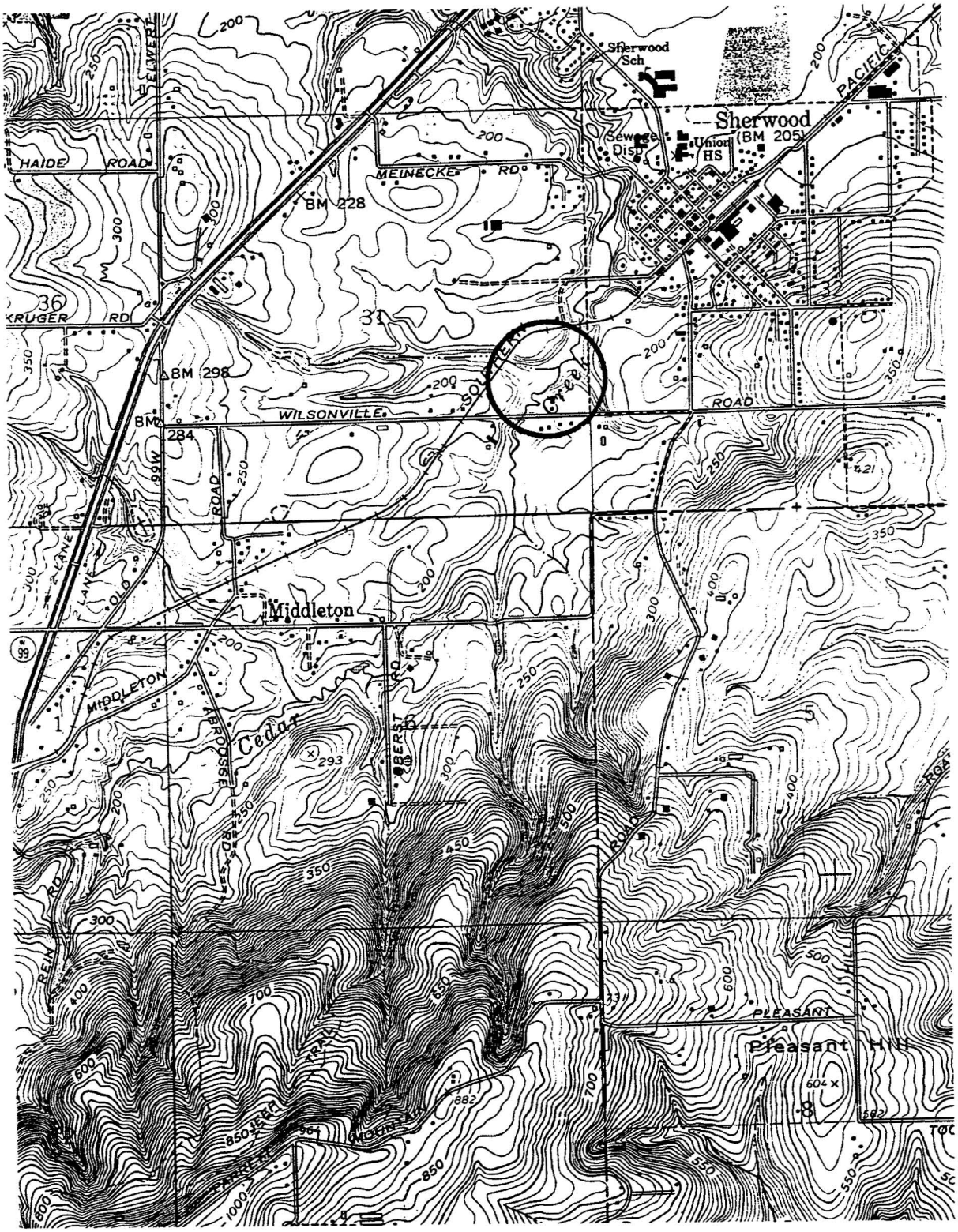


Figure 1. A portion of the USGS Sherwood, Oregon 7 1/2 minute topographic quadrangle (1961, photorevised 1970 & 1975) which shows the site.

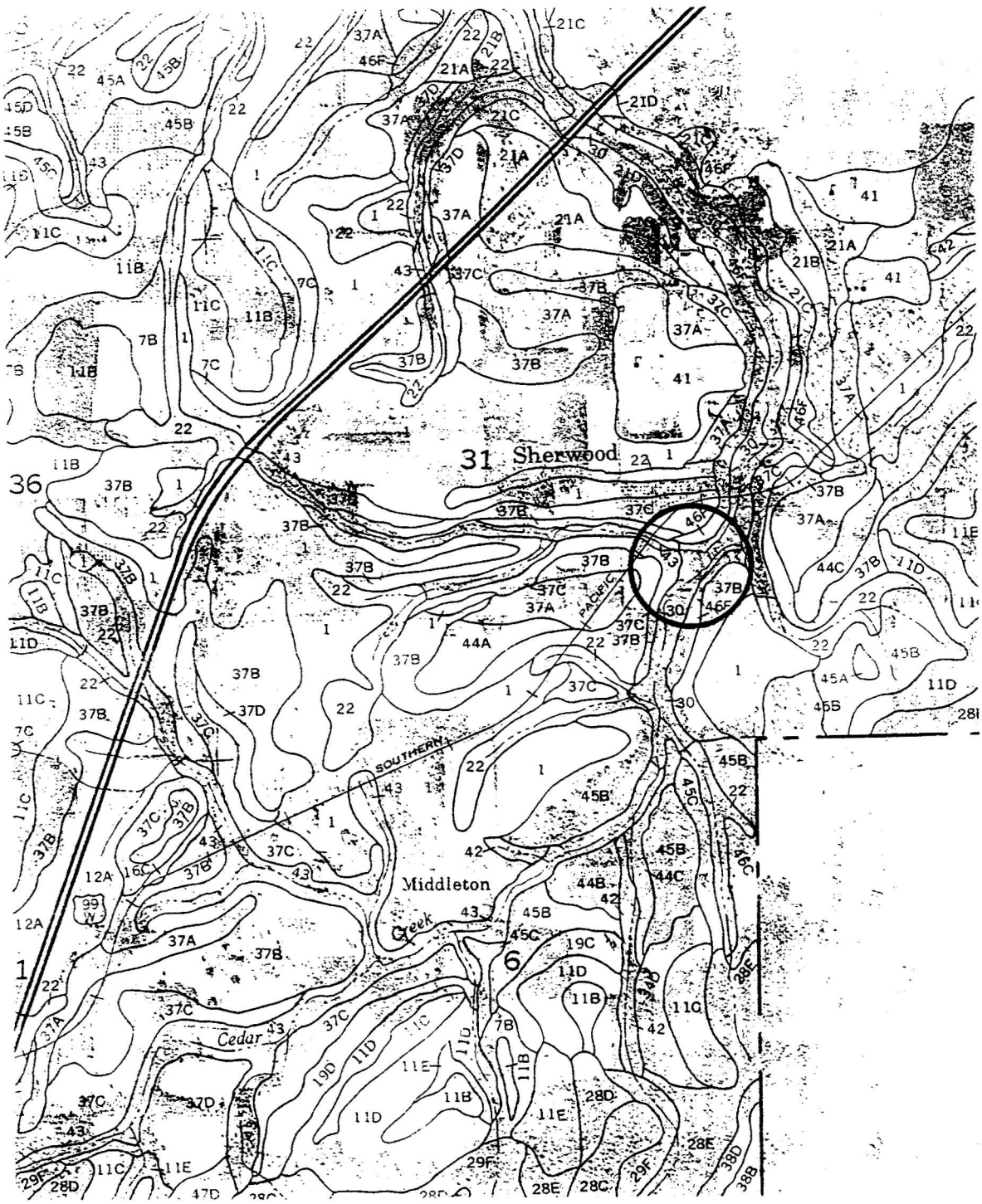


Figure 2. Sheet 49 of the Washington County Soil Survey (1982) which shows the site. "30" = McBee silty clay loam; "43" = Wapato silty clay loam; "37" = Quatama loam.

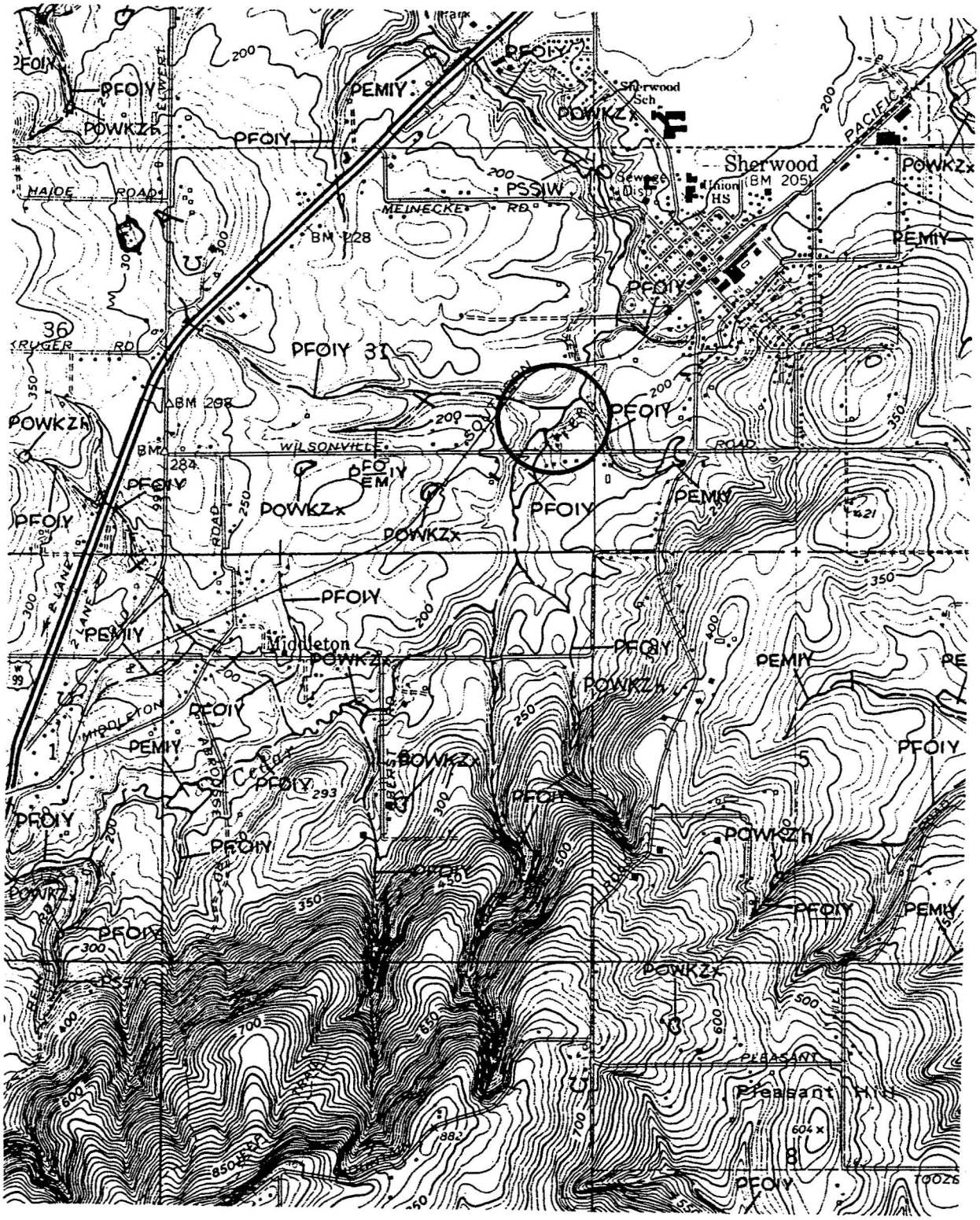
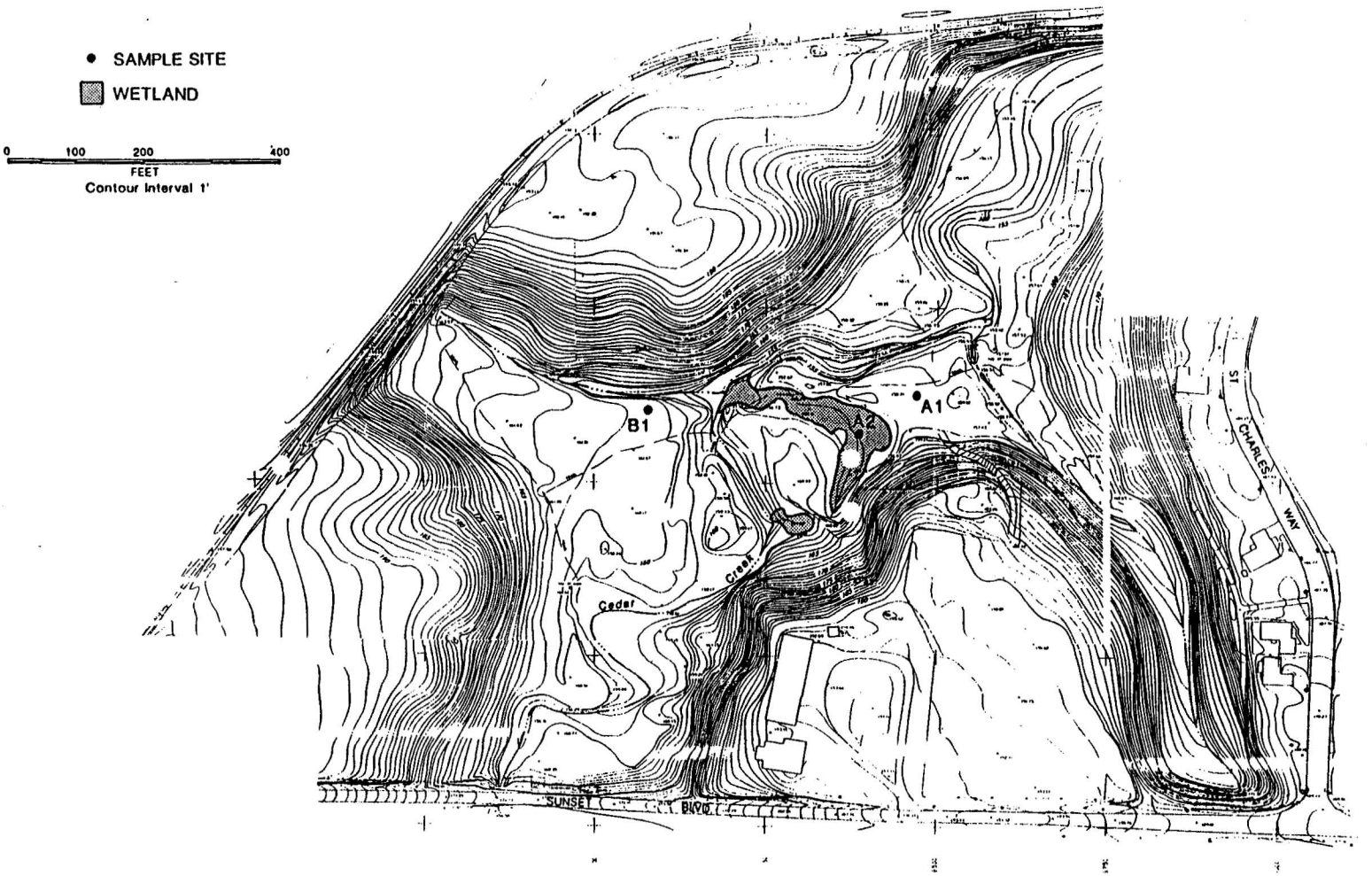


Figure 3. A portion of the USFWS Sherwood, Oregon National Wetland Inventory Map (1981) which shows the site.



John Drennan Wetland Delineation		SRI Scientific Resources, 11830 S.W. Kerr Parkway, Lake Oswego, OR 97035 503/245-4
DATE: 1/18/90	CLIENT:	SRI PROJECT # 89
Drawn by: L. Anderson		Sheet of

NATURAL, UNDISTURBED SITES — ROUTINE ONSITE METHOD

APPLICANT NAME:	APPLICANT NUMBER:	SRI PROJECT #: 89127
COUNTY AND STATE: Washington, OREGON	LEGAL DESCRIPTION: Township: T2S Range: R1W Section: 31 Plot #: A1	
DATE: January 15, 1990	PLANT COMMUNITY NAME: Festuca arundinacea/Agrostis tenuis	

SOILS

Series and Phase: McBee silty clay loam		On hydric soils list: Yes ___ No ✓
Matrix Color: 10YR 3/2	Mottled: Yes ✓ No ___ Sparse	Mottle Color:
Gleyed: Yes ___ No ✓	Other Indicators:	
Hydric Soils: Yes ___ No ✓	Basis: criteria not met ~ paucity of mottles	

VEGETATION

DOMIMANT SPECIES	FWS INDICATOR STATUS	PERCENT COVER (30' RADIUS)
TREES 1.		
2.		
3.		
SAPLINGS / SHRUBS 1.		
2.		
3.		
HERBS 1. Festuca arundinacea	FACU	20 %
2. Agrostis tenuis	NOL	40 %
3. Trifolium repens	NOL	30 %
WOODY VINES 1.		
2.		
3.		

Percent of Dominant Species that are OBL, FACW, and/or FAC: 0% | Other Indicators: none

Hydrophytic Vegetation: Yes ___ No ✓ | Basis: Criteria not met

HYDROLOGY

Inundated: Yes ___ No ✓	Depth of Standing Water:	
Saturated Soils: Yes ___ No ✓	Depth to Saturated Soil:	Depth to Water Table: 14"
Other Indicators: none		
Wetland Hydrology: Yes ___ No ✓	Basis: lack of indicators, criteria not met	

WETLAND DETERMINATION: Wetland (W): Non-Wetland (N): N

Comments:

Investigator: J.M.M.

NATURAL, UNDISTURBED SITES — ROUTINE ONSITE METHOD

APPLICANT NAME:	APPLICANT NUMBER:	SRI PROJECT #: 89127
COUNTY AND STATE: Washington, OREGON	LEGAL DESCRIPTION: Township: T2S Range: R1W Section: 31	Plot #: A2
DATE: January 15, 1990	PLANT COMMUNITY NAME: Ranunculus repens / Agrostis tennis	

SOILS

Series and Phase: McBee silty clay loam		On hydric soils list: Yes ___ No ✓
Matrix Color: 10YR 3/2	Mottled: Yes ✓ No ___	Mottle Color:
Gleyed: Yes ___ No ✓	Other Indicators: fine texture	
Hydric Soils: Yes ✓ No ___	Basis: criteria met	

VEGETATION

DOMIMANT SPECIES	FWS INDICATOR STATUS	PERCENT COVER (30' RADIUS)
TREES		
1.		
2.		
3.		
SAPLINGS / SHRUBS		
1.		
2.		
3.		
HERBS		
1. Ranunculus repens	FACW	60%
2. Agrostis tennis	NOL	30%
3.		
WOODY VINES		
1.		
2.		
3.		

Percent of Dominant Species that are OBL, FACW, and/or FAC: 1/2 50% | Other Indicators:

Hydrophytic Vegetation: Yes ✓ No ___ | Basis:

HYDROLOGY

Inundated: Yes ✓ No ___ nearby	Depth of Standing Water: 6-12" in lowest part of oxbow	
Saturated Soils: Yes ✓ No ___	Depth to Saturated Soil: 9"	Depth to Water Table: 9"
Other Indicators: prominent oxidized root channels		
Wetland Hydrology: Yes ✓ No ___	Basis: root channels	

WETLAND DETERMINATION: Wetland (W): W Non-Wetland (N):

Comments:

Investigator: J.m.m.

NATURAL, UNDISTURBED SITES — ROUTINE ONSITE METHOD

APPLICANT NAME:	APPLICANT NUMBER:	SRI PROJECT #: 89127
COUNTY AND STATE: Washington, OREGON	LEGAL DESCRIPTION: Township: T2S Range: R1W Section: 31 Plot #: B1	
DATE: January 15, 1990	PLANT COMMUNITY NAME: Festuca arundinacea / Agrostis tenuis	

SOILS

Series and Phase: Qatama silt loam above 12" *		On hydric soils list: Yes ___ No ___
Matrix Color: 10YR 3/2	Mottled: Yes ___ No ___	Mottle Color:
Gleyed: Yes ___ No ✓	Other Indicators: * Wapato silty clay loam below 12"	
Hydric Soils: Yes ___ No ✓	Basis:	

VEGETATION

DOMIMANT SPECIES	FWS INDICATOR STATUS	PERCENT COVER (30' RADIUS)
TREES		
1.		
2.		
3.		
SAPLINGS / SHRUBS		
1.		
2.		
3.		
HERBS		
1. Festuca arundinacea	FACU	40%
2. Agrostis tenuis	NOL	40%
3. Trifolium repens	NOL	20%
WOODY VINES		
1.		
2.		
3.		

Percent of Dominant Species that are OBL, FACW, and/or FAC: 0% | Other Indicators:

Hydrophytic Vegetation: Yes ___ No ✓ | Basis: Criteria not met

HYDROLOGY

Inundated: Yes ___ No ✓	Depth of Standing Water:	
Saturated Soils: Yes ___ No ✓	Depth to Saturated Soil:	Depth to Water Table:
Other Indicators: none		
Wetland Hydrology: Yes ___ No ✓	Basis:	

WETLAND DETERMINATION:	Wetland (W):	Non-Wetland (N): N
Comments:		
	Investigator:	J.m.m.

APPENDIX H

Wetland Determination for C-12

performed by

David Evans and Associates, Inc. and Cascade Earth Sciences, Ltd.

Oregon

DIVISION OF
STATE LANDS

STATE LAND BOARD
BARBARA ROBERTS
Governor
PHIL KEISLING
Secretary of State
ANTHONY MEEKER
State Treasurer

April 14, 1992

APR 17 1992

Carol Connell
City of Sherwood
90 NW Park
Sherwood, OR 97140

Re: Sunset Meadows Wetland Delineation
(T2S; R1W; Sec. 32; Tax Lot 2603)

Dear Ms. Connell:

Janet Morlan and I have reviewed the wetland delineation done by David Evans and Associates, and Bill Parks has visited the above referenced site. We concur with the wetland boundaries shown on the tax assessor map of the area (also shown are the David Evans sample plots - no figure or map number).

If the subdivision is built as proposed, the developer will need a removal-fill permit from the Division before starting work.

Sincerely,

Emily Roth

Emily Roth
Wetlands Resource Planner

ER/jap
emi:289

cc: Larry Devroy, David Evans and Associates
Jim Goudzwaard, Corps of Engineers

775 Summer Street NE
Salem, OR 97310-1337
(503) 378-3805
FAX (503) 378-4844

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 1
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Quatama Subgroup:[2] Haplaxeralfs
Is the soil on the hydric soils list? Yes ___ No ✓ Undetermined ___
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ___ No ✓ Gleyed? Yes ___ No ✓
Matrix Color: 10 yr 3/3, 4/3 Mottle Color: _____
Other hydric soil Indicators: _____
Comments: loam with rocks - Inclusion in soil mapping.

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators:
no indicators of hydrology present

Comments: _____

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11- -91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Salix Lasiandra	FACW+	15		10.5	*
2.					
3.					
4.					
5.					
6.					
		Sum of Midpoints		10.5	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		5.25	

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rubus ursinus	NI	30		38.0	*
2. Cytisus scoparius	-	15		10.5	*
3.					
4.					
5.					
6.					
		Sum of Midpoints		48.5	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		24.25	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Hypericum perforatum	-	T		0	
2. Holcus lanatus	FAC	5		3	
3. Cirsium vulgare	FACU	25		20.5	*
4. Plantago		5		3	
5. Agrostis tenuis	-	20		20.5	*
6.					
7.					
8.					
9.					
10.					
11.					
12.					
		Sum of Midpoints		46.0	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		23.0	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 3-11-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name _____
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot# 1
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No ___ (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes ___ No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Salix lasiandra	FACW+	T	14.		
2. Rubus ursinus	NI	S	15.		
3. Cytisus scoparius	—	S	16.		
4. Cirsium vulgar	FACU	H	17.		
5. Agrostis tenuis	—	H	18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 25

Is the hydrophytic criterion met? Yes___ No ✓

Is the hydric soils criterion met? Yes___ No ✓

Is the wetland hydrology criterion met? Yes___ No ✓

Is the vegetation unit or plot wetland? Yes___ No ✓

Rationale for jurisdictional decision: Does not meet wetland criteria

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[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 2
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Quatama Subgroup:[2] Haplox eralfs
Is the soil on the hydric soils list? Yes ___ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ___ No ✓ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 4/3 4/4 Mottle Color: _____
Other hydric soil Indicators: _____
Comments: Damp blocky loam - inclusion in soil mapping

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: No indication of hydrology

Comments: _____

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6 91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Salix lasiandra	FACW+	5		3.0	*
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints	3.0	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	1.5	

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Cytisus scoparius	-	20		20.5	*
2. Rubus ursinus	NI	10		10.5	*
3.					
4.					
5.					
6.					
			Sum of Midpoints	31.0	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	15.5	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Phalaris arundinacea	FACW	80		85.5	*
2. Agrostis tenuis	-	25		20.5	
3. Cirsium vulgare	FACU	5		3.0	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			Sum of Midpoints	109.0	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	54.5	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]

INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD

(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 3-11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 2
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Salix lasiandra	FACW+	T	14.		
2. Cytisus scoparius	-	S	15.		
3. Rubus ursinus	NI	S	16.		
4. Phalaris arundinacea	FACW	H	17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 67

Is the hydrophytic criterion met? Yes No ✓

Is the hydric soils criterion met? Yes No ✓

Is the wetland hydrology criterion met? Yes No ✓

Is the vegetation unit or plot wetland? Yes No ✓

Rationale for jurisdictional decision: Plot does not meet wetland criteria

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 3
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Quatama Subgroup:[2] Haploxeralfs
Is the soil on the hydric soils list? Yes ___ No ✓ Undetermined _____
Is the soil a Histosol? Yes___ No___ Histic epipedon present? Yes ___ No ___
Is the soil: Mottled? Yes ___ No ___ Gleyed? Yes ___ No ___
Matrix Color: 10yr 4/3 Mottle Color: _____
Other hydric soil Indicators: _____
Comments: _____

****

HYDROLOGY

Is the ground surface inundated? Yes___ No ✓
Surface water depth: _____
Is the soil saturated? Yes___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: no indication of hydrology

Comments: _____

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11- -91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints		
			Dominance Threshold Number Equals 50% x Sum of Midpoints		

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Cytisus scoparius	—	T		Ø	
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints	Ø	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	Ø	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Phalaris arundinacea	FACW	100		98	*
2. Cirsium vulgare	FACU	20		20.5	
3. Agrostis tenuis	—	60		63	*
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			Sum of Midpoints	181.5	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	90.75	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 3
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Phalaris arundinacea	FACW	H	14.		
2. Agrostis tenuis	—	H	15.		
3.			16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 50

Is the hydrophytic criterion met? Yes No ✓

Is the hydric soils criterion met? Yes No ✓

Is the wetland hydrology criterion met? Yes No ✓

Is the vegetation unit or plot wetland? Yes No ✓

Rationale for jurisdictional decision: Plot does not meet wetland criteria.

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 4
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 4/1, 3/1 Mottle Color: Bright red
Other hydric soil Indicators: _____
Comments: _____

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: no indication of hydrology present

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Salix lasiandra	FACW+	T		Ø	
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints	Ø	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	Ø	

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints		
			Dominance Threshold Number Equals 50% x Sum of Midpoints		

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Phalaris arundinacea	FACW	100		98	*
2. Galium	FACW	5		3	
3. Juncus effusus	FACW+	5		3	
4. Ranunculus repens	FACW	75		63	*
5. Holcus lanatus	FAC	T		Ø	
6. Cirsium vulgare	—	T		Ø	
7.					
8.					
9.					
10.					
11.					
12.					
			Sum of Midpoints	167.0	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	83.5	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 4
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Thalaris arundinacea	FACW	H	14.		
2. Ranunculus repens	FACW	H	15.		
3.			16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 100

Is the hydrophytic criterion met? Yes ✓ No

Is the hydric soils criterion met? Yes ✓ No

Is the wetland hydrology criterion met? Yes No ✓

Is the vegetation unit or plot wetland? Yes ✓ No

Rationale for jurisdictional decision: Hydrology is assumed to be present some time during the growing season.

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 5
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 4/1 Mottle Color: faint red
Other hydric soil Indicators: _____
Comments: _____

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: hydrology observed at 8-10" from below hole wall

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method ____
Transect ____ Plot # 6
Vegetation Unit #/Name: ____ Sample # Within Veg. Unit: ____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Quatama Subgroup:[2] Haplox eralfs
Is the soil on the hydric soils list? Yes ___ No ___ Undetermined ____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ___ No ✓ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 4/3, 4/4 Mottle Color: ____
Other hydric soil Indicators: ____
Comments: Inclusion in mapping

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: ____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: ____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: ____

Comments: No indication of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Salix lasiandra					
2.					
3.					
4.					
5.					
6.					

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rubus ursinus	FAC				
2.					
3.					
4.					
5.					
6.					

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Agrostis tenuis	—				
2. Cirsium vulgare	FAC				
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).
[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 6
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No ___ (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes ___ No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Salix lasiandra	FACW	T	14.		
2. Rubus ursinus	NI	S	15.		
3. Agrostis tenuis	—	H	16.		
4. Cirsium vulgarus	FACU	H	17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 33

Is the hydrophytic criterion met? Yes___ No ✓

Is the hydric soils criterion met? Yes___ No ✓

Is the wetland hydrology criterion met? Yes___ No ✓

Is the vegetation unit or plot wetland? Yes___ No ✓

Rationale for jurisdictional decision: Plot does not meet wetland criteria. Plot is on wetland boundary.

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method ____
Transect ____ Plot # 1
Vegetation Unit #/Name: ____ Sample # Within Veg. Unit: ____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Aloha Subgroup:[2] Xerochrepts
Is the soil on the hydric soils list? Yes ___ No ___ Undetermined ____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10 yr 4/3 Mottle Color: not assessed
Other hydric soil Indicators: ____
Comments:
Probe only/ Inclusion in soil mapping

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: ____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: ____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: ____

Comments: high topo - no indication of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Salix lasinandra	FACW	T		0	
2.					
3.					
4.					
5.					
6.					
		Sum of Midpoints		0	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		0	

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rubus ursinus	NI	15		10.5	*
2. Cytisus scoparius	—	40		38.0	*
3.					
4.					
5.					
6.					
		Sum of Midpoints		48.5	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		24.25	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Phalaris arundinacea	FACW	25		20.5	*
2. Hypericum perforatum	—	T		0	
3. Agrostis tenuis	—	10		63.0	*
4. Cirsium vul	FACU	5		3	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
		Sum of Midpoints		86.5	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		43.25	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]

INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD

(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name _____
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot# 7
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No ___ (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes ___ No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Rubus ursinus	NI	S	14.		
2. Baccharis pilularis	—	S	15.		
3. Phalaris arundinacea	FACW	H	16.		
4. Agrostis tenuis	—	H	17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 33

Is the hydrophytic criterion met? Yes___ No ✓

Is the hydric soils criterion met? Yes___ No ✓

Is the wetland hydrology criterion met? Yes___ No ✓

Is the vegetation unit or plot wetland? Yes___ No ✓

Rationale for jurisdictional decision: Plot does not meet wetland criteria

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 8
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Hubbard Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 4/1 Mottle Color: bright red
Other hydric soil Indicators: _____
Comments:
0-4" 10yr 4/3
4-12" 10yr 4/1 w/ right red mottles

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones	__Water-stained leaves
__Water marks	__Surface scoured areas
__Drift lines	__Wetland drainage patterns
__Water-borne sediment deposits	__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of positive hydrology. High top.

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11- -91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Salix lasiandra	FACW	T		Ø	
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints	Ø	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	Ø	

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Cytisus scoparius	-	60		63	*
2. Rubus ursinus	NI	45		38	*
3.					
4.					
5.					
6.					
			Sum of Midpoints	101	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	50.5	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Galium	FACW	T		Ø	
2. Cirsium vulgare	FACW	T		Ø	
3. Epilobium angustifolium	FACW+	T		Ø	
4. Phalaris arundinacea	FACW	T		Ø	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			Sum of Midpoints	Ø	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	Ø	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]

INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD

(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 8
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Cytisus scoparius	-	S	14.		
2. Rubus ursinus	NI	S	15.		
3.			16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC Ø

Is the hydrophytic criterion met? Yes No ✓

Is the hydric soils criterion met? Yes ✓ No

Is the wetland hydrology criterion met? Yes No ✓

Is the vegetation unit or plot wetland? Yes No ✓

Rationale for jurisdictional decision: Plot is on edge of wetland boundary.

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 9
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Quatama Subgroup:[2] Haploxeralfs
Is the soil on the hydric soils list? Yes ___ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ___ No ✓ Gleyed? Yes ___ No ✓
Matrix Color: 10 yr 4/3 Mottle Color: _____
Other hydric soil Indicators: _____
Comments: Inclusion in Soil Mapping

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: NO evidence of positive hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints		
			Dominance Threshold Number Equals 50% x Sum of Midpoints		

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Cytisus scoparius	—	35		38	*
2. Rubus laciniatus	FACU+	35		38	*
3.					
4.					
5.					
6.					
		Sum of Midpoints		76	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		38	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Hypericum perforatum	—	55		63	*
2. Cirsium vulgare	FACU	20		20.5	
3. Phalaris arundinacea	FACW	10		10.5	
4. Daucus carota	—	20		20.5	
5. Epilobium angustifolium	FACU+	10		10.5	
6. Lolium perenne	FACU	25		20.5	
7.					
8.					
9.					
10.					
11.					
12.					
			Sum of Midpoints	145.5	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	72.75	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 9
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Cytisus scoparius	—	S	14.		
2. Rubus laciniatus	FAcut	S	15.		
3. Hypericum perforatum	—	H	16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC Ø

Is the hydrophytic criterion met? Yes No ✓

Is the hydric soils criterion met? Yes No ✓

Is the wetland hydrology criterion met? Yes No ✓

Is the vegetation unit or plot wetland? Yes No ✓

Rationale for jurisdictional decision: Plot does not met wetland criteria

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 10
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined ___
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10 yr 5/2 Mottle Color: orange / red
Other hydric soil Indicators: _____
Comments: _____

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ___
Surface water depth: _____
Is the soil saturated? Yes ___ No ___
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Fraxinus latifolia	FACW	SD		38	*
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints	38.0	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	19.0	

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rubus ursinus	NI	26		38	*
2. Rubus laciniatus	FACW+	25		20.5	*
3.					
4.					
5.					
6.					
			Sum of Midpoints	58.5	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	29.25	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Juncus effusus	FACW	30		38	*
2. Epilobium angustifolium	FACW+	10		10.5	
3. Agrostis tenuis	—	55		63	*
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			Sum of Midpoints	111.5	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	55.75	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 10
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Fraxinus latifolia	FACW	T	14.		
2. Rubus ursinus	NI	S	15.		
3. Rubus laciniatus	FACult	S	16.		
4. Juncus effusus	FACW	H	17.		
5. Agrostis stolonifera	—	H	18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 50

Is the hydrophytic criterion met? Yes No ✓

Is the hydric soils criterion met? Yes ✓ No

Is the wetland hydrology criterion met? Yes No ✓

Is the vegetation unit or plot wetland? Yes No ✓

Rationale for jurisdictional decision: Plot is on wetland boundary.

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 11
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 4/1 Mottle Color: very faint
Other hydric soil Indicators: _____
Comments: Dark blocky loam

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints		
			Dominance Threshold Number Equals 50% x Sum of Midpoints		

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rosa	NI	T		Ø	
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints	Ø	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	Ø	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Ranunculus repens	FACW	100		98	*
2. Phalaris arundinacea	FACW	10		10.5	
3. Galium	FACW	5		3	
4. Holcus lanatus	FACW	5		3	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			Sum of Midpoints	114.5	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	57.25	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 11
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Ranunculus repens	FACW	M	14.		
2.			15.		
3.			16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 100

Is the hydrophytic criterion met? Yes ✓ No

Is the hydric soils criterion met? Yes ✓ No

Is the wetland hydrology criterion met? Yes No ✓

Is the vegetation unit or plot wetland? Yes ✓ No

Rationale for jurisdictional decision: Hydrology is assumed present at some time during the growing season.

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 12
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined ___
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ___ No ✓ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 3/1 Mottle Color: _____
Other hydric soil Indicators: _____
Comments: _____

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Fraxinus latifolia	FACW	T		0	
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints	0	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	0	

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rosa	NI	15		10.5	*
2. Rubus ursinus	NI	10		10.5	*
3.					
4.					
5.					
6.					
			Sum of Midpoints	21.0	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	10.5	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Agrostis tenuis	-	85		85.5	*
2. Cirsium vulgare	FACU	20		20.5	
3. Phalaris arundinacea	FACW	60		63	*
4. Plantago lanceolata	FACU+	T		0	
5. Festuca arundinacea	FACU-	10		10.5	
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			Sum of Midpoints	179.5	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	89.75	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).
[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name _____
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot# 12
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ___ No ✓ (If no, explain on back) Area has evidence of past disturbance
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes ___ No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Rosa	NI	S	14.		
2. Rubus ursinus	NI	S	15.		
3. Agrostis tenuis	—	H	16.		
4. Phalaris arundinacea	FACW	H	17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 50

Is the hydrophytic criterion met? Yes___ No ✓

Is the hydric soils criterion met? Yes ✓ No___

Is the wetland hydrology criterion met? Yes___ No ✓

Is the vegetation unit or plot wetland? Yes___ No ✓

Rationale for jurisdictional decision: Area is disturbed. Plot is on edge of wetland boundary.

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 13
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ___ No ✓ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 3/1 Mottle Color: _____
Other hydric soil Indicators: _____
Comments: _____
Probe only

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Epilobium angustifolium	FACW+	25		20.5	*
2. Dactylis glomerata	FACU	10		10.5	
3. Festuca arundinacea	FAC-	25		20.5	*
4. Cirsium vulgare	FAC	10		10.5	
5. Phalaris arundinacea	FACW	10		10.5	
6. Agrostis tenuis	–	25		20.5	*
7. Hypericum perforatum	–	5		3	
8.					
9.					
10.					
11.					
12.					

Sum of Midpoints 96.0
Dominance Threshold Number Equals 50% x Sum of Midpoints 48.0

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).

[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# B

Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ___ No ✓ (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes ✓ No ___ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Epilobium angustifolium	FACW	H	14.		
2. Festuca arundinacea	FACU-	H	15.		
3. Agrostis tenuis	—	H	16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC Ø

Is the hydrophytic criterion met? Yes ✓ No ___

Is the hydric soils criterion met? Yes ✓ No ___

Is the wetland hydrology criterion met? Yes ___ No ✓

Is the vegetation unit or plot wetland? Yes ✓ No ___

Rationale for jurisdictional decision: Area is disturbed. Using criteria for disturbed wetland, this area is wet provided hydrology is assumed to be present at some time during the growing season

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 14
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10 yr 4/2 Mottle Color: not assessed
Other hydric soil Indicators: _____
Comments: _____

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rubus ursinus	N1	T		Ø	
2.					
3.					
4.					
5.					
6.					

Sum of Midpoints Ø
Dominance Threshold Number Equals 50% x Sum of Midpoints Ø

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Agrostis tenuis	—	40		38	*
2. Festuca arundinacea	FACU-	50		38	*
3. Cirsium vulgare	FACU	5		3	
4. Epilobium adenocaulon	FACU+	T		Ø	
5. Phalaris arundinacea	FACW	70		63	*
6.					
7.					
8.					
9.					
10.					
11.					
12.					

Sum of Midpoints 142.0
Dominance Threshold Number Equals 50% x Sum of Midpoints 71.0

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).
[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 14
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No ___ (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes ___ No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Agrostis tenuis	Upld	H	14.		
2. Festuca arundinacea	FACU-	H	15.		
3. Phalaris arundinacea	FACW	H	16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 33

Is the hydrophytic criterion met? Yes___ No ✓

Is the hydric soils criterion met? Yes ✓ No___

Is the wetland hydrology criterion met? Yes___ No ✓

Is the vegetation unit or plot wetland? Yes___ No ✓

Rationale for jurisdictional decision: Plot is on edge of wetland boundary

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-6 91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 15
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Aloha Subgroup:[2] Xerochrepts
Is the soil on the hydric soils list? Yes ___ No ✓ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 4/3 Mottle Color: not assessed
Other hydric soil Indicators: _____
Comments: Soil inclusion in mapping.

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11- -91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Pyrus festuca	FACT	T		Ø	
2.					
3.					
4.					
5.					
6.					

Sum of Midpoints: Ø
Dominance Threshold Number Equals 50% x Sum of Midpoints:

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					

Sum of Midpoints:
Dominance Threshold Number Equals 50% x Sum of Midpoints:

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Festuca arundinacea	FACU-	60		63	*
2. Phalaris arundinacea	FACW	35		38	*
3. Agrostis tenuis	—	60		63	*
4. Cirsium vulgare	FACU	10		20.5	
5. Plantago lanceolata	FACU+	+			
6.					
7.					
8.					
9.					
10.					
11.					
12.					

Sum of Midpoints: 184.5
Dominance Threshold Number Equals 50% x Sum of Midpoints: 92.25

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).
[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devrol & S. Cunningham Date: 11-6-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 15
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Festuca arundinacea	FACU-	H	14.		
2. Phalaris arundinacea	FACW	H	15.		
3. Agrostis tenuis	—	H	16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 33

Is the hydrophytic criterion met? Yes No ✓

Is the hydric soils criterion met? Yes ✓ No

Is the wetland hydrology criterion met? Yes No ✓

Is the vegetation unit or plot wetland? Yes No ✓

Rationale for jurisdictional decision: Plot does not meet wetland criteria

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-8-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 16
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Aloha Subgroup:[2] Xerochrept
Is the soil on the hydric soils list? Yes ___ No ✓ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 4/2, 3/2 Mottle Color: not assessed
Other hydric soil Indicators: _____
Comments: _____

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of hydrology; On a slope

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11- -91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					

Sum of Midpoints
Dominance Threshold Number Equals 50% x Sum of Midpoints

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rubus ursinus	NI	T		Ø	
2. Rosa	NI	T		Ø	
3.					
4.					
5.					
6.					

Sum of Midpoints Ø
Dominance Threshold Number Equals 50% x Sum of Midpoints

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Phalaris arundinacea	FACW	30		38	*
2. Daucus carota	–	15		10.5	
3. Agrostis tenuis	–	60		63	*
4. Epilobium angustifolium	FACU+	15		10.5	
5. Festuca arundinacea	FACU-	30		38	*
6.					
7.					
8.					
9.					
10.					
11.					
12.					

Sum of Midpoints 159.0
Dominance Threshold Number Equals 50% x Sum of Midpoints 79.5

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).
[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 3/11-8-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 16
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No ___ (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes ___ No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Phalaris arundinacea	FACW	~~30~~ H	14.		
2. Agrostis tenuis	-	H	15.		
3. Festuca arundinacea		H	16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 33

Is the hydrophytic criterion met? Yes___ No ✓

Is the hydric soils criterion met? Yes___ No ✓

Is the wetland hydrology criterion met? Yes___ No ✓

Is the vegetation unit or plot wetland? Yes___ No ✓

Rationale for jurisdictional decision: Plot does not meet wetland criteria

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-8-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 17
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Woodburn Subgroup:[2] Aquadolls
Is the soil on the hydric soils list? Yes ___ No ✓ Undetermined ___
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 3/2 Mottle Color: not assessed
Other hydric soil Indicators: _____
Comments: _____

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ___
Surface water depth: _____
Is the soil saturated? Yes ___ No ___
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-8-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1.					
2.					
3.					
4.					
5.					
6.					
			Sum of Midpoints		
			Dominance Threshold Number Equals 50% x Sum of Midpoints		

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rubus ursinus	NI	70		63	*
2. Rubus laciniatus	FACU-	30		38	*
3.					
4.					
5.					
6.					
			Sum of Midpoints	101	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	50.5	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Agrostis tenuis	—	80		85.5	*
2. Rumex acetosella	FACU	2		3	
3. Cirsium arvense	FACU+	2		3	
4. Epilobium angustifolium	FACU+	2		3	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			Sum of Midpoints	94.5	
			Dominance Threshold Number Equals 50% x Sum of Midpoints	47.25	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).
[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-8-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 17
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes No ✓ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Agrostis tenuis	—	1-1	14.		
2. Rubus ursinus	NI	S	15.		
3. Rubus laciniatus	FACW-	S	16.		
4.			17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC Ø

Is the hydrophytic criterion met? Yes No ✓

Is the hydric soils criterion met? Yes ✓ No

Is the wetland hydrology criterion met? Yes No ✓

Is the vegetation unit or plot wetland? Yes No ✓

Rationale for jurisdictional decision: Plot does not meet wetland criteria

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-8-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 18
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 3/1, 4/1 Mottle Color: not assessed.
Other hydric soil Indicators: _____
Comments: Pit dug to assess hydrology (depth to water) and soils were sampled to determine change in soil color.

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: ~~0~~
Is the soil saturated? Yes ✓ No ___
Depth to free-standing water in pit/soil probe hole: 20"
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: Positive hydrology at 20"

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-8-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect _____ Plot # 19
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined _____
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10yr 5/3 Mottle Color: not assessed
Other hydric soil Indicators: _____
Comments: _____

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: NO evidence of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11- -91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Salix lasiandra	FACW+	10		10.5	*
2. Populus tremuloides	FAC+	T		Ø	
3. Acer macrophyllum	FACU	T		Ø	
4.					
5.					
6.					
		Sum of Midpoints		10.5	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		5.25	

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rubus ursinus	NI	T		Ø	
2. Cytisus scoparius	—	4		3	*
3.					
4.					
5.					
6.					
		Sum of Midpoints		3.0	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		1.5	

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rumex acetosella	FACU	T		Ø	
2. Trifolium sp	FACU	T		Ø	
3. Agrostis tenuis	—	T		Ø	
4. Phalaris arundinacea	FACW	35		38	*
5. Festuca arundinacea	FACU-	6.5		63	*
6. Daucus carota	—	5		3	
7. Holcus lanatus	FAC	5		3	
8. Plantago major	FAC+	5		3	
9.					
10.					
11.					
12.					
		Sum of Midpoints		110.0	
		Dominance Threshold Number Equals 50% x Sum of Midpoints		55.0	

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).
[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 3-11-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 19
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ___ No ✓ (If no, explain on back) Area highly disturbed due to partial
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes ✓ No ___ (If yes, explain on back) fill in area. Large blocks of cement scattered throughout willows.

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Salix lasiandra	FACW+	T	14.		
2. Cytisus scoparius	-	S	15.		
3. Phalaris arundinacea	FACW	H	16.		
4. Festuca arundinacea	FAC-	H	17.		
5.			18.		
6.			19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 50

Is the hydrophytic criterion met? Yes___ No✓

Is the hydric soils criterion met? Yes✓ No___

Is the wetland hydrology criterion met? Yes___ No✓

Is the vegetation unit or plot wetland? Yes___ No✓

Rationale for jurisdictional decision: Plot is on edge of wetland boundary. Phalaris & Salix found on north side and dicot plants found on the uphill slope on the south side.

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.

DATA FORM[1]

INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR COMPREHENSIVE ONSITE DETERMINATION METHOD (Soils and Hydrology)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-8-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method _____
Transect ____ Plot # 20
Vegetation Unit #/Name: _____ Sample # Within Veg. Unit: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

SOILS

Series/phase: Huberly Subgroup:[2] Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined ___
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 10 yr 5/2 Mottle Color: not assessed.
Other hydric soil Indicators: _____
Comments: Only probe sample was taken

****

HYDROLOGY

Is the ground surface inundated? Yes ___ No ✓
Surface water depth: _____
Is the soil saturated? Yes ___ No ✓
Depth to free-standing water in pit/soil probe hole: _____
Mark other field indicators of surface inundation or soil saturation below:

__Oxidized root zones
__Water marks
__Drift lines
__Water-borne sediment deposits
__Water-stained leaves
__Surface scoured areas
__Wetland drainage patterns
__Morphological plant adaptations

Additional hydrologic indicators: _____

Comments: No evidence of hydrology

[1] This data form can be used for both the Vegetation Unit Sampling Procedure and the Quadrat Transect Sampling Procedure of the Intermediate-level Onsite Determination Method, or the Quadrat Sampling Procedure of the Comprehensive Onsite Determination Method. Indicate which method is used.
[2] See classification according to "Soil Taxonomy."

DATA FORM
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD
VEGETATION UNIT SAMPLING PROCEDURE
(Trees, Shrubs, and Herbs)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-8-91
Project/Site: Sunset Subdivision County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Tree Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Populus trichocarpa	FAC	42		38	*
2. Salix lasiandra	FACW	10		10.0	*
3.					
4.					
5.					
6.					

Sum of Midpoints 48.0
Dominance Threshold Number Equals 50% x Sum of Midpoints 24.0

Shrub Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Rubus ursinus	NI	42		38	*
2. Rosa sp.	NI	42		38	*
3.					
4.					
5.					
6.					

Sum of Midpoints ~~38.0~~ 76.0
Dominance Threshold Number Equals 50% x Sum of Midpoints ~~19.0~~ 38.0

Herb Species	Indicator Status	Percent Areal Cover	Cover[1] Class	Midpoint[1] of Cover Class	Rank[2]
1. Festuca arundinacea	FACU-	SD		38.0	*
2. Phalaris arundinacea	FACW	D		38.0	*
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

Sum of Midpoints 76.0
Dominance Threshold Number Equals 50% x Sum of Midpoints 38.0

[1] Cover classes (midpoints): T<1% (none); 1 = 1-5% (3.0); 2 = 6-15% (10.5); 3 = 16-25% (20.5); 4 = 26-50% (38.0); 5 = 51-75% (63.0); 6 = 76-95% (85.5); 7 = 96-100% (98.0).
[2] To determine the dominants, first rank the species by their midpoints. Then cumulatively sum the midpoints of the ranked species until 50% of the total for all species midpoints is immediately exceeded. All species contributing to that cumulative total (the dominance threshold number) plus any additional species having 20% of the total midpoint value should be considered dominants and marked with an asterisk.

DATA FORM[1]
INTERMEDIATE-LEVEL ONSITE DETERMINATION METHOD OR
COMPREHENSIVE ONSITE DETERMINATION METHOD
(Summary Sheet)

Field Investigator(s): L. Devroy & S. Cunningham Date: 11-8-91
Project/Site: Sunset Subdivision State: Oregon County: Washington
Applicant/Owner: City of Sherwood Vegetation Unit #/Name
Intermediate-level Onsite Determination Method ✓ Or
Comprehensive Onsite Determination Method
Transect Plot# 10
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

****

Do normal environmental conditions exists at the plant community?
Yes ✓ No ___ (If no, explain on back)
Has the vegetation, soils and/or hydrology been significantly disturbed?
Yes ___ No ___ (If yes, explain on back)

Dominant Plant Species	Ind. Stat.	Strat.	Dominant Plant Species	Ind. Stat.	Strat.
1. Populus trichocarpa	FAC	T	14.		
2. Salix lasiandra	FACW	T	15.		
3. Rubus ursinus	NI	S	16.		
4. Festuca arundinacea	FACU-	H	17.		
5. Phalaris arundinacea	FACW	H	18.		
6. Rosa species	NI	S	19.		
7.			20.		
8.			21.		
9.			22.		
10.			23.		
11.			24.		
12.			25.		
13.			26.		

****

Percent of dominant species that are OBL, FACW and/or FAC 75

Is the hydrophytic criterion met? Yes ✓ No ___

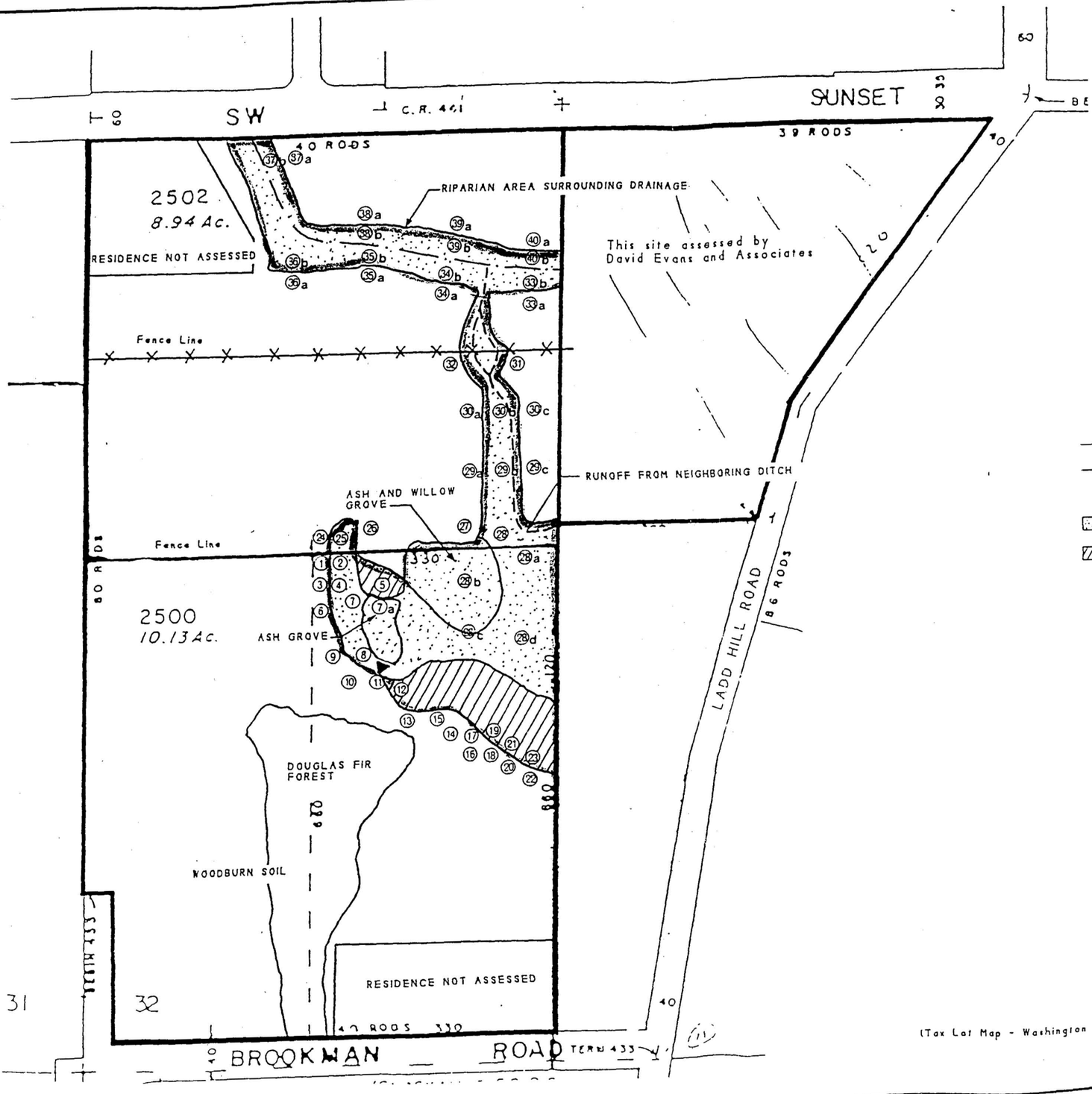
Is the hydric soils criterion met? Yes ✓ No ___

Is the wetland hydrology criterion met? Yes ___ No ✓

Is the vegetation unit or plot wetland? Yes ✓ No ___

Rationale for jurisdictional decision: Hydrology is assumed to be present during the growing season for some period of time.

[1] This data form can be used for either the Intermediate-level Onsite Determination Method or the Comprehensive Onsite Determination Method. Indicate which method is used.



N

EXPLANATION

① Sample Point

Year Round Drainage

Runoff (Occassional)

▼ Spring

Meets 1987 and 1989 Criteria

Meets 1989 Criteria Only

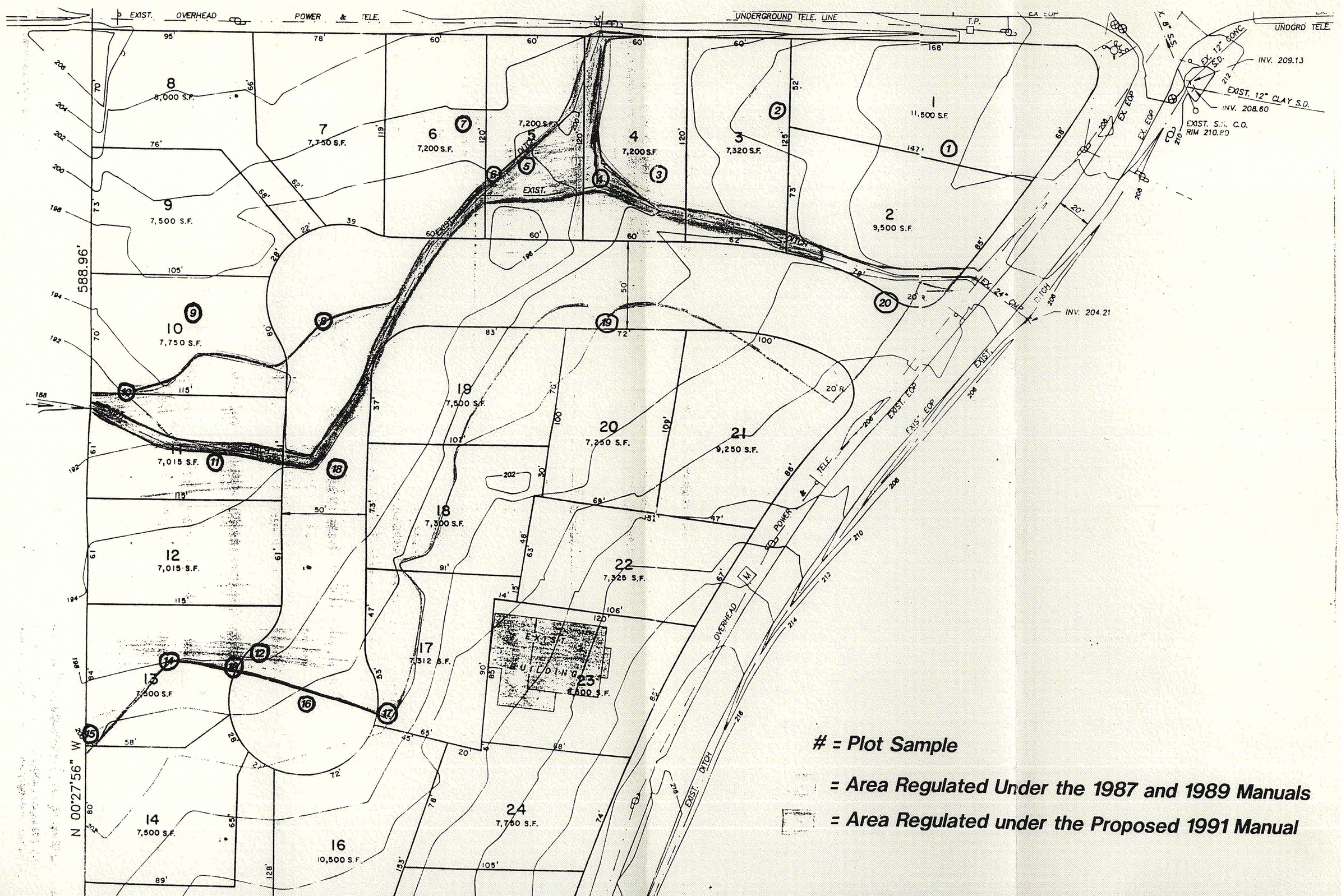
Locations of sample points and wetland boundaries are approximate.

Site needs to be surveyed for definative boundaries.

(Tax Lot Map - Washington County)

FIGURE 2. Site Map

PROJECT NUMBER: 923035	WILLIAM PETERSON WETLAND DELINEATION
DATE: 05/11/92	
DWG. KM / DWG NO: 923035F2	SHERWOOD, OREGON
PROJECT MANAGER: PV	
REVISED:	CASCADE EARTH SCIENCES, LTD Albany, Oregon


EXIST. OVERHEAD POWER & TELE.
UNDERGROUND TELE. LINE
T.P.
EX. EOP
UNDGRD TELE.
EX. 12" CONC. S.D.
INV. 209.13
EXIST. 12" CLAY S.D.
INV. 208.60
EXIST. S.M. C.O.
RIM 210.80
EX. 24" CMP
INV. 204.21
DITCH
EXIST. EOP
POWER & TELE
OVERHEAD
EXIST. DITCH
EXIST. BUILDING
588.96'
N 00°27'56" W
1 11,500 S.F.
2 9,500 S.F.
3 7,320 S.F.
4 7,200 S.F.
5 7,200 S.F.
6 7,200 S.F.
7 7,750 S.F.
8 8,000 S.F.
9 7,500 S.F.
10 7,750 S.F.
11 7,015 S.F.
12 7,015 S.F.
13 7,500 S.F.
14 7,500 S.F.
16 10,500 S.F.
17 7,312 S.F.
18 7,300 S.F.
19 7,500 S.F.
20 7,250 S.F.
21 9,250 S.F.
22 7,325 S.F.
23 8,400 S.F.
24 7,750 S.F.
= Plot Sample
= Area Regulated Under the 1987 and 1989 Manuals
= Area Regulated under the Proposed 1991 Manual

APPROVED WETLANDS INVENTORY
Oregon Division of State Lands
Meets LWI standards
Date 6-4-92 Approved by L. Morlan

CITY OF SHERWOOD

LOCAL WETLAND INVENTORY (LWI)

SUMMARY REPORT

Prepared for:

City of Sherwood
90 NW Park Avenue
Sherwood, Oregon 97140

Prepared by:

David Evans and Associates, Inc.
2828 SW Corbett Avenue
Portland, Oregon 97201

May 19, 1992

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Introduction

The City of Sherwood hired David Evans and Associates, Inc., to perform a Local Wetlands Inventory (LWI) of the wetlands within that portion of the Rock Creek drainage basin that is inside the city limits. The LWI was designed around the Division of State Lands (DSL) standards and guidelines. A copy of the DSL standards and guidelines for conducting an LWI is provided in Appendix A.

Methodology

A preliminary review of available information was conducted prior to field work. The Washington County Soil Survey (WCSS) and the National Wetlands Inventory (NWI) maps were reviewed for any wetland indicators within the study area. The WCSS indicated that five hydric soils occur within this study area of the Rock Creek basin: Cove, Huberly, Labish, Verboort, and Wapato (Appendix B). The NWI showed wetlands occurring only in association with Rock Creek and its tributaries (Appendix C). Washington County Soil Consergvation Service was also contacted to gather any wetland determinations that have been completed inside the project area. The SCS has only completed wetland determination on three-quarters of the county. The southeast portion of the county (Sherwood area) has not been done due tot he changes in federal wetland methodology.

A color aerial photo (taken on June 9, 1991, at a scale 1"=400') was used in the office and field to locate and assist in mapping the limits of the wetlands. All potential wetlands located on the aerial photo were ground verified between January 13-15, 1992.

In the field, the routine on-site determination method outlined in the *Manual for Identifying and Delineating Jurisdictional Wetlands* (FICWD, 1989) was used to determine the presence and extent of wetlands. In the field application of the triple parameter method includes examination of the area for hydrophytic vegetation, hydric soils, and hydrology to determine the extent of wetlands. Plots were established in areas of homogenous vegetation representative of the site. Soil test pits were dug down to a minimum of 18 inches, and soil colors were determined using the Munsell Soil Color Chartbook. Indicators of wetland hydrology were sought and noted.

There are 963 acres of the Rock Creek basin within the city limits. A total of 95 acres of wetlands were identified and mapped as occurring inside the study area of the basin.

Wetlands identified were given a code number starting with the letter "R," indicating that the wetland is located within the Rock Creek basin. Wetlands were also classified according to the U.S. Fish and Wildlife's *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, 1979). A summary sheet for each identified wetland is provided in Appendix C. The correlating code number is also on the inventory map (Enclosed) and routine field data forms. A copy of the routine data forms is provided in Appendix D.

Wetlands R-1, R-2, R-3, R-5, R-6, and R-8 are all part of the same Rock Creek system. Through land development and manipulation, the wetlands that make-up this system have been separated and/or classified differently to be able to specifically describe each system. R-1 and R-2 are the north end of Rock Creek. R-1 is an palustrine emergent wetland dominated by reed canary grass, while R-2 is a forested riparian area composed of Douglas fir (*Pseudotsuga menziesii*) and red alder (*Alnus rubra*) along Rock Creek. R-1 and R-2 are separated from R-3, R-5, and R-6 by Edy Road. R-3 is a small forested area of Rock Creek south of Edy Road and not connected to R-5 and R-6 due to an historic fill that was placed for an agricultural access road. R-3 consist of a few large trees of willow (*Salix* sp.) and Oregon ash (*Fraxinus latifolia*). R-5 is Rock Creek itself and the associated wetland banks vegetated with reed canary grass. R-6 is a seasonal wetland that has been disturbed via historic agricultural uses. R-6 is best described as an agriculturally disturbed wetland that is now composed of two co-dominant species (reed canary grass and colonial bentgrass [*Agrostis tenuis*]), and other species such as Queen Anne's lace (*Daucus carota*), willow, common cattail (*Typha latifolia*), plantain (*Plantago* sp.), Oregon white oak, and Oregon ash. R-8 is an abandoned water treatment pond that now has a connection with Rock Creek due to a break in the eastern wall. R-8 is vegetated with willow, reed canary grass, and common cattail .

R-18 and R-19 are the wetlands associated with a small creek that drains into R-6 and eventually into R-5. R-18 is the wetland associated with a channelized creek that runs from the pallet factory to an apple and black walnut orchard. The creek runs through a plowed field and the orchard before outfalling into R-6. Over half of R-18 consists of a narrow strip of slough sedge (*Carex obnupta*) and reed canary grass growing along the top of the bank of the creek; the other half is a forested strip of willow and slough sedge (*Carex obnupta*) running through the orchard. R-19 is a small mowed swale composed of Oregon black cottonwood (*Populus trichocarpa*), willow, reed canary grass, and creeping buttercup (*Ranunculus repens*) that ends at the pallet factory property boundary. R-18 and R-19 are separated by the pallet factory. Water from R-18 is piped into a culvert on the eastern (where R-6 would connect). The outfall for the water that is collected from R-18 was not located. It is not known if there is still a connection between R-18/R-19 and R-5/R-6.

R-4 is a disturbed wetland. Hydrology and hydric soils are present, but the vegetation has been plowed under. The hydrology has been altered by a ditch and the reconstruction of S.W. Tualatin-Sherwood Road (Edy Road). The only remaining vegetation is a single Oregon ash tree and a small patch of reed canary grass growing around the base of the tree.

R-7 is the northern abandoned water treatment pond. Although no longer used as a retainment pond, the area was saturated to the surface with some areas inundated. Soils within the pond were gleyed, as expected from previous years of constant inundation. Vegetation consisted of reed canary grass, slough sedge, common cattails, and willows.

R-10, R-11, R-12, and R-13 are all part of what used to be Murdock Creek, but now the system has been channelized and divided by culverts. R-13 is a pond surrounded by willow

and reed canary grass. R-12 is a small drainage overgrown with Himalayan blackberry (*Rubus discolor*). R-11 has been ditched, and the reed canary grass is contained within the well defined banks of the ditch. Previously, R-11 flowed north and connected with Rock Creek south of the southern water retention pond, but it has been re-routed and now flows east into R-10. R-10 follows a drainage and forms a small pond where it turns north. It is vegetated with reed canary grass, Himalayan blackberry, and Oregon white oak (*Quercus garryana*). The water in this system (R-10 through R-13) eventually flows into Rock Creek (R-5).

R-14 is an isolated wetland consisting of reed canary grass. This small depression has a man-hole in the northeast section of it.

R-15 is a small marsh located in a depression surrounded by hills. It is dominated by reed canary grass, curly dock (*Rumex crispus*), and an aster (*Aster* sp.).

R-16 and R-17 used to be part of the same system, but the construction of Murdock Road has isolated R-16 from connection with any other system. R-16 is composed of willow, rose (*Rosa* sp.), reed canary grass, hawthorn (*Crataegus* sp.) and curly dock. R-17 flows to the south and is a tributary to Rock Creek, although they do not connect within the city limits. This wetland is dominated by Himalayan blackberry, reed canary grass, and small-fruit bullrush (*Scirpus microcarpus*); with rose, Douglas fir, hawthorn, and red alder lining the upland banks. Several mallards and frogs were seen and heard utilizing this wetland.

References

Cowardin, Lewis M., Carter, Virginia, Golet, Francis C., and LaRoe, Edward T., *Classification of Wetlands and Deepwater Habitats of the United States*, U.S. Fish and Wildlife Service.

Federal Interagency Committee for Wetland Delineation, 1989, *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and the U.S.D.A. Soil Conservation Service, Washington, D.C. Cooperative technical publication.

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

National Technical Committee for Hydric Soils, 1991, *Hydric Soils of the United States*, U.S.D.A. Soil Conservation Service.

Reed, Porter 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, 1982, *Washington County Soil Survey*, Oregon Agricultural Experiment Station.

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APPENDIX A

Division of State Lands Standards and Guidelines for Local Wetland Inventories

Local Wetlands Inventory (LWI)
Standards and Guidelines

Purpose
141-86-180 Pursuant to ORS 196.674, these rules establish a system for uniform wetland identification, delineation, and comprehensive mapping. A Local Wetlands Inventory (LWI) is optional and is developed by a local jurisdiction for all or a portion of its jurisdiction according to the following standards and guidelines.

Policy
141-86-190 (1) Once adopted by the local jurisdiction and accepted by the Division of State Lands, the LWI may be used in place of the National Wetlands Inventory (NWI) and is incorporated into the State-wide Wetlands Inventory (SWI).

(2) A LWI provides good information for planning purposes and on location of potentially regulated wetlands, but is not of sufficient detail for regulatory certainty under the state Removal-Fill Law.

(3) The Offsite LWI Option is comprehensive enough to provide good information for planning purposes and improves notification to landowners, but there is not sufficient information to trigger Goal 5 for wetlands.

(4) The Onsite LWI Option fulfills location and quantity for Goal 5, but not quality. At the option of the local jurisdiction, a wetland function and value assessment may be conducted in order to obtain information sufficient to trigger Goal 5. The function/value assessment may be completed at a later date than the initial inventory, and is subject to approval by the Department of Land Conservation and Development.

(5) Wetland determinations and delineations shall be conducted according to the criteria and methodologies in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands and/or any subsequent manual/guidance developed or adopted by the Division.

(6) Determinations and delineations shall be conducted by any qualified person, and are subject to review and approval by the Division before incorporation into the State-wide Wetlands Inventory.

Definitions
141-86-200 (1) "Determination" means identifying an area as wetland or non-wetland.

(2) "Delineation" means identifying and marking the wetland/non-wetland boundary of each wetland identified.

(3) "Mapping" means transferring the identified and delineated wetlands to a base map.

Inventory Development Process and Standards
141-86-210 (1) Sources of inventory information shall include:

(a) U.S. Soil Conservation Service county soil survey and county list of hydric soils & soils with hydric inclusions;

(b) National Wetlands Inventory;

(c) Soil Conservation Service wetland maps where applicable;

(d) Federal Emergency Management Act floodplain maps where applicable;

(e) Other local wetlands inventories or wildlife habitat inventories that include wetlands;

(f) Resource agencies, including the Oregon Department of Fish & Wildlife and U.S. Fish & Wildlife Service;

(g) Division of State Lands and Corps of Engineers wetland determination & permit files; and

(h) Color and/or infra-red airphotos (min. scale 1" = 800').

(2) Sources of inventory information may include but is not limited to:

(a) Agricultural Stabilization and Conservation Service aerial color slides;

(b) Local knowledge of area (e.g., longtime residents); and

(c) The Nature Conservancy/Natural Heritage maps.

(3) A parcel base map shall be used which includes all roads, railroads, and property boundaries to facilitate accurate field mapping.

(a) The base map shall be scaled and shall be geographically referenced to State Plane Coordinate System and/or Public Land Survey.

(b) The base map shall be at or close to scale of airphotos used and final map products (Minimum scale of final wetlands maps is 1" = 800').

(c) The base map shall include hydrologic sub-basin boundaries, if any.

(4) Before beginning field verification, field map(s) shall be prepared from the base map and shall include the approximate location of:

(a) Any wetlands and deepwater habitats from NWI;

(b) Any wetlands from other inventories;

(c) Hydric soils and soils with hydric inclusions (keyed separately);

(d) Wetlands or possible wetlands delineated on airphotos; and

(e) Sites to check based on other leads.

(5) All work shall be completed by or supervised by a cartographer (on staff or contracted).

(6) Field verification of wetlands and possible wetlands shall be conducted as follows, except where access is denied by the landowner:

(a) For the Onsite LWI Option, onsite wetland determination is required for all wetlands or probable wetlands located through the process described in (1) through (4). Wetland boundary delineation is optional.

(b) For the Offsite LWI Option, field verification of wetlands or probable wetlands is required for:

(A) All wetland types identified through offsite process described in (1) through (4).

(B) Any wetland for which offsite source information is unclear or where two or more sources contradict each other (i.e., soils and NWI).

(c) Airphoto interpretation shall be tested early in the process by interpreting several wetland types, groundtruthing the interpretations, then completing the airphoto interpretations.

(7) Wetlands that are field-verified and those that are not shall be indicated on field forms and field map(s).

(8) The minimum size wetland to be identified and mapped shall be 0.5 acre.

(6) A study area summary report shall be prepared that includes:

(a) Total acreage in study area;

(b) Total acreage of wetlands in study area; and

(c) Total number of wetlands in study area.

(7) One complete set of all final maps and reports shall be provided to the Division for in-house use, coordination with the local jurisdiction, and inclusion in the State-wide Wetlands Inventory.

(a) Maps provided to the Division are public record and may be made available to the public and state and federal agencies.

(b) Maps provided to the Division shall be in a stable base, reproducible form.

(c) If final mapping is electronic, digital map data shall also be provided to the Division in a form usable by the Division.

(8) All wetland inventory procedures, final maps, and final reports are subject to review and approval by the Division before:

(a) Maps are accepted by the Division as part of the State-wide Wetlands Inventory; and

(b) Maps are accepted by the Division as a Local Wetlands Inventory to be used in lieu of the National Wetlands Inventory for Wetland Land Use Notification purposes.

Revisions
141-86-230 Every ten years, the local jurisdiction shall conduct a field reconnaissance of wetlands on the LWI to verify permitted changes and to note any substantial changes attributable to natural events. A summary report and any map changes shall be provided to the Division.

Landowner Notification
141-86-240 When the LWI is adopted by the local jurisdiction and by the Division, the local jurisdiction shall notify by mail all landowners of record whose parcel contains a wetland that:

(1) Their parcel(s) was included in the wetlands study area; and

(2) There is a wetland mapped on their parcel.

(k) Date inventory was adopted by local jurisdiction;

(l) Symbology for wetlands not field-verified, if any;

(m) Disclaimer (if any wetlands are not delineated), such as: "Information shown on this map is of a generalized nature. In all cases, actual field conditions determine wetland boundaries;" and

(n) All wetlands, clearly and accurately drawn and clearly identified by an individual wetland code that relates each wetland to field data sheets, database, and wetland summary sheets.

(3) Minimum map scale shall be 1" = 800' (1:9,600).

(4) Each inventory and mapping process shall be fully documented in order to ensure accuracy and consistency throughout the process. Documentation shall include:

(a) Wetland determination procedures used;

(b) Date(s) and scales of source maps and air photos used;

(c) Technical staff members and qualifications;

(d) Field data sheet(s) for each wetland field-verified, including wetland code;

(e) Field maps with sketches, notes, and measurements and air photos with wetland delineations; and

(f) All mapping and map transfer procedures used.

(5) A summary sheet shall be prepared for each wetland. The summary sheet shall include but is not limited to:

(a) Individual wetland code (used on map, data sheets, etc.);

(b) Street address or equivalent sufficient to locate site;

(c) Public Land Survey identifier (Township, Range, Section, Quarter Section);

(d) Approximate wetland size (in acres);

(e) Wetland Classification(s);

(f) Soil type(s) as mapped by Soil Conservation Service county soil survey, if any; and

(g) Hydrologic basin.

(9) Each wetland shall be assigned a distinctive identification code to use on map(s), field data forms, and in optional database.

(10) At the option of the local jurisdiction, hydrologically altered former wetlands may be inventoried as potential restoration sites.

(11) All wetlands identified shall be classified by type according to the U.S. Fish and Wildlife Service's Classification of Wetlands and Deepwater Habitats of the United States (Cowardin 1979).

(a) All wetlands shall be classified to "Class" level and special modifiers shall be included. Water regime modifiers are optional, but recommended.

(b) When a wetland contains more than one adjoining classification, the minimum wetland type size to differentiate shall be 0.1 acre.

Final Maps and Reports

141-86-220 (1) The final wetland map products shall consist of one or more maps (depending on size of area to be covered). If the study area is covered by more than one wetland map, a single, smaller scale reference map of the complete study site is required. The reference map shall indicate the location of all wetlands and be keyed to individual, large-scale maps.

(2) Final maps shall include:

(a) Map name;

(b) Scale bar;

(c) Geographical reference to State Plane Coordinate System and/or Public Land Survey;

(d) Roads and railroads;

(e) Watercourses;

(f) Property boundaries (Onsite Option only);

(g) Watershed boundaries, if any;

(h) Legend key to wetland symbology on map;

(i) Month(s) and year of field determinations (Onsite Option only);

(j) Source air photo date and scale;

APPENDIX B

Washington County Soil Survey

Sheet 49

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APPENDIX C

National Wetlands Inventory

APPENDIX D

Wetland Summary Sheets

May 19, 1992 **Wetland Code # R-1**

LOCATION:

LEGAL: T 2S R 1W SECTION 29 1/4 NE 1/16 ___ 1/32 _____

OTHER: North of Edy Road. Northwest of junk yard

CLASSIFICATION: PEMy

SOIL:

Series: Wapato **Subclass:** Fluvaguentic Haplaquolls

Color: 10 yr 4/1 with bright mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 100,620 sq ft (2.3 ac)

COMMENTS: Wetland extends to the southwest from the Onion Flats. One small pond has been excavated within the year. Wetland composed of reed canary grass (*Phalaris arundinacea*). Surrounded by a forested area on the east, development west of the pond, Edy Rd. to the south, and agriculture use on the north.

P=Palustrine

EM=Emergent **OW=Open Water** **FO=Forested**

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-2**

LOCATION:

LEGAL: T 2S R 1W SECTION 29 1/4 NE 1/16 ___ 1/32 _____

OTHER: Rock Creek, north of Edy Rd and west of junk yard

CLASSIFICATION: PFOy

SOIL:

Series: Wapato **Subclass:** Fluvaguentic Haplaquolls

Color: 10 yr 3/1

HYDROLOGIC BASIN: Rock Creek

SIZE: 32,015 sq ft (0.73 ac)

COMMENTS: Forested riparian area along Rock Creek.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-3**

LOCATION:

LEGAL: T 2S R 1W SECTION 29 1/4 SE 1/16 NE 1/32 _____

OTHER: Excavated portion of Rock Creek south of Edy Rd

CLASSIFICATION: PFOyx

SOIL:

Series: Wapato **Subclass:** Fluvaguentic Haplaquolls

Color: 10 yr 3/1 with gleyed mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 20,255 sq ft (0.46 ac)

COMMENTS: Rock Creek was excavated with the construction of Edy Rd. Two large box culverts were installed. Trees line the western banks of the creek.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-4**

LOCATION:

LEGAL: T 2S R 1W SECTION 28 1/4 SW 1/16 NW 1/32 SE
OTHER: South of Edy Rd. and east of railroad crossing

CLASSIFICATION: PEMc

SOIL:

Series: Huberly **Subclass:** Typic Fragiaquepts

Color: 10 yr 3/2 with mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 88,544 sq ft (2.03 ac)

COMMENTS: Highly disturbed area. Ditch with hydrophytic vegetation has been excavated and altered the hydrology of the area. Some fill has been placed on the top. Hydric soils and wetland hydrology are present. One ash (*Populus trichocarpa*) with reed canary grass (*Phalaris arundinacea*) growing around the bottom is the only vegetation left after the plowing.

On the north side of Edy road, hydric soils confirm, but hydrology and vegetation have been altered. No vegetation was present.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-5**

LOCATION:

LEGAL: T_2S_ R_1W_ SECTION _*_ 1/4 ___ 1/16 ___ 1/32 _____

OTHER: Rock Creek

CLASSIFICATION: PEMy

SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 2,153,728 ft (49.4 ac)

COMMENTS:

*Sec 29	SE	1/4
Sec 28	SW	1/4
Sec 33	NW	1/4

This is Rock Creek. This portion of Rock Creek is boarded on the north by SW Tualatin-Sherwood Road, and the Urban Growth Boundary on the south. This wetland has been disturbed and hydrologically manipulated over the years. Reed canary grass (*Phalaris arundinacea*) is the dominant species.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-6**

LOCATION:

LEGAL: T 2S R 1W SECTION 29 1/4 SE 1/16 ___ 1/32 _____

OTHER: West of Rock Creek

CLASSIFICATION: PEMc

SOIL:

Series: Aloha, Huberly **Subclass:** Aquatic Xerochrepts, Argixerolls Fragiaquepts

Color: 10 yr 3/1 with gleyed mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 1,029,573 sq ft (23.64 ac)

COMMENTS: Disturbed area wetland. Vegetation is dominated by FACW and FACU species. Three flat terraces make up this wetland. Each terrace is approximately 5 feet higher in elevation than the eastern one. Soils range in color from 10 yr 3/1 to 7.5 yr 3/2 with gley (5/1) mottles. Wetland hydrology present across entire field, except southern end.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-7**

LOCATION:

LEGAL: T 2S R 1W SECTION 29 1/4 SE 1/16 SE 1/32 NE

OTHER: Northern water treatment pond

CLASSIFICATION: PFOkzx

SOIL:

Series: not identified by SCS **Subclass:** not identified by SCS

Color: N 4/ (Probably Cove soil)

HYDROLOGIC BASIN: Rock Creek

SIZE: 126,510 sq ft (2.90 ac)

COMMENTS: Former water treatment facility. Now heavily vegetated with willow (Salix sp), cattail (*Typha latifolia*), and reed canary grass (*Phalaris arundinacea*). No longer contains open water as indicated by NWI and SCS maps.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-8**

LOCATION:

LEGAL: T 2S R 1W SECTION 29 1/4 SE 1/16 SE 1/32 SE

OTHER: Southern water treatment pond

CLASSIFICATION: PFOkzx

SOIL:

Series: not identified by SCS **Subclass:** not identified by SCS

Color: N 4/ (Probably Cove)

HYDROLOGIC BASIN: Rock Creek

SIZE: 144,034 sq ft (3.31 ac)

COMMENTS: Former water treatment pond. Has opening on northeast side to Rock Creek. Heavily vegetated now with reed canary grass (*Phalaris arundinacea*), willow (*Salix*), and cattail (*Typha latifolia*). No longer contains open water as indicated on NWI and SCS maps.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-9**

LOCATION:

LEGAL: T 2S R 1W SECTION 28 1/4 SW 1/16 SW 1/32 SW

OTHER: Southeast corner of Oregon Street and Tonquin Road

CLASSIFICATION: PEMy

SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 34,287 sq ft (0.79 ac)

COMMENTS: Outside city limits. Small pond recently excavated (within last 6 months) below ground water. Vegetation is heavily grazed upon by cows, with the exception of softrush (*Juncus effusus*).

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-10**

LOCATION:

LEGAL: T 2S R 1W SECTION 33 1/4 NW 1/16 NW 1/32 ____

OTHER: East of Murdock Road. Tributary to Rock Creek

CLASSIFICATION: PEMyx

SOIL:

Series: N/A **Subclass:** Xerochrepts-Rock outcrop

Color: 10 yr 3/1

HYDROLOGIC BASIN: Rock Creek

SIZE: 29,660 sq ft (0.68 ac)

COMMENTS: According to USGS maps, there was a small drainage running on the west side of Murdock Road down to Rock Creek. This drainage has been re-routed with the development of a housing subdivision and Murdock Apartments. Currently this tributary crosses Murdock Creek and is R-10. A small pond has formed where the creek makes a northern turn. Soils are non-hydric with hydric inclusions. Hydrophytic vegetation is growing along the water course.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal

May 19, 1992 **Wetland Code # R-11**

LOCATION:

LEGAL: T 2S R 1W SECTION 32 1/4 NE 1/16 NE 1/32 _____

OTHER: Tributary to Rock Creek west of Murdock Road
CLASSIFICATION: PEMyx

SOIL:

Series: Briedwell, Cove **Subclass:** Ultic Haploxerolls, Vertic Haplaquolls

Color: 10 yr 3/1

HYDROLOGIC BASIN: Rock Creek

SIZE: 20,188 sq ft (0.46 ac)

COMMENTS: See R-10. This part of the small drainage has been excavated. Hydrophytic vegetation (reed canary grass [*Phalaris arundinacea*], cattail [*Typha latifolia*]) is found only within the well defined banks, even though hydric soils extend further.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-12**

LOCATION:

LEGAL: T 2S R 1W SECTION 32 1/4 SE 1/16 NE 1/32 _____

OTHER: Roy Street Park

CLASSIFICATION: PEMyx
SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 10,785 sq ft (0.25 ac)

COMMENTS: Southern segment of R-11 and R-10. Excavated for subdivision. Portion between R-12 and R-11 will be culverted and have a road over the top. The portion not excavated is covered by Blackberry (*Rubus discolor*), with reed canary grass (*Phalaris arundinacea*) at the very southern end. Because this wetland will be filled upon completion of the construction, this wetland has been removed from the LWI (Concurrence with DSL on May 12, 1992).

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-13**

LOCATION:

LEGAL: T 2S R 1W SECTION 32 1/4 SE 1/16 NE 1/32 SE

OTHER: Roy Street Park

CLASSIFICATION: PEMy

SOIL:

Series: Quatama **Subclass:** Aquultic Haploxeraefs

Color: 10 yr 3/1 mottles, 10 yr 4/3 mottles, N 4/

HYROLOGIC BASIN: Rock Creek

SIZE: 19,047 sq ft (0.44 ac)

COMMENTS: Pond surrounded by hills on all four sides. Reed canary grass (*Phalarais arundinacea*) and willow (*Salix* sp.) vegetate this small wetland area.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-14**

LOCATION:

LEGAL: T 2S R 1W SECTION 32 1/4 SW 1/16 NW 1/32 SW

OTHER: East of murdock, south of Barn (south of curve)

CLASSIFICATION: PEMy

SOIL:

Series: N/A **Subclass:** Xerochrepts-Rock outcrop

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 27,027 sq ft (0.62 ac)

COMMENTS: Small depression in topography. Man-hole for sewer system on southern end. No connections with other wetlands found. This area is vegetated with reed canary grass (*Phalaris arundicacea*).

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-15**

LOCATION:

LEGAL: T 2S R 1W SECTION 33 1/4 SW 1/16 SW 1/32 NE

OTHER: Southeast of curve in Murdock Road

CLASSIFICATION: PEMy

SOIL:

Series: N/A **Subclass:** Xerochrepts-Rock outcrop

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 91,478 sq ft (2.10 ac)

COMMENTS: Pond surrounded by hills on all sides. No connections with other wetlands found. This area is vegetated with reed canary grass (*Phalaris arundicacea*), aster (*Aster* sp.), and curly dock (*Rumec crispa*).

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-16**

LOCATION:

LEGAL: T 2S R 1W SECTION 32 1/4 SE 1/16 NE 1/32 SE

OTHER: South of Sunset Road and Murdock Road intersection

CLASSIFICATION: PFOyh

SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 38,428 sq ft (0.88 ac)

COMMENTS: Possible headwater for R-17. Murdock Rd. has separated the two without a culvert connection. This small area is diked by Murdock Road. This area is vegetated with Oregon ash (*Fraxinus latifolia*), reed canary grass (*Phalaris arundinacea*), and curly dock (*Rumex crispa*).

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-17**

LOCATION:

LEGAL: T_2S_ R_1W_ SECTION __* 1/4 __ 1/16 __ 1/32 _____

OTHER: Creek east of Murdock Road.

CLASSIFICATION: PEMy

SOIL:

Series: Cove **Subclass:** Vertic Haplaquolls

Color: N 4/

HYDROLOGIC BASIN: Rock Creek

SIZE: 114,055 sq ft (3.31 ac)

COMMENTS:

*	Sec 32	SE 1/4	SE 1/16	NE 1/32
	Sec 33	SW 1/4	SW 1/16	SW 1/32

Wide wetland on valley floor. The northern end is completely dominated by Himalayan blackberry (*Rubus discolor*). Reed canary grass (*Phalaris arundinacea*) dominates where it gets wider. On the southern city limits a property owner has diked it to form a year round lake for aesthetic purposes in their back yard. South of the impounded lake, the drainage is diked again by a driveway crossing. The driveway contains a culvert that is too small to handle the amount of water that flows down this drainage.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code # R-18**

LOCATION:

LEGAL: T 2S R 1W SECTION 29 1/4 SE 1/16 SW 1/32 SW

OTHER: _____

CLASSIFICATION: PFOyx

SOIL:

Series: Verboort **Subclass:** Typic Argialbolls
Color: 10 yr 2/1, 2/2 with mottles

HYDROLOGIC BASIN: Rock Creek

SIZE: 33,773 sq ft (0.78 ac)

COMMENTS: Small creek that flows through a walnut and apple tree orchard. Slough sedge (*Carex obnupta*) and willow (*Salix* sp.) line the creek bed and flood plains. The creek has been excavated on the southern side. Where hydric soils end, so does hydrophytic vegetation. Red alder (*Alnus rubra*) and sword fern (*Polystichum munitum*) line the banks. Culverted on northeastern end. Could not final northern end of culvert. Probably outfalls somewhere in R-6. An additional manhole was located further north of R-6 culvert, but no culvert outfall was located.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

May 19, 1992 **Wetland Code #** R-19

LOCATION:

LEGAL: T 2S R 1W SECTION 32 1/4 NW 1/16 NE 1/32 ____

OTHER: _____

CLASSIFICATION: PEMy

SOIL:

Series: Verboort **Subclass:** Typic Argialbolls

Color: 10 yr 2/1

HYDROLOGIC BASIN: Rock Creek

SIZE: 27,748 sq ft (0.64 ac)

COMMENTS: Obviously R-19 and R-18 were once connected. Mill has an outfall into R-18 that supplies some water to small creek. No culvert opening was found for the eastern end of R-19. R-19 is a small wetland located in a depression. Culvert found under road to farm yard on the west, but wetland limits do not extend that far. Area is mowed.

P=Palustrine

EM=Emergent OW=Open Water FO=Forested

Water Regime Modifiers

c=seasonal
h=diked, impounded
k=artificial
x=excavated
y=saturated/semiperment/seasonal
z=intermittently exposed/permanent

APPENDIX E

Routine On-site Data Forms

pit 1

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Susan Cunningham Date: 1-13-92
Project/Site: City of Sherwood State: OR County: Washington
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 YR 4/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 6"
List other field evidence of surface inundation or soil saturation:
oxidized root channels and rhizospheres
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

* For all data forms ">" = greater than; "<" = less than.

pit 2

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Susan Cunningham Date: 1-13-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back) Evidence of historic grazing

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Unidentified grass		Herb	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: Hydrophytic vegetation criterion is indeterminate at this time pending a positive vegetative determination in the summer

SOILS

Series/phase: Subgroup:[2] Xerochrepts - Rock outcrop
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 YR 4/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation. Oxidized root channels
Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: Area is within flood plain of Rock Creek. Area gets wet, but not long enough to support hydrophytic vegetation.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Absence of hydrology and vegetation

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): S. Cunningham Date: 1-13-92
Project/Site: City of Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back) Evidence of historic grazing

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VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Unidentified grass		Herb	11.		
2. Phalaris arundinacea	FACW	Herb	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 50
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: Need positive identification in spring

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 4/1 Mottle Colors: ____
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: ____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 8"
List other field evidence of surface inundation or soil saturation.
Oxidized rhizospheres
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: Vegetation should be rechecked in spring for positive identification of indicator species

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 4

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-13-92
Project/Site: Sherwood LNA State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Thuja plicata	FAC	T	11.		
2. Berberis aquifolium	-	S	12.		
3. Polystichum munitum	-	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 33
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: N/A Subgroup:[2] Xerochrept - Rock outcrop
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 5

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-13-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

Area has been fenced into grazing pastures. Cow tracks and other evidence of livestock presence. Historic grazing.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Ranunculus repens	FACW	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ____ Gleyed? Yes ✓ No ____
Matrix Color: N 4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 6"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit6

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-13-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-11
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Small drainage has been excavated. Wetland condition found only within well defined banks.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Plants outside ditch			11.		
2. have been mowed.			12.		
3. Too hard to identify			13.		
4. after disturbance			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ____
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: ____

SOILS

Series/phase: Bridwell Subgroup:[2] Ultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/3 Mottle Colors: not assessed
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ____ No ✓
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: ____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: With the excavation of the ditch, the jurisdictional has been altered. Wetland conditions occur only within well defined banks of creek.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 7

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LN1 State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Drainage excavated recently for placement of culverts for Subdivision

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Cor Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 3/2 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale: not mottled.

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.
Water drainage patterns.
Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: This is the top end of small drainage. Area will be culverted in near future.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydrology was not present. Small drainage corridor.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 8

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-14
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100 %
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Subgroup:[2] Xerochrepts - Rock outcrop
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N 4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 2"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 9

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Cirsium vulgare	FAC	H	12.		
3. Rumex acetosella	FACU	H	13.		
4. Cytisus scoparius	–	S	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 25 %
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: Subgroup:[2] Xerochrepts - Rock outcrops
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 5 yr 3/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision:

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[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 10

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood Mill State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-16
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Construction of Murdock Rd has diked this area and left it isolated

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix sp	FACW	T	11.		
2. Rosa sp	NI	S	12.		
3. Phalaris arundinacea	FACW	H	13.		
4. Bunias cornuta	FACW	H	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100 %
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: 0-8" 10YR 3/1; 8"+ N4/ Mottle Colors: ____
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 11

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood INT State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-17
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes _____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No _____ (If yes, explain on back)

Construction of Murdock R has altered hydrology and vegetation.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Rubus discolor	FACU-	S	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC Ø
Is the hydrophytic vegetation criterion met? Yes _____ No ✓
Rationale: _____

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes ✓ No _____
Matrix Color: N 4/ Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No _____ Surface water depth: 0 to >8"
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: Blackberry is out-competing other vegetation - growing along ditch banks, many channels.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 12

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-17
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

Construction of Murdock Rd housing developments, and diking of creek further downstream has affected hydrology

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Scirpus microcarpus	OBL	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 4"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 13

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-17
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back) Diked drainage to form pond in private yard.
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Populus trichocarpa	FAC	T	11.		
2. Salix sp	FACW	T	12.		
3. Scirpus microcarpus	OBL	H	13.		
4.			14.		
5. * other vegetation outside			15.		
6. water has been moved			16.		
7. and landscaped for			17.		
8. aesthetic purposes.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Coe Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N 4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 7/8"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: Pit on wetland edge. Would expect the hydrology criteria to be met in a growing season.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: Wetland inside banks of embanked pond. Wetland continuous surround via small outfall water control structure.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 14

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood UGA State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-15
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Aster species	FACW-OBL	H	12.		
3. Rumex crispus	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Subgroup:[2] Xerochrept - Rock outcrop
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 1/4"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 2"
List other field evidence of surface inundation or soil saturation.
Sulfurous smell
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood UWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-13
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Glyceria sp (?)	OBL	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3. Salix sp	FACW	T	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Dustana Subgroup:[2] Aquertic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 4/2 Mottle Colors: gleyed in color
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 2"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 7-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea (reed)	FACW	H	11.		
2. unidentified grass	?	H	12.		
3. Rubus ursinus	NI	S	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: Need positive identification on unknown grass to make a determination

SOILS

Series/phase: Quatama Subgroup:[2] Aquultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 4/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydrology and soils are not hydric.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 17

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-17
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Cow pasture. Recent excavation down to ground water to form pond for cows. This has altered hydrology.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Juncus effusus	FACW	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Heavily grazed

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Cor Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: 0-8" 10yr 3/1; 8"+ N4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 8"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pt 18

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

The culvert at ~~Ba~~ Oregon Street crossing of Rock Creek is too small to handle flow. Rock Creek is, in a sense, dike at this point

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix sp	FACW	T	11.		
2. Ranunculus repens	FACW	H	12.		
3. Carex stricta	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Subgroup:[2] Xerochrept - Rock outcrop
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 0-4"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood (WA) State: OR County: WA
Applicant/Owner: ____ Plant Community #/Name: R-8
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Abandoned water treatment pond.
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix sp	FACW	T	11.		
2. Typha latifolia	OBL	H	12.		
3. Phalaris arundinacea	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: ____

SOILS

Series/phase: Not identified. Subgroup:[2] ____
Is the soil on the hydric soils list? Yes ____ No ____ Undetermined ✓
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N 4/ Mottle Colors: ____
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 2"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: ____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: ____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Berm surrounding water detension pond.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Agrostis tenuis	FAC	H	11.		
2. Elymus arvense	FACU	H	12.		
3. Plantago lanceolata	FACU+	H	13.		
4. Rubus lacinatus	FACU+	S	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 25
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: undetermined Subgroup:[2]
Is the soil on the hydric soils list? Yes ____ No ____ Undetermined ✓
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 4/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LRI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

May have been affected by placement of retension ponds.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Dyssacus sylvestris	NI	H	12.		
3. Juncus effusus	FACW+	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100 %
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Cove Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes ✓ No _____
Matrix Color: N 4/ Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: 0'
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: 2"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 22

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood Well State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Unidentified grass		H	11.		
2. Cirsium vulgare	FACU	H	12.		
3. Rosa sp	NI	S	13.		
4. Daucus carota	—	H	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ≤33
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: Need positive identification of unknown grass to make a determination.

SOILS

Series/phase: Briedwell Subgroup:[2] Ultic Haploxerolls
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 5yr 4/1 Mottle Colors: not assessed - dull
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydrology not present. Vegetation leaning towards upland scale.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood (LWI) State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

Hydrology is affected by flood control of Oregon Slough.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Coe Subgroup:[2] Typic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: N 4/ Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood Env State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix sp	FACW	T	11.		
2. Rosa sp	NI	S	12.		
3. Phalaris arundinacea	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Wapato Subgroup:[2] Fluvaquentic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes ✓ No _____ Gleyed? Yes _____ No ✓
Matrix Color: 10yr 2/1 Mottle Colors: bright mottles
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 25

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Populus trichocarpa	FAC	T	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: _____

SOILS

Series/phase: Wapato Subgroup:[2] Fluvaquentic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/2 Mottle Colors: Strong bright mottles.
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 6"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 26

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LW1 State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-5
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Cove Subgroup:[2] Typic Hapiaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: 0-8" 10yr 3/1; >8" N4/1 Mottle Colors: ____
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole:
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 27

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Susan Cummings-Lowe Date: 1-14
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: 2-6
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes _____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No _____ (If yes, explain on back)

Site has been disturbed by historic agricultural use. The site has drainage systems and be terraced to alter hydrology

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Juncus sp.	FACW	H	11.		
2. Daucus carota	—	H	12.		
3. Agrostis tenuis	FAC	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 66
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Aloha Subgroup:[2] Aquic Xerochrepts
Is the soil on the hydric soils list? Yes _____ No ✓ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes ✓ No _____ Gleyed? Yes _____ No ✓
Matrix Color: 10yr 3/1 Mottle Colors: mottles are grey in color
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No _____ Surface water depth: 1"
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: Although a disturbed site from historic agricultural use, still meets wetland criteria.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 28

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Susan Cunningham Date: 1-14-92
Project/Site: Sherwood CWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-6
Note: **If a more detailed site description is necessary, use the back of data form or a field notebook.**

Do normal environmental conditions exist at the plant community?
Yes ___ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ___ (If yes, explain on back)

Site has been altered by historic agricultural uses. There is a drainage system, and the land has been burned to alter hydrology.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix species	FACW	T	11.		
2. Pseudotsuga menziesii	-	T	12.		
3. Daucus Crinata	-	H	13.		
4. Agrostis tenuis	FAC	H	14.		
5. Cladonia pyxidata	NI	fungus	15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 50
Is the hydrophytic vegetation criterion met? Yes ✓ No ___
Rationale: FAC to water species make-up less dominate species in plot.

SOILS

Series/phase: Huberly Subgroup:[2] Typic Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ___ Undetermined ___
Is the soil a Histosol? Yes ___ No ✓ Histic epipedon present? Yes ___ No ✓
Is the soil: Mottled? Yes ✓ No ___ Gleyed? Yes ___ No ✓
Matrix Color: 7.5 YR 3/2 Mottle Colors: 5Y 5/1
Other hydric soil indicators: ___
Is the hydric soil criterion met? Yes ✓ No ___
Rationale: ___

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ___ Surface water depth: 2"
Is the soil saturated? Yes ✓ No ___
Depth to free-standing water in pit/soil probe hole: ___
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ___
Rationale: ___

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ___
Rationale for jurisdictional decision: Although a disturbed site, it still meets wetland criteria.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 29

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Plantago sp. FAC-	FACW	H	11.		
2. Agrostis tenuis	FAC	H	12.		
3. Daucus carota	—	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ≥ 33
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: Need positive identification of unknown grass to make determination.

SOILS

Series/phase: Quatama Subgroup:[2] Aquultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 7/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 7/8"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydric soils and hydrology are not present.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 30

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Construction of RR crossing and retension pond [illegible] formed this little [illegible]

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris Brunetiana	FACW	H	11.		
2. Typha latifolia	OBL	H	12.		
3. Rosa sp	NI	S	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: _____

SOILS

Series/phase: Aloha Subgroup:[2] Aquatic Xerochrepts
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 2/2, 2/1 Mottle Colors: bright strong mottles
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No ____ Surface water depth: 2"
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pt 31

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-2
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, expiain on back)

There has been some excavation of rock cuts by Hi road construction on Edy Rd.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Hedera helix	—	V	11.		
2. Rubus discolor	FACW	S	12.		
3. Rubus laciniatus	FACW	S	13.		
4. Populus trichocarpa	FAC	T	14.		
5. Salix sp	FACW	T	15.		
6. Pseudotsuga menziesii	—	T	16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 33
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: Wapato Subgroup:[2] Fluvaquentic Haplaquolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Vegetation and hydrology not present

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 32

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-1
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Quatama Subgroup:[2] Aquertic Haploxeralfs
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 4/1 Mottle Colors: bright mottles
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 7/8"
List other field evidence of surface inundation or soil saturation.
Oxidized root channels
Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: 10 feet north of this pit - further into the Phalaris field - hydrology (standing water) can be found within 8" of the surface.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: On edge of wetland.

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[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 33

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 7-14-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Site has been partially filled for access road to perform agricultural use.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Rubus discolor	FACW	S	11.		
2. Plantago lanceolata	FACW	H	12.		
3. Daucus carota	—	H	13.		
4. Cirsium arvense	FACW	H	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC Ø
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: Quatama Subgroup:[2] Aquultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 4/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 34

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LW1 State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Unidentified grass		H	11.		
2. Daucus carota	—	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ≤50
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: Positive indentification of unknown grass needed to make determination

SOILS

Series/phase: Huberley Subgroup:[2] Argixerolls Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/2 Mottle Colors: ____
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ____ No ✓
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Hydric soils and hydrology not present.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 35

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood UB1 State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-4
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Ditch down field and recent plowing has altered hydrology

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. No vegetation due to			11.		
2. plowing			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: _____

SOILS

Series/phase: Huberley Subgroup:[2] Typic Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined _____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 3/2 Mottle Colors: bright (exact color not assessed)
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: Soils are hydric below plowed layer.

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 10"
List other field evidence of surface inundation or soil saturation.
glistening sides at 5"
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: disturbed Wetland.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 36

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LW1 State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Area plowed. No vegetation.
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. no vegetation			11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale: _____

SOILS

Series/phase: Quatama Subgroup:[2] Aquultic Haploxeralfs
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined _____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/3 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ____ No ✓
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 37

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood LW1 State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-4
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes _____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No _____ (If yes, explain on back)

Area plowed. No vegetation. Ditch alongside road could have affected hydrology.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. no vegetation			11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes _____ No ✓
Rationale: _____

SOILS

Series/phase: Huberly Subgroup:[2] Typic Fragiaquepts
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No _____
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes _____ No _____
Matrix Color: 10yr 3/1 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: _____
Is the soil saturated? Yes _____ No ✓
Depth to free-standing water in pit/soil probe hole: 20"
List other field evidence of surface inundation or soil saturation.
Some stand water, but soil is not saturated. Glisten sides @ 10"
Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: Disturbed wetland. Hydrology has been altered by construction of Tualatin-Sherwood Rd. Hydrophytic vegetation has been replaced with grass seed mix.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-14-92
Project/Site: Sherwood Unit State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back) Plowed field. Hydrology has been altered by ditching.
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. No Vegetation			11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale:

SOILS

Series/phase: Aloha Subgroup:[2] Aquetic Xerochrepts
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 2/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: Aloha soil meets color criteria as a hydric soil, but drainage class and low water table do not meet SCS criteria for being listed as hydric.

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: greater than 18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: This plot is higher in elevation than plot #1. Water will probably not rise within 18" of the surface.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

pit 39

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood UW State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-19
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Mowed.
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Ranunculus repens	FACW	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3. Unidentified grass		H	13.		
4. Populus trichocarpa	FAC	T	14.		
5. Willow sp.	FACW	T	15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC ≥80
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale: Mowed grass was not possible to identify

SOILS

Series/phase: Verboort Subgroup:[2] Typic Argialbolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ✓ No ____ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 2/2 Mottle Colors: bright
Other hydric soil indicators: ____
Is the hydric soil criterion met? Yes ✓ No ____
Rationale: ____

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 10"
List other field evidence of surface inundation or soil saturation.
glistening sides at 5"
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: ____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: ____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit 40

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood UGB State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-18
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Ditch through plowed field.
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Carex obnupta	FACW	H	11.		
2. Phalaris arundinacea	FACW	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Verboort Subgroup:[2] Typic Argialbolls
Is the soil on the hydric soils list? Yes ✓ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ✓ No ____
Matrix Color: 10yr 5/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth: ____
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 7½"
List other field evidence of surface inundation or soil saturation.
Glistening sides at 10"
Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale: Ditching has affected hydrology. Ditch is 3.5 feet deep & 4' wide. Soil on banks is saturated to surface.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision: Disturbed wetland. Wetland conditions exist outside of ditch, wetland does not exist outside hydric soils.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

Pit M1

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood UGB State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: R-18
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? Creek has been excavated.
Yes _____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No _____ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Salix species	FACW	T	11.		
2. Populus trichocarpa	FAC	T	12.		
3. Carex stipata	FACW	H	13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Verboort Subgroup:[2] Typic Argiaquolls
Is the soil on the hydric soils list? Yes _____ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes _____ No ✓
Matrix Color: 10YR 5/1 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ✓ No _____ Surface water depth: _____
Is the soil saturated? Yes ✓ No _____
Depth to free-standing water in pit/soil probe hole: 5"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No _____
Rationale for jurisdictional decision: _____

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood UGB State: OR County: WA
Applicant/Owner: Plant Community #/Name:
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No ____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Alnus rubra	FAC	T	11.		
2. Polystichum munitum	—	H	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 50
Is the hydrophytic vegetation criterion met? Yes ____ No ✓
Rationale:

SOILS

Series/phase: Quatama Subgroup:[2]
Is the soil on the hydric soils list? Yes ____ No ____ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 3/3 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ____ No ✓
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: 7/8"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ✓
Rationale for jurisdictional decision: Pit taken within flood plain of the Creek. This area is a forest riparian area, but not a wetland.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood UGB State: OR County: WA
Applicant/Owner: Plant Community #/Name: R-6
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Flow control device installed years ago for access road to basin in abandoned overbank. Creek flows into culvert. Do not know what if any water leaves culvert.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 100
Is the hydrophytic vegetation criterion met? Yes ✓ No ____
Rationale:

SOILS

Series/phase: Aloha Subgroup:[2] Aquetic Xerochrept
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined ____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10yr 2/1 Mottle Colors:
Other hydric soil indicators:
Is the hydric soil criterion met? Yes ✓ No ____
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ____ No ✓ Surface water depth:
Is the soil saturated? Yes ✓ No ____
Depth to free-standing water in pit/soil probe hole: 10"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ✓ No ____
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ✓ No ____
Rationale for jurisdictional decision:

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood UGB State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ✓ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ✓ (If yes, explain on back)

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. Phalaris arundinacea	FACW	H	11.		
2. Plantago lanceolata	FACU	H	12.		
3. Daucus carota	—	H	13.		
4. Cirsium arvense	FACU	H	14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC 25
Is the hydrophytic vegetation criterion met? Yes _____ No ✓
Rationale: _____

SOILS

Series/phase: Hubbard Subgroup:[2] Typic Argixerepts
Is the soil on the hydric soils list? Yes ✓ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No ✓ Histic epipedon present? Yes _____ No ✓
Is the soil: Mottled? Yes _____ No ✓ Gleyed? Yes _____ No ✓
Matrix Color: 10YR 3/2 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: _____
Is the soil saturated? Yes _____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes _____ No ✓
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No ✓
Rationale for jurisdictional decision: Soils and vegetation do not meet wetland criteria. As this is slightly higher in elevation, it is doubtful that the water table comes within 18" of the surface.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."

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DATA FORM
ROUTINE ONSITE DETERMINATION METHOD[1]

Field Investigator(s): Cunningham Date: 1-15-92
Project/Site: Sherwood LWI State: OR County: WA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ____ No ✓ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ✓ No ____ (If yes, explain on back)

Plowed area with ditch. Ditch is a very wide swale.

VEGETATION

Dominant Plant Species	Indicator Status	Stratum	Dominant Plant Species	Indicator Status	Stratum
1. No vegetation			11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ____ No ____
Rationale: _____

SOILS

Series/phase: Aloha Subgroup:[2] Aquic Xerochrepts
Is the soil on the hydric soils list? Yes ____ No ✓ Undetermined _____
Is the soil a Histosol? Yes ____ No ✓ Histic epipedon present? Yes ____ No ✓
Is the soil: Mottled? Yes ____ No ✓ Gleyed? Yes ____ No ✓
Matrix Color: 10 yr 2/2 Mottle Colors: _____
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes ____ No ✓
Rationale: _____

HYDROLOGY

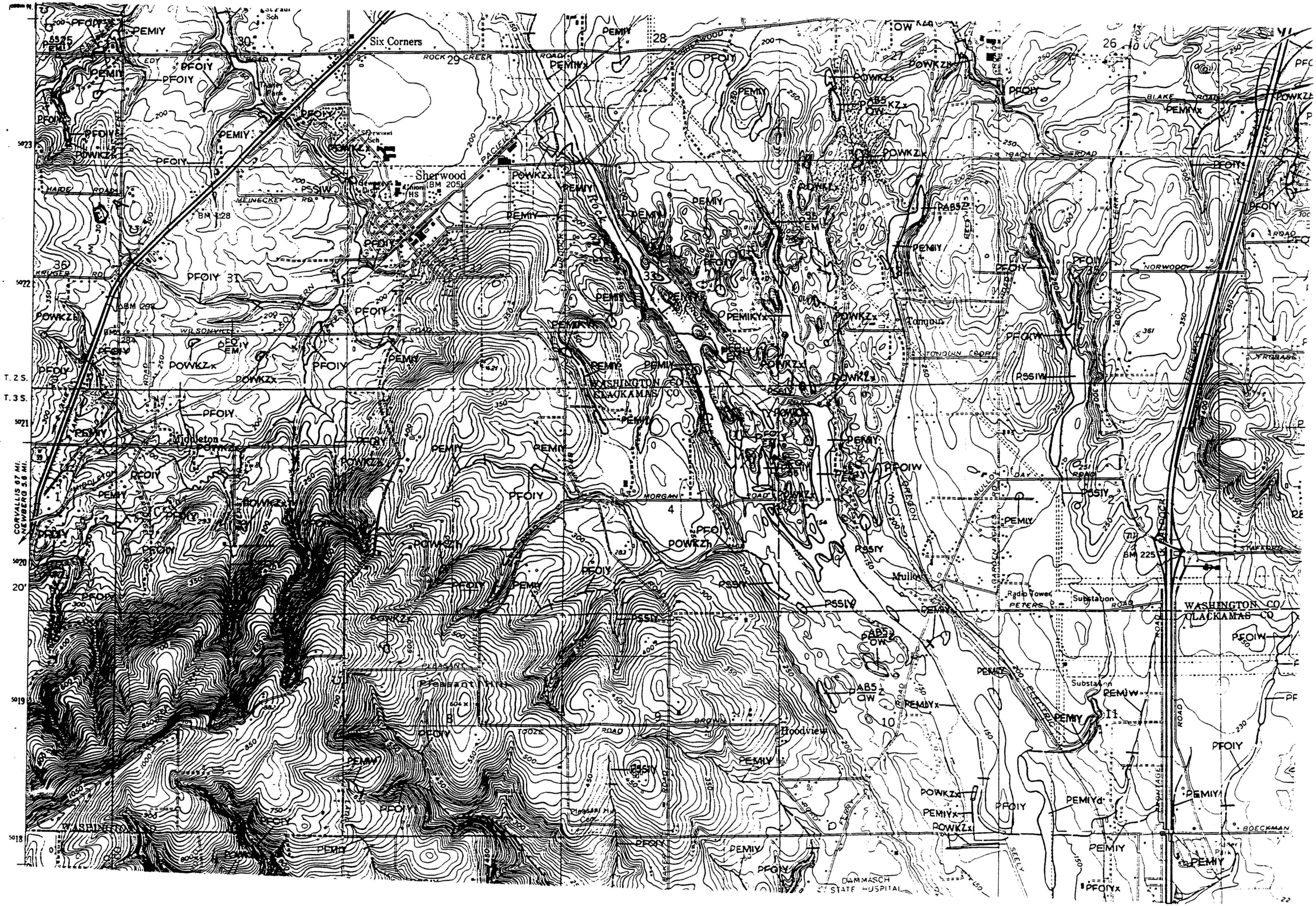
Is the ground surface inundated? Yes ____ No ✓ Surface water depth: _____
Is the soil saturated? Yes ____ No ✓
Depth to free-standing water in pit/soil probe hole: >18"
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ____ No ✓
Rationale: Not assessed during growing season. Doubtfull that water table rises within 18" of the surface here.

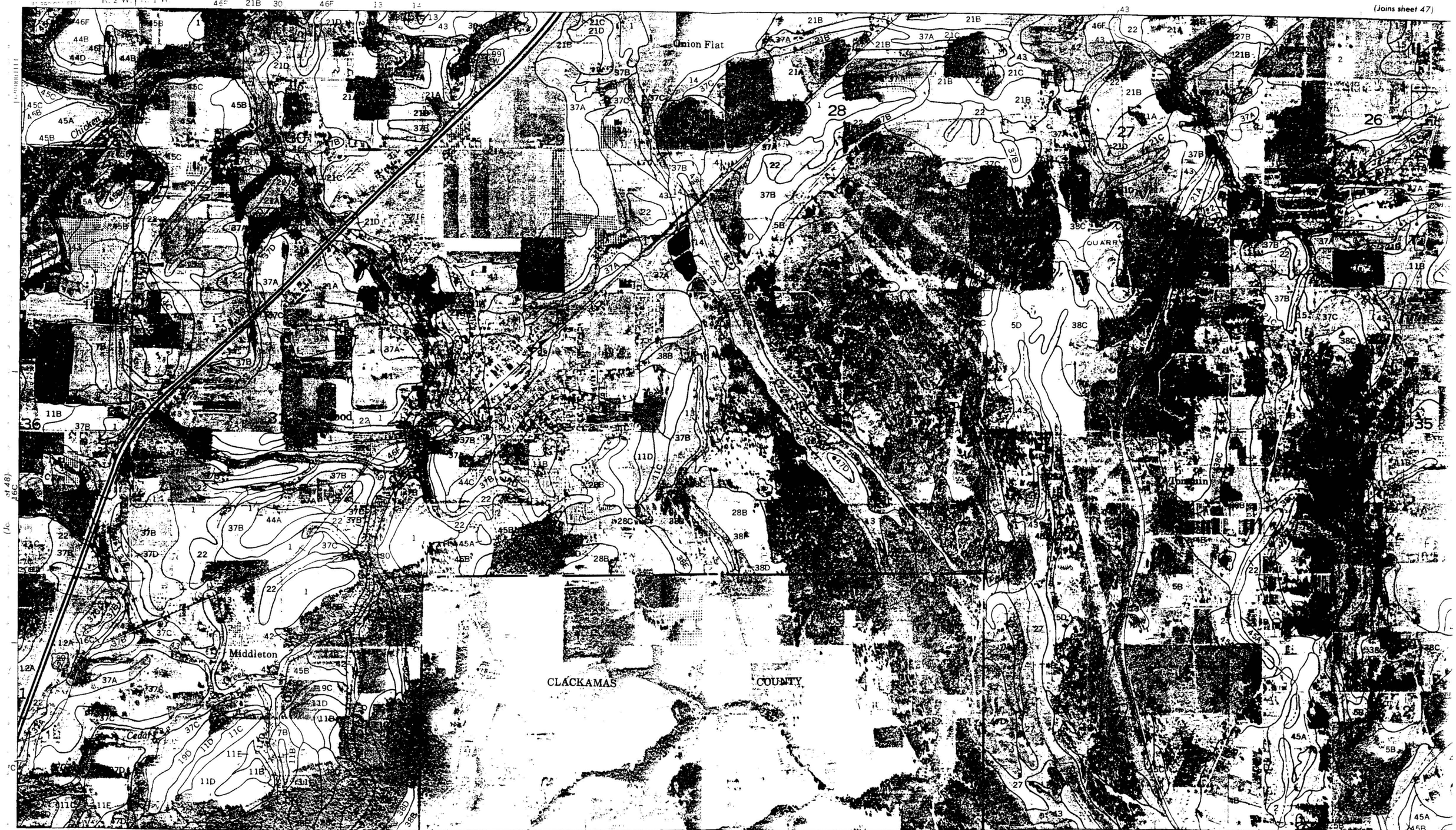
JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ____ No ____
Rationale for jurisdictional decision: This is a disturbed area. Both vegetation and hydrology are absence. Drainage system has on site has altered hydrology.

[1] This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
[2] Classification according to "Soil Taxonomy."



Six Corners
Sherwood
Middleton
Tonquin
Mullock
Hoodview
Pleasant Hill
WASHINGTON CO
CLACKAMAS CO
DAMMASCH STATE HOSPITAL
T. 2 S.
T. 3 S.
CORVALLIS 67 MI.
NEWBERG 5.6 MI.


R. 2 W. | R. 1 W.
(Joins sheet 47)
Union Flat
Chicken
Middleton
Cedar
CLACKAMAS
COUNTY
QUARRY
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1 Mile
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