

Happy Valley

Local Wetlands Inventory



Prepared for
City of Happy Valley

Prepared by



SRI/SHAPIRO/AGCO, Inc.

April 7, 1997

Happy Valley

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April 7, 1997

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1.0 INTRODUCTION

In October 1994, the City of Happy Valley was awarded a Technical Assistance Grant by the Oregon Department of Land Conservation and Development (DLCD) to conduct a Local Wetlands Inventory (LWI) and identify significant wetlands and significant wildlife habitat within the city limits. The project area, which includes the city limits, is shown on Figure 1. In December, 1994, Happy Valley contracted with SRI/SHAPIRO/AGCO, Inc. (SHAPIRO) to conduct the work items described in the grant.

In March 1997, Happy Valley entered into a contract with SHAPIRO to update and finalize the LWI portion of the project. This final report documents the methodology and results of the LWI, and includes minor adjustments to a few wetland boundaries as well as minor corrections. The report includes only the wetland mapping and description. SHAPIRO applied the *Oregon Freshwater Assessment Methodology* (OFWAM; Roth, et al., 1993) and developed a significant wetlands criteria in 1994. The results from the OFWAM and significant wetlands analysis are documented in an addendum to this report. This work was conducted prior to adoption of the revised OFWAM analysis (Roth, et al., 1996) and draft significant wetlands criteria developed by the Oregon Division of State Lands (DSL; 1996). The revised OFWAM, and significant wetlands and wildlife area assessment will be updated by other consultants. The updated analyses will complement this report and will comply with the new Goal 5 (1996) rules.

2.0 DEFINITIONS

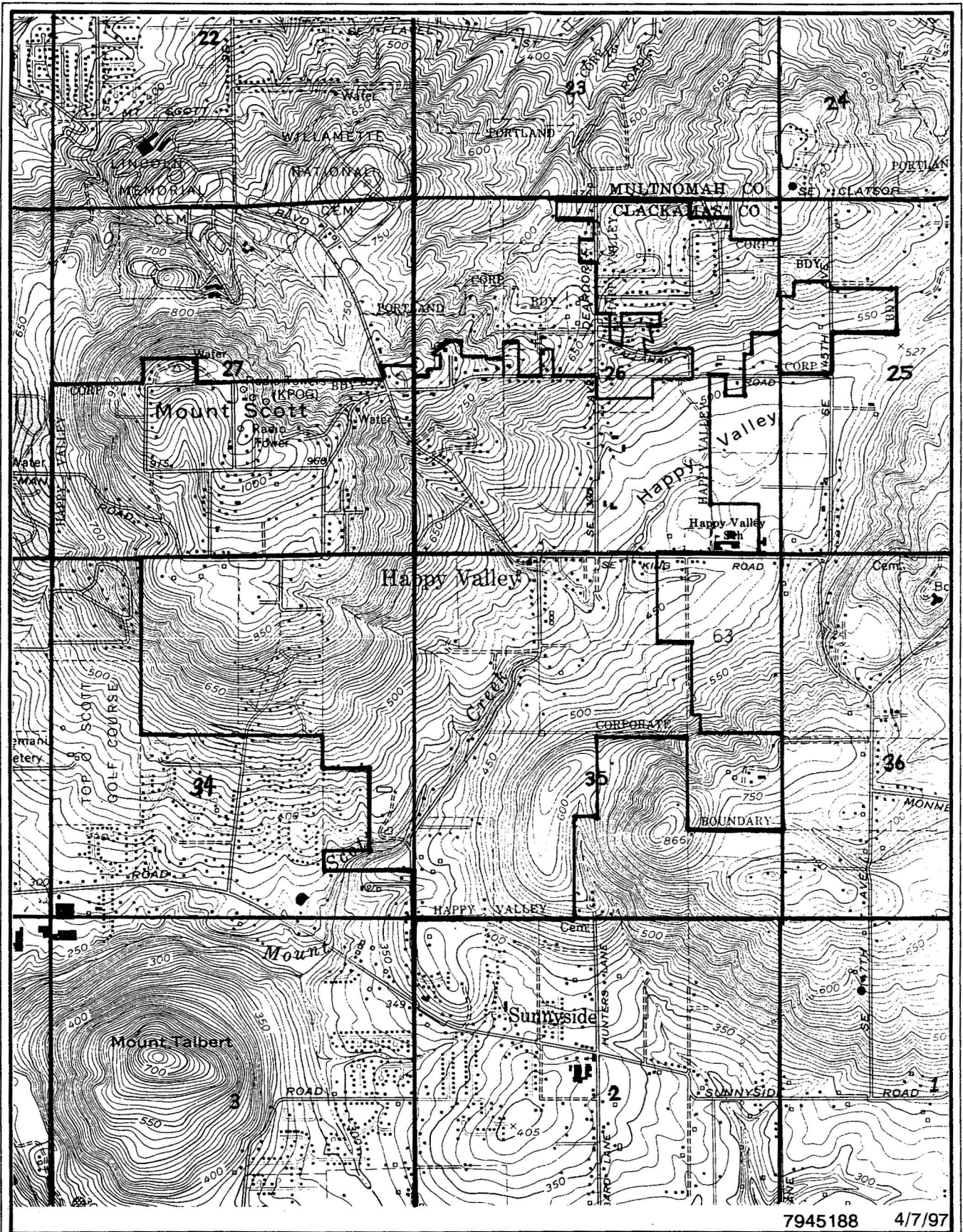
2.1 Corps of Engineers Wetlands Delineation Manual

The main source document used in the investigation was the *Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1* (Environmental Laboratory, 1987). This manual is now recognized by the Oregon Division of State Lands and by the U.S. Army Corps of Engineers for the determination and delineation of wetlands within Oregon.

As provided in the Manual, the accepted definition of wetland used by the Corps of Engineers in implementing section 404 of the Clean Water Act and by the Oregon Division of State Lands in administering the Removal/Fill Law is:

Those areas that are inundated or saturated by surface or ground water 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 generally include swamps, marshes, bogs, and similar areas. (Federal Register, 1982).

The 1987 manual provides technical criteria, field indicators, and recommended procedures to be used in determining whether an area is a jurisdictional wetland. The manual requires that three technical criteria in undisturbed situations be met before areas can be considered wetland under federal or state jurisdiction. These criteria are hydric soils, hydrophytic vegetation, and wetland hydrology.



Location and generalized topography for the Happy Valley Local Wetlands Inventory and Wildlife Habitat Assessment in Clackamas County, Oregon (U.S.G.S. Gladstone, Oregon, 7.5-minute quadrangle, 1:24000, 1961, photorevised 1984).

FIGURE
1

2.2 Mandatory Wetland Technical Criteria

2.2.1 Hydrophytic Vegetation

Hydrophytic vegetation consists of those plant species that have adapted to growing in substrates which are periodically deficient in oxygen due to saturated soil conditions. Five basic groups of vegetation are recognized based on their frequency of occurrence in wetlands. These categories, referred to as the "wetland indicator status," are as follows: obligate wetland plants (OBL) are estimated to occur almost exclusively in wetlands (>99%); facultative wetland (FACW) plants are estimated to occur 67-99% of the time in wetlands; facultative (FAC) plants occur equally in wetlands and non-wetlands (34-66%); and facultative upland (FACU) plants usually occur in non-wetlands (67-99%). If a species is not assigned to one of the four groups described above it is assumed to be an obligate upland (UPL) plant, which is estimated to occur almost exclusively in non-wetlands (>99%). In addition, plants designated "NI" have not yet received a wetland indicator status, but are probably not obligate upland.

Species lists of commonly encountered plants along with their wetland status have been prepared for all regions of the country by the U.S. Fish and Wildlife Service (USFWS, 1988).

2.2.2 Hydric Soils

Hydric soils are those that in an undrained condition are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions near the surface. Such anaerobic (little or no free oxygen) conditions during the growing season affect the production, growth, and survival of plants. Chemically reduced forms of iron, manganese, and sulfur may also be present (primarily in mineral soils), their higher toxicity further affecting plant growth.

2.2.3 Wetland Hydrology

The 1987 manual defines wetland hydrology as saturation within a major portion of the root zone (usually above 12 inches) typically between 5 and 12.5% of the growing season and typically between March 1 and October 31. The wetland hydrology criterion can be met, however, if saturation within the major portion of the root zone is present for only 5 percent of the growing season depending on the wetland status of the plant community. The growing season for any given site or location is determined from U.S. Soil Conservation Service data and information.

2.3 Wetland Field Indicators

2.3.1 Hydrophytic Vegetation

A wide variety of plants exhibit at least some degree of tolerance to saturated soil conditions. Adaptations to such conditions may be both structural and physiological in nature, making few of these features readily observable in the field. Structural adaptations may include a shallow root system or adventitious (above ground) roots, while a physiological adaptation includes the ability to transport oxygen to the root zone (as evidenced by oxidized rhizospheres).

For the purposes of wetland delineation, plants generally considered to be more or less tolerant of saturated soil conditions have been included in the USFWS Region 9 plant list. Exclusively upland plants are not listed for the sake of brevity. The rating system is not flawless, and species

are occasionally found in areas considered to be atypical habitat. Nevertheless, an assemblage of plants with at least a facultative (FAC) rating generally indicates the presence of wetland conditions (provided hydric soils and wetland hydrology indicators are also present). A higher proportion of dominant species rated as facultative wetland (FACW) and obligate wetland (OBL) will more reliably indicate wetland conditions.

2.3.2 Hydric Soils

Readily observable field indicators for hydric soils include gleying and mottling in mineral soils, or an organic upper surface layer (histic epipedon). Occasionally, the presence of a strong sulfur smell (reduced sulfur) in some soils can indicate prolonged anaerobic conditions as well.

Color strength (chroma) is generally the most reliable indicator of a hydric mineral soil, since such soils will develop very low chromas (two or less) under saturated oxygen-free conditions. Gleyed soils are visually distinctive, with a grayish color often tinged with green or blue. Reduced iron and manganese are readily leached from the soil column under prolonged saturation, accounting for the unsaturated color. Gleying may be uniform to the surface in areas that are inundated year-round, while oxidation in the upper soil layers due to a fluctuating high water table may result in patches of brighter colors called mottles. A mineral soil is considered hydric when the dominant soil matrix chroma is two or less with mottles, or one or less without mottles. Colors are determined in the field with the aid of a Munsell soil color chart.

2.3.3 Wetland Hydrology

The best field indicators of wetland hydrology include the direct observation of standing surface water, soil saturation at or near the surface, or a high ground water table. Due to the seasonal nature of prolonged saturation or inundation in most areas, however, these indicators are often not present. Active oxidized root channels in the upper soil profile provide evidence of the physiological adaptation by plants to supply oxygen to their root systems during anaerobic conditions. Their existence is generally a reliable indicator of prolonged saturation in the root zone during the growing season, as long as vegetation is present.

Other indirect indicators include dried-up water channels and depressional areas, dried algal mats, water marks on plants, and water-stained leaves. These may provide adequate evidence of wetland hydrology as long as it can be shown that a short-lived flood event (such as might cause water marks) was not the only hydrologic activity.

2.4 Local Wetlands Inventory

The 1989 Oregon state legislature authorized the Division of State Lands (DSL) to develop a statewide wetlands inventory suitable for planning and regulatory purposes. Pursuant to ORS 196.674, DSL established Local Wetlands Inventory (LWI) standards and guidelines. The purpose of an LWI is to locate, map, and to classify wetlands by type (e.g. forested wetlands) over a relatively large geographic area. The approximate boundary of all wetlands greater than 0.5 acres in size are identified through the inventory.

An approved LWI will replace the National Wetlands Inventory maps and will be incorporated into the statewide wetlands inventory. Wetlands identified on the National Wetlands Inventory maps are located through the interpretation of relatively small-scale color infrared aerial

photographs (e.g., scale of 1:58000) with limited "ground truthing" conducted to confirm the interpretations.

An LWI is conducted using color or color infrared aerial photographs taken within 5 years of the inventory initiation and at a minimum scale of 1" = 800'. In general, wetlands are located using the on-site option, as described in the LWI Standards and Guidelines (DSL, 1994). In cases where property access is denied, wetlands can be mapped off-site using information such as topographic maps and aerial photographs to aid in locating wetlands. The product of an LWI is a parcel-based map showing the approximate location of wetlands at a minimum scale of 1" = 800'. In most cases, however, the maps are produced at a scale of 1" = 400'. The parcel-based map allows the property owner, the local jurisdiction, and the Division of State Lands, to know which tax lots may contain wetland.

2.5 Wetland Functions and Values

2.5.1 Overview

Wetlands were once considered of little value to society. They were seen as breeding grounds for pests and disease and as obstacles to economic development. Many wetlands were drained, filled, and converted to serve some other purpose. In recent years, however, there has been an increasing awareness of the values of wetlands. This recognition of wetland functions and values (e.g. wildlife habitat, floodwater storage, natural water treatment), has resulted in the enactment of state and federal laws protecting wetlands.

It is also recognized, however, that the quality of wetlands can vary widely. To determine the value of a wetland, it is necessary to conduct an assessment of the functions it performs. These functions are assessed by measuring physical characteristics such as diversity of vegetation, water storage capacity, shape, size, and location in the landscape. Not all wetland functions are performed equally by each wetland, and it is possible to rank wetlands within an area relative to one other in terms of the degree to which specific functions are performed.

All wetlands have value in that they are a composite of certain soil characteristics, vegetation, and water. However, some wetlands may provide particular values consistent with the local community's needs, such as encouraging tourism, providing educational opportunities, or they are simply pleasing to look at. The evaluation process allows a community to identify these wetlands and develop a management strategy that is consistent with the planning goals.

2.5.2 The Oregon Freshwater Assessment Methodology (OFWAM)

To conduct an assessment of the relative quality of a wetland, the OFWAM was developed by an interagency committee. The methodology is intended for use by planners, public officials, and community members for planning and educational purposes. Completion of this method provides basic information, which is not intended for evaluation of detailed, site-specific impacts on individual wetlands.

OFWAM is based on the idea that an understanding of the wetland system functions and conditions at local, state, and federal levels is necessary in order to make management decisions. Recommended uses of OFWAM include collection of basic information about wetlands in an

assessment area, creation of a database of functions and conditions and other wetland data, support of decision-making and planning within a jurisdiction, and education.

OFWAM requires that the same functions and conditions be evaluated for each wetland within a study area. This does not determine the wetland's overall value. The functions and conditions used in OFWAM include wildlife habitat, fish habitat, water quality, hydrologic control, education, recreation, enhancement potential, aesthetic quality, and sensitivity to impact.

The results from the OFWAM (1993) and significant wetlands analysis (SHAPIRO, 1994) are documented in an addendum to this report. The revised OFWAM assessment (1996), will be applied to individual wetlands and the analysis updated by other consultants.

3.0 PROJECT METHODOLOGY

3.1 Cartography

METRO's Data Resource Center provided section base maps of the Happy Valley study area. These maps included layers for tax lot lines, tax lot numbers, street names, right of ways, and section boundaries. These were transferred from METRO's ARC/INFO system to AutoCAD drawing files.

Initially, a project base map was created by inserting or tiling together each section map into a single drawing file. Onto this project area map the study area boundaries, project boundary, and the city limits were digitized.

The project area base map was plotted at a scale of 1"=400' onto a 24" x 36" sheet. Additional layers digitized onto the AutoCAD base map included drainage basin boundaries, streams from the U.S.G.S., National Wetlands Inventory wetland boundaries and designations, and hydric soils units from the County Soil Survey.

A color aerial photograph was ordered for the study area at a scale of 1"=400" to match the scale of the base map. This aerial photograph was covered with clear acetate (permanently registered) to protect it during field use and as a surface for drafting wetland boundaries and sample sites. Clackamas County provided 1"=100', 2-foot contour interval, topographic maps. These maps were used to identify additional drainageways and to highlight depressional areas. Property access permission denials were located on the base map.

3.2 Information Processing

The approximate boundaries of wetlands and the location of sample sites were drafted in the field on to the aerial photograph. These boundaries were subsequently digitized onto the AutoCAD maps. All wetlands received a unique code to aid in their identification. Wetlands were assigned a unique code based on the wetland's drainage basin and the number of wetlands within each basin (e.g. PH-1, MS-11, etc). In general, wetlands that are divided by a culvert received separate codes.

3.3 Wetland Identification and Boundary Determinations

3.3.1 Routine On-Site

Where property access permission had not been denied, on-site observation and inspection of soils, vegetation, and hydrology were made using the "Routine Onsite" method of the manual. One-foot diameter soil pits were excavated to a depth of 18-inches in selected locations. The soil profiles were examined for hydric soils and wetland hydrology field indicators. In addition, a visual percent-cover estimate of the dominant species of the plant community for a 30-foot radius area was performed using soil pit locations as a center of reference. Data were recorded in the field and subsequently transferred to standard wetland delineation data sheets (included in Appendix A). Data were collected for representative sampling locations, however, numerous soil pits were excavated between these data points to verify changes in the three parameters.

To the greatest possible extent, wetland areas smaller than 0.5 acre were mapped, although this is not required in the LWI standards. No wetland boundaries were staked and flagged by SRI/SHAPIRO for this study.

3.3.2 Routine Off-Site

Where property access permission had been denied or otherwise not explicitly approved, no on-site sampling could be conducted. Therefore, off-site determinations were made on the basis of aerial photographic inspection, all available mapped attributes (i.e., field maps), and, where available, a reconnaissance from nearby public access vantage points. Observations from vantage points included documentation of dominant vegetative communities (forested, scrub/shrub, or emergent) and water regimes (ponded areas, obviously wet meadows, etc.). Approximate wetland boundaries were drawn on aerial photographs.

Boundaries determined in this way may not be sufficiently accurate for State and Federal jurisdictional determinations because of the absence of actual on-site data. In addition, where views into properties from vantage points were not possible or were otherwise restricted, and where aerial photographic and mapped information was inconclusive, some wetland areas may have been missed and not inventoried.

4.0 PROJECT AREA CHARACTERISTICS

4.1 Setting

The City of Happy Valley is located southeast of Portland in Clackamas County, Oregon. The City is east of Interstate 205, north of SE Sunnyside Road and south of SE Foster Road. It has an area of approximately 1,500 acres (2.2 square miles) and a population of approximately 2,000. Happy Valley contains the headwaters for Mount Scott Creek, which flows southeast through the city at the base of the valley floor.

The majority of the City is within the Mt. Scott Creek drainage basin. However, approximately 260 acres along the western boundary of the city is within the Phillips Creek drainage basin and approximately 70 acres in the northern portion of the city is within the Johnson Creek drainage basin.

4.2 Topography

The project area is characterized by gently to steeply sloping uplands and a nearly flat valley floor. Elevations range from approximately 300 feet National Geodetic Vertical Datum (NGVD) at Mt. Scott Creek near the southwest corner of Happy Valley to approximately 1100 feet (NGVD) at the top of Mt. Scott in the city's northwest corner.

The geology of the area is a composite of volcanic formations including basaltic lavas, tuffs, and flow breccias. It is also comprised of fluvial and eolian sediment formations. Numerous geologic units of each formation type have been mapped within the region (Schlicker and Finlayson, 1979).

4.3 Hydrology

The project area is comprised of portions of 3 sub-basins: Phillips Creek, Johnson Creek and Mt. Scott Creek. Mt. Scott Creek flows from headwaters in the northeast corner of the project area, through the approximate center of the valley, and continues out of the city limits in the southwest corner. Many ground water seeps and small intermittent drainages flow into Mt Scott Creek within the project boundaries. Small tributaries of Johnson Creek flow north out of the project area and small tributaries of Phillips Creek flow to the west.

4.4 Soils

4.4.1 Overview

The majority of the soils in the study area were formed from mixed alluvium. Alluvium is material which has been deposited or is in transit by rivers and streams. The term "mixed" means that the soil particle sizes are generally unsorted. Stratified glaciolacustrine deposits are the second most common soils found in the study area. These soils with well-sorted particle sizes were deposited in ancient lakes which formed when glacial ice dams broke periodically over thousands of years, releasing enormous volumes of glacial meltwater into the Columbia River Channel. These floods often backed up into the Willamette Valley, forming lakes well over one hundred feet deep in some instances.

There is only one major soil association in the study area: The Cascade-Powell association. This association consists of medium textured, deep, somewhat poorly drained soils that are underlain by a cemented layer and formed in a silty material. It occurs on rolling hills and high terraces. It is 60 percent Cascade and similar soils, and 25 percent Powell and similar soils. The majority of this association is being used for pasture, homesites, and timber production, as well as cultivated crops, recreation, and wildlife habitat. The main limitation for homesite development are a seasonal high water table, low soil strength, and slope in the steeper areas.

4.4.2 Soil Types

Twelve soil types have been mapped by the Soil Conservation Service (SCS, 1983) as occurring on the project site (Figure 2). *Borges silty clay loam* (map unit 7B) is mapped in flat areas in the northeastern end of the valley and is the only soil in the project area listed as hydric by the SCS

Soil mapping units for the Happy Valley Local Wetlands Inventory and Wildlife Habitat Assessment in Clackamas, Oregon (Soil Conservation Service, *Soil Survey of Clackamas County Area, Oregon*, 1:20000, 1985).

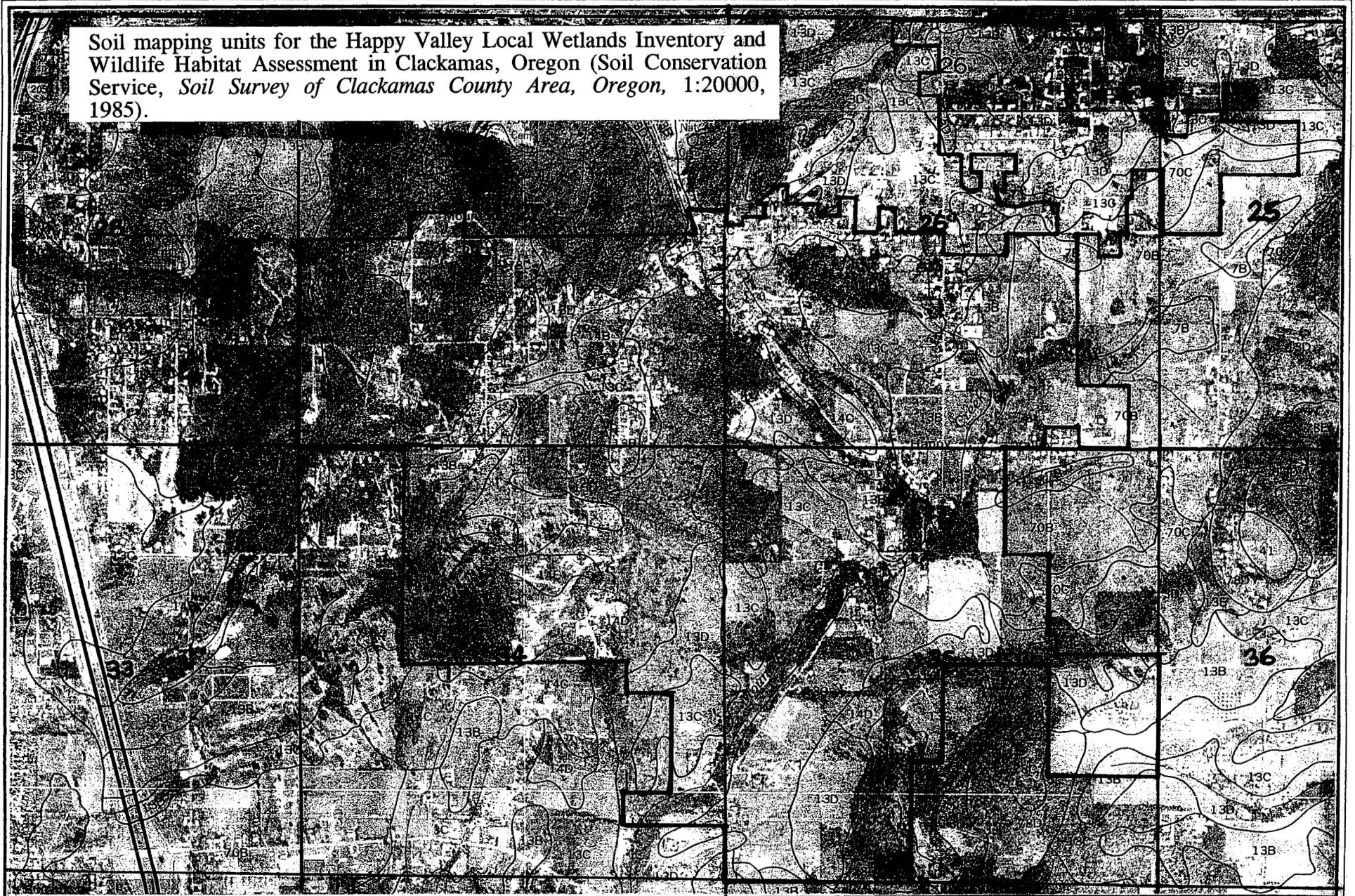


Figure 2

(1989). *Cascade silt loam 3-8%, 8-15% & 15-30% slopes* (map units 13B, 13C, 13D) are mapped throughout most of the project area. *Cascade silt loam, stony substratum 3-15%, 15-30%, & 30-60% slopes* (map units 14C, 14D, 14E) are mapped in the moderately sloped areas mainly in the western part of the project area. *Powell silt loam 0-8% & 8-15% slopes* (mapping units 70B, 70C) are mapped in the gently sloping areas in the east end of the project area around Mt. Scott Creek. *Saum silt loam 8-15%, 15-30%, & 30-60% slopes* (mapping units 78C, 78D, 78E) are mapped in the steeply sloping areas around the top of Mt. Scott and in the southeast corner of the project area.

Borges silty clay loam is a deep, poorly drained soil found in concave areas on rolling uplands and high terraces. It formed in mixed clayey alluvium (water deposited material). It is classified as a *fine, mixed, nonacid, mesic Typic Humaquept*. A typical profile is a very dark gray and very dark grayish brown silty clay loam about 12 inches thick. The subsoil is dark grayish brown silty clay loam about 6 inches thick. The upper 27 inches of the substratum is dark gray and grayish brown silty clay, and the lower part to a depth of 60 inches or more is brown and grayish brown clay loam.

Cascade silt loam is a deep, somewhat poorly drained soil found in convex areas of rolling uplands. This soil formed in silty material. It is classified as a *fine-silty, mixed, mesic Typic Fragiumbrept*. A typical profile has a surface layer that is very dark grayish brown and dark brown silt loam to a depth of 11 inches, the subsoil is dark yellowish brown silt loam about 10 inches thick. To a depth of 60 inches or more is a dark yellowish brown, mottled silt loam and silty clay loam hardpan. Depth to the hardpan ranges from 20 to 30 inches.

Cascade silt loam, stony substratum is a deep, somewhat poorly drained soil found on rolling uplands. This soil formed in silty material. It is classified as a *fine-silty, mixed, mesic Typic Fragiumbrept*. In the typical profile the surface layer is a dark brown silt loam about 15 inches thick. The upper 9 inches of the subsoil is dark brown, mottled silt loam, and the lower 8 inches is a brown silt hardpan. The substratum is reddish brown very stony silty clay loam to a depth of 60 inches or more.

Powell silt loam is a moderately well drained soil which is slowly permeable and found in rolling terrain that formed in old alluvial silt. It is classified as a *fine-silty, mixed, mesic Typic Fragiochrept*. A typical profile has a surface layer that is a dark brown silt loam about 7 inches thick. The upper 5 inches of the subsoil is a dark brown and dark yellowish brown silt loam and the lower 3 inches is mottled, dark brown silt loam. Below this to a depth of 60 inches or more is a brown, dark grayish brown very dark grayish brown and yellowish brown silt loam hardpan. This fragipan (seemingly cemented layer of silt or fine sand) ranges from a depth of from 23 to 36 inches.

Saum silt loam is a well drained soil found on rolling uplands that formed in mixed silty material and colluvium (material deposited at the base of steep slopes) derived from basalt. It is classified as a *fine, mixed, mesic Typic Xerumbrept*. A typical profile has a surface layer of dark brown silt loam and silty clay loam about 15 inches thick. The upper 11 inches of the subsoil is dark reddish brown silty clay loam, and the lower 9 inches is reddish brown gravelly silty clay loam. The substratum is yellowish red gravelly silty clay loam about 15 inches thick. Basalt is at a depth of 50 inches. Depth to bedrock ranges from 40 to 60 inches.

4.5 Vegetation

4.5.1 Overview

Vegetation communities in Happy Valley have been altered significantly from those believed to have been present before settlement by people of European heritage in the mid-1800's. During the past century essentially all of the survey area has been impacted to some degree through logging and agricultural activities, with urbanization pressures from residential development currently the greatest agent of impact.

Patches of habitat still exist, however, that have not been significantly impacted in recent years. In these remnant areas, plant communities have developed that include associations of species common to other areas of the Willamette Valley and to the lower foothills of the Cascades. Detailed descriptions of native plant communities in western Oregon can be found in Franklin and Dyrness (1973).

Plant communities occurring in Happy Valley include deciduous forest, mixed coniferous-deciduous forest, upland scrub-shrub, grassland, developed-urban, riparian, and wetland. Wetland communities can be further described as palustrine-open water, palustrine-emergent, palustrine-shrub/scrub, and palustrine-forested, following the classification system adopted by the U.S. Fish and Wildlife Service (Cowardin, *et. al.*, 1979). Each of these communities is described below, with a more complete listing of species found in section 4.5.3.

4.5.2 Vegetation Communities

Deciduous Forest

The overstory of a deciduous forest community is dominated by mature bigleaf maple and red alder. Occasional Douglas fir, black cottonwood, and wild cherry may also be present. The shrub layer tends to be denser than in coniferous stands, with vine maple, Indian plum, red elderberry, hazelnut, oceanspray, Oregon grape, and snowberry as common associates. The herbaceous ground cover is usually dominated by swordfern, with licorice fern, fringe cup, and Siberian miner's lettuce also frequently present.

Mixed Coniferous-Deciduous Forest

Douglas fir generally co-dominates the overstory of the mixed coniferous-deciduous forests, with deciduous species such as bigleaf maple and red alder also present. Common shrub species include hazelnut, vine maple, Indian plum, and red elderberry. Introduced species such as Himalayan blackberry and English ivy may come to dominate the shrub understory, especially in more recently disturbed areas and along stand edges.

Upland Shrub

Upland shrub communities are generally found on disturbed sites that have been cleared, graded, or logged in recent years. Similar communities may be associated with grassland habitat, such as along fencelines at the edge of formerly maintained pastureland. Shrub communities are dominated by saplings of such trees as red alder and black cottonwood, along with such shrubs as

oceanspray, hawthorne, Scot's broom, and Himalayan blackberry. The herbaceous layer is generally suppressed by the dense shrub growth, though species associated with adjacent grassland habitat may be present.

Grassland

Open areas (such as abandoned agricultural fields) are commonly dominated by grasses and associated forbs. Shrub thickets often dominate fenced or wooded boundaries. Grasses observed may include tall fescue, orchard grass, colonial bentgrass, and velvet grass. Common forbs include Canada and bull thistle, Queen Anne's lace, St. John's wort, white clover, and teasel. Shrubs often include Scot's broom, hawthorne, clustered rose, and Himalayan blackberry.

Developed-Urban

Plant communities shaped by human residential and past agricultural development are found throughout the study area. Most of the developed land area consists of residences, sidewalks, roads, and yards. Vegetated areas are typically dominated by introduced species, both weeds and ornamentals. Marginal areas are often dominated by thickets of Himalayan blackberry or one-seed hawthorne, while weedy grasses and forbs dominate open areas subject to more frequent disturbance.

Riparian Communities

Riparian forests are generally similar to the upland mixed coniferous-deciduous forests, though species preferring wetter sites are more common. Douglas fir and bigleaf maple may codominate with western red cedar, red alder, hawthorne and Oregon ash. In addition, the shrub layer is often denser and composed of species such as salmonberry, Douglas' hawthorne, and red-osier dogwood. Herbaceous species may dominate the understory, with stinging nettle and lady fern being common associates. Riparian communities are often associated with or may overlap wetland plant communities.

Wetland Communities

Wetland areas are generally transitional between upland or riparian areas and truly aquatic sites with permanent open water. In many cases, however, open water is seldom (if ever) present and the wetland occupies a position where the ground water table simply comes close to the surface for an extended period sometime during the growing season.

Palustrine-forested wetlands in the area are dominated by such species as Oregon ash, red alder, black cottonwood, and willows. Palustrine scrub/shrub wetlands may have a high proportion of saplings of the above species, with the addition of such shrubs as red-osier dogwood, Douglas' spiraea, and four-line honeysuckle. Palustrine- emergent wetlands are dominated by herbaceous species, many of which are graminoids. Common species include common cattail, soft rush, reed canarygrass, creeping buttercup, slough sedge and small fruited bulrush.

4.5.3 Wetland and Upland Indicator Species

Species lists of commonly encountered plants along with their status have been prepared for all regions of the country by the U.S. Fish and Wildlife Service (USFWS, 1988). The status of a

particular plant, as discussed in Section 2.2.1, is the probability of that plant occurring in a wetland. Many plants, however, are found in transitional areas between wetlands and uplands. These areas are usually characterized by flat to gradually sloping terrain where the species composition may not reflect true wetland boundaries. In such areas, a species with a status of FACU may extend into the wetland areas, just as FACW species may be present in upland areas.

The indicator statuses for the plant species were taken from the 1988 list, and, therefore, do not include changes that were made in the *1993 Supplement to the National List of Plant Species That Occur in Wetlands: Northwest (Region 9)*. In all cases, the designation for each sample plot as a wetland or non-wetland would not change if the revised status were applied.

Below is a non-comprehensive listing of indicator species often encountered in the wetland and associated upland habitats of the survey area.

Wetland Indicators

Common trees found in wetland and riparian areas include: red alder (*Alnus rubra*; FAC), Oregon ash (*Fraxinus latifolia*; FACW), black cottonwood (*Populus trichocarpa*; FAC), western red cedar (*Thuja plicata*; FAC), and willows (*Salix* spp.; FAC to FACW).

Dominant shrubs found in wetlands and fringe areas include: red-osier dogwood (*Cornus stolonifera*; FACW), Douglas hawthorne (*Crataegus douglasii*; FAC), one-seed hawthorne (*Crataegus monogyna*; FACU), four-line honeysuckle (*Lonicera involucrata*; FAC+), Pacific ninebark (*Physocarpus capitatus*; FACW-), and Douglas spirea (*Spiraea douglasii*; FACW).

Common herbaceous species found in wetlands and transitional areas include: redtop (*Agrostis alba*; FAC), colonial bentgrass (*Agrostis tenuis*; FAC), meadow foxtail (*Alopecurus pratensis*; FACW), Dewey's sedge (*Carex deweyana*; FACU), slough sedge (*Carex obnupta*; OBL), teasel (*Dipsacus sylvestris*; FAC), hairy willow-herb (*Epilobium watsonii*; FACW-), large-leaf avens (*Geum macrophyllum*; FACW-), tall manna grass (*Glyceria elata*; FACW+), common velvet grass (*Holcus lanatus*; FAC), soft rush (*Juncus effusus*; FACW), slender rush (*Juncus tenuis*; FACW-), bird's foot trefoil (*Lotus corniculatus*; FAC), water parsley (*Oenanthe sarmentosa*; OBL), reed canarygrass (*Phalaris arundinacea*; FACW), creeping buttercup (*Ranunculus repens*; FACW), curly dock (*Rumex crispus*; FAC+), cattail (*Typha latifolia*; OBL), stinging nettle (*Urtica dioica*; FAC+), and American speedwell (*Veronica americana*; OBL).

Upland Indicators

Trees commonly found in upland areas include: bigleaf maple (*Acer macrophyllum*; FACU), Douglas fir (*Pseudotsuga menziesii*; FACU), and Oregon white oak (*Quercus garryana*; UPL). In addition, red alder (*Alnus rubra*; FAC) is often found in transitional to upland sites.

Dominant shrubs generally found in upland areas include: vine maple (*Acer circinatum*; FAC-), Saskatoon serviceberry (*Amelanchier alnifolia*; UPL), Oregon grape (*Berberis nervosa*), western hazelnut (*Corylus cornuta*; FACU), Scot's broom (*Cytisus scoparius*; UPL), ocean spray (*Holodiscus discolor*; UPL), Indian plum (*Oemleria cerasiformis*; FACU), clustered rose (*Rosa pisocarpa*; FAC), red elderberry (*Sambucus racemosa*; FACU), and snowberry (*Symphoricarpos albus*; FACU).

Herbaceous species most likely found in upland areas include: quack grasses (*Agropyron* spp.; FAC to UPL), sweet vernal grass (*Anthoxanthum odoratum*; FACU), Canada thistle (*Cirsium arvense*; FACU+), bull thistle (*Cirsium vulgare*; FACU), orchard grass (*Dactylis glomerata*; FACU), Queen Anne's lace (*Daucus carota*; UPL), tall fescue (*Festuca arundinacea*; FAC-), catchweed bedstraw (*Galium aparine*; FACU), Pacific waterleaf (*Hydrophyllum tenuipes*; UPL), St. John's-wort (*Hypericum perforatum*; UPL), western swordfern (*Polystichum munitum*; FACU), bracken fern (*Pteridium aquilinum*; FACU), common tansy (*Tanacetum vulgare*; NI), common dandelion (*Taraxacum officinale*; UPL), fringecup (*Tellima grandiflora*; UPL), red clover (*Trifolium pratense*; FACU), white clover (*Trifolium repens*; FAC), and common vetch (*Vicia sativa*; UPL).

5.0 DISCUSSION AND CONCLUSIONS

5.1 U.S. Fish & Wildlife Service National Wetland Inventory Areas

The U.S. Fish and Wildlife Service, as part of the National Wetland Inventory (NWI) program, has mapped wetland in the study area (Figure 3). The NWI maps are generated primarily on the basis of interpretation of relatively small-scale color infrared aerial photographs (e.g., scale of 1:58000) with limited "ground truthing" conducted to confirm the interpretations.

Most of the wetlands within the study area are classified as palustrine. Palustrine combines vegetated wetlands traditionally called marshes, swamps, bogs, fens, wet prairies, and small, shallow, permanent or intermittent water bodies called ponds.

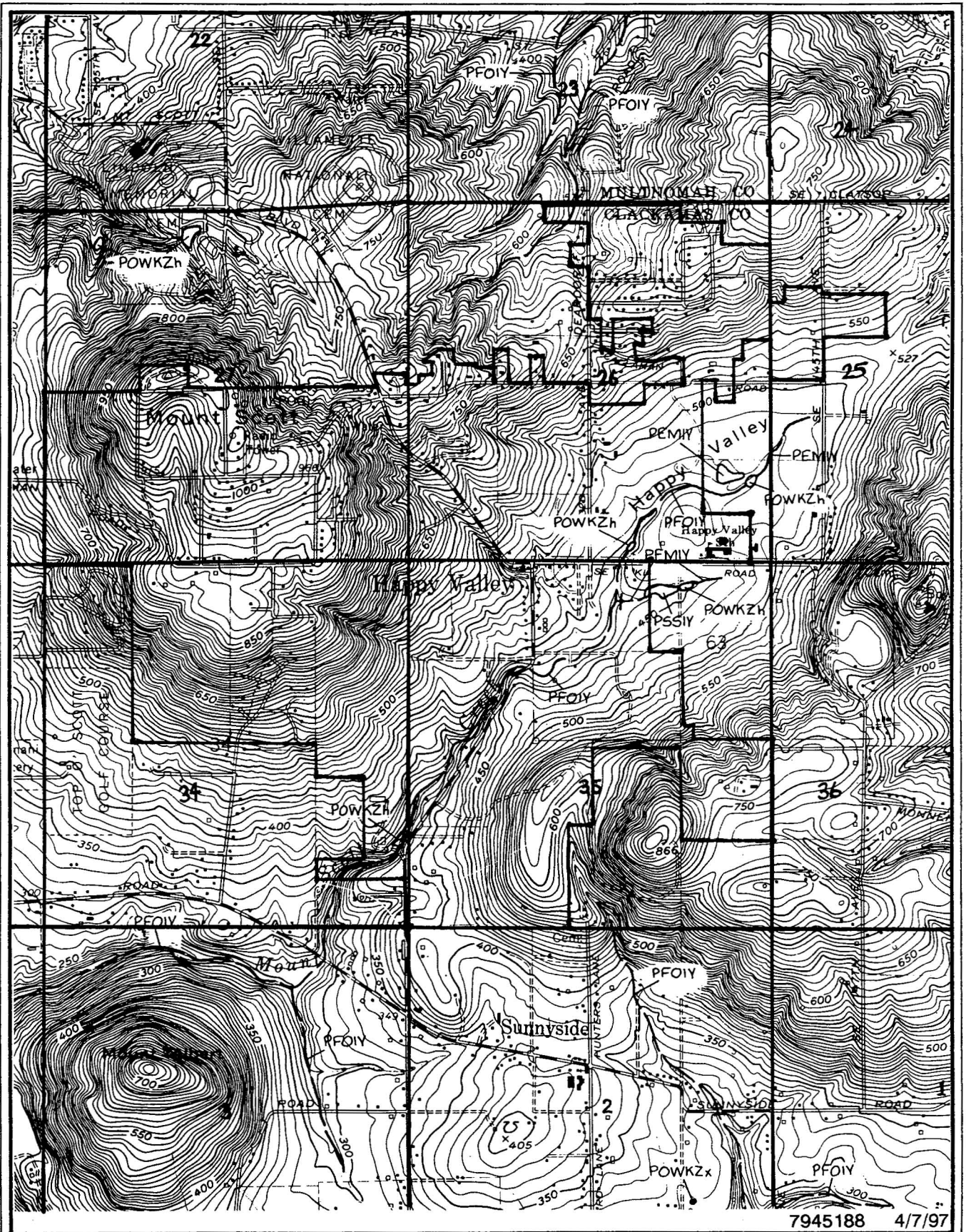
The NWI mapped wetlands within the project area are all located along Mt. Scott Creek and one small tributary. Mt. Scott Creek is classified as palustrine, forested, broad-leaved deciduous, saturated/ semipermanent/ seasonal (PFO1Y) body of water for most of its length through the project area. Two reservoir areas, one in the eastern end and another area in the southwestern end of Mt. Scott Creek are classified as palustrine, open water, artificially flooded, intermittently exposed/ permanent, diked/impounded (POWKZh) bodies of water. The small tributary of Mt. Scott Creek in the east end of the project area is classified as a palustrine, emergent, persistent, saturated/semipermanent/seasonal (PEM1Y) wetland.

5.2 Local Wetlands Inventory Results

5.2.1 Total Wetland Acreage

The study area incorporated approximately 1,500 acres (2.2 square miles) within the city limits of Happy Valley. A total of 28 wetland and waterway sites were inventoried for a total of approximately 39.7 acres of potential jurisdictional waters of the state (WOS) (Figure 4). Identified intermittent channels that do not meet criteria to be designated as wetland may still be under the jurisdiction of the DSL if they are determined by ODFW that they have value to fish. The USCOE may also have regulatory jurisdiction over some of the intermittent channels.

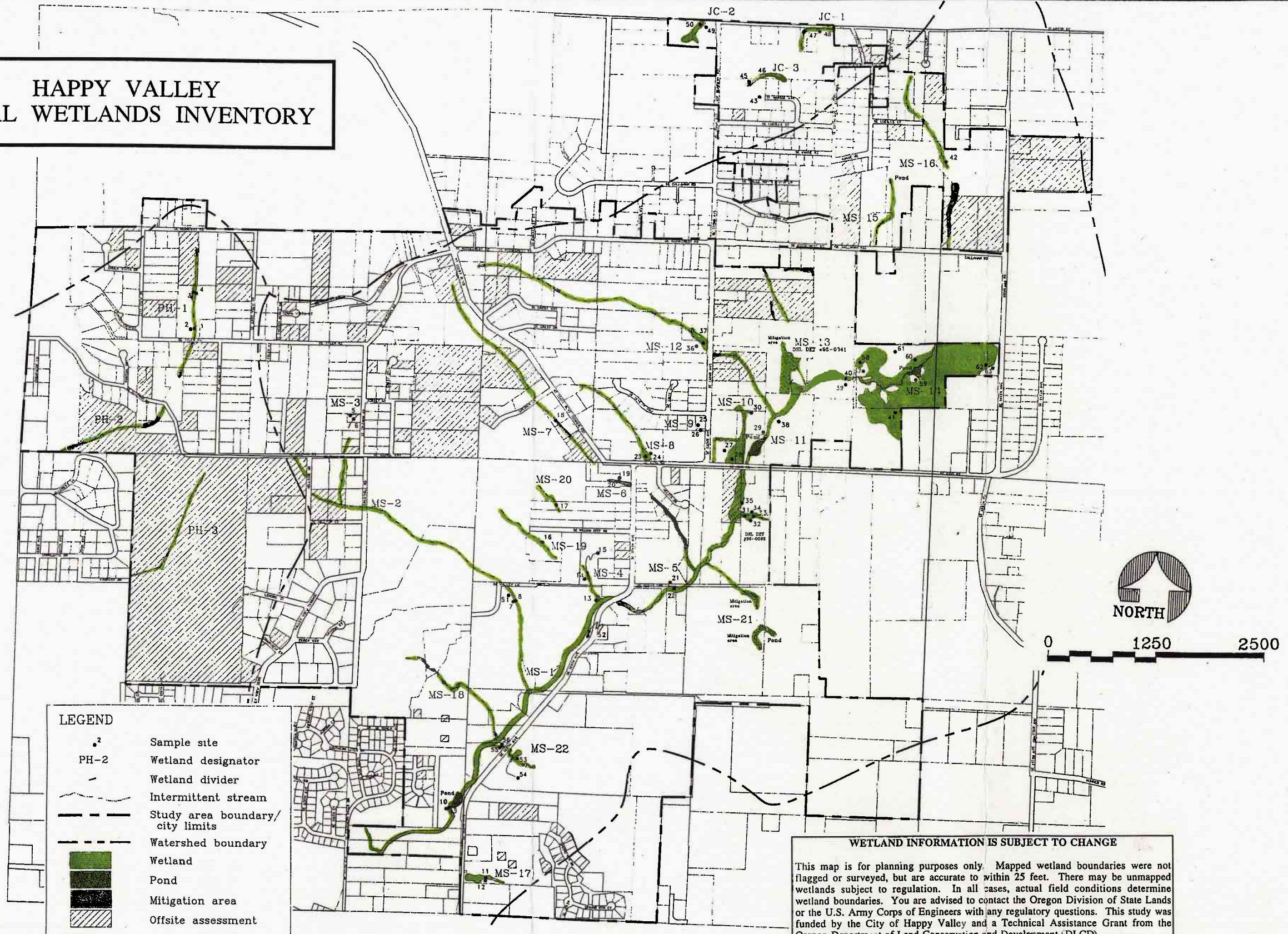
The majority of the wetland areas were determined using the routine on-site method of the Federal Manual. In areas where property access was denied, wetland boundaries were determined off-site using aerial photographs, topographic maps, and other pertinent information.



National Wetlands Inventory designations for the Happy Valley Local Wetlands Inventory and Wildlife Habitat Assessment in Clackamas County, Oregon (U.S. Fish & Wildlife Service Gladstone, Oregon, 7.5-minute quadrangle, 1:24000, based on 1981 color infrared aerial photography).

FIGURE
3

HAPPY VALLEY LOCAL WETLANDS INVENTORY



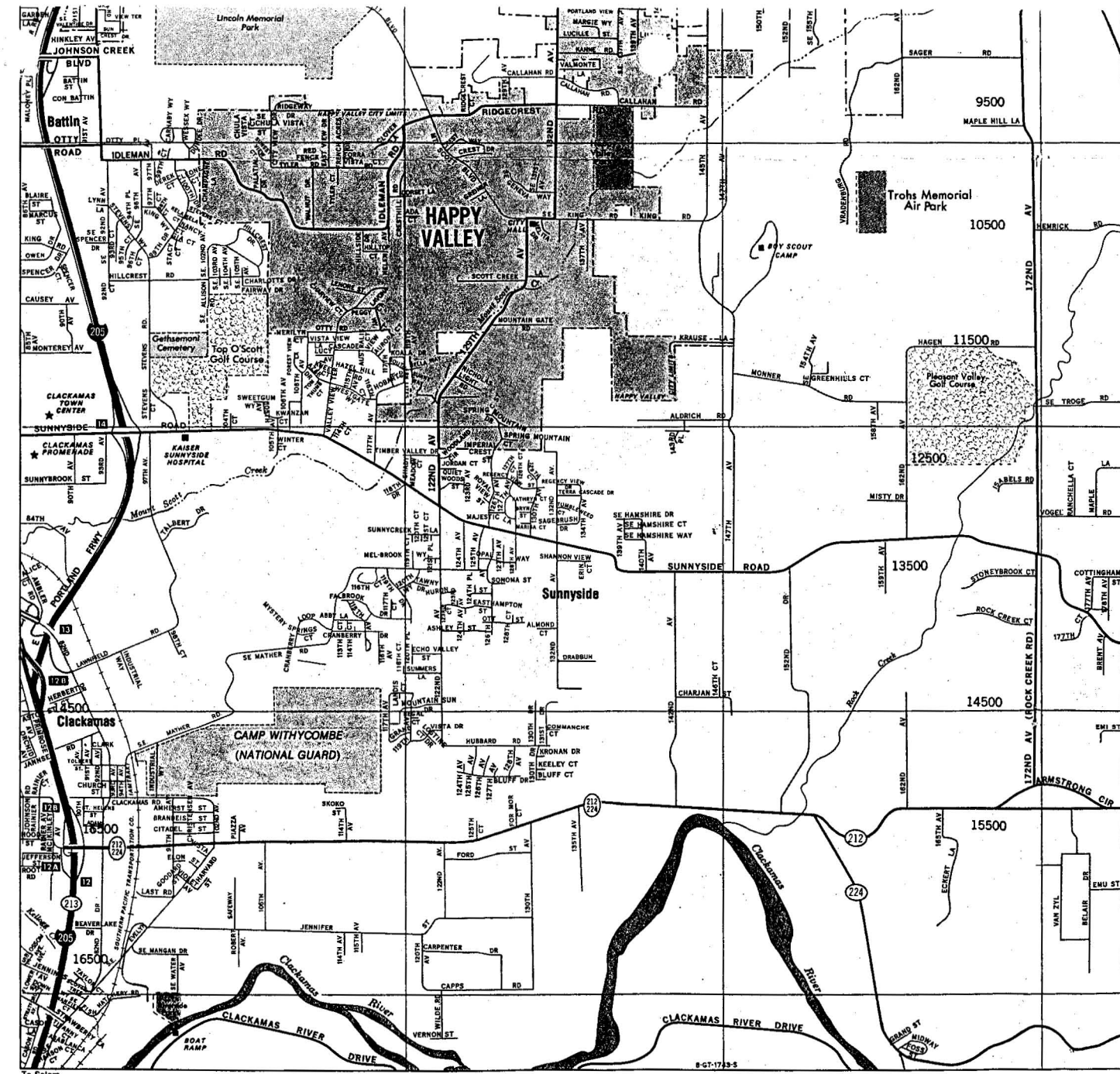
LEGEND	
•	Sample site
PH-2	Wetland designator
-	Wetland divider
~	Intermittent stream
- - -	Study area boundary/ city limits
- - - -	Watershed boundary
■	Wetland
■	Pond
■	Mitigation area
■	Offsite assessment

WETLAND INFORMATION IS SUBJECT TO CHANGE

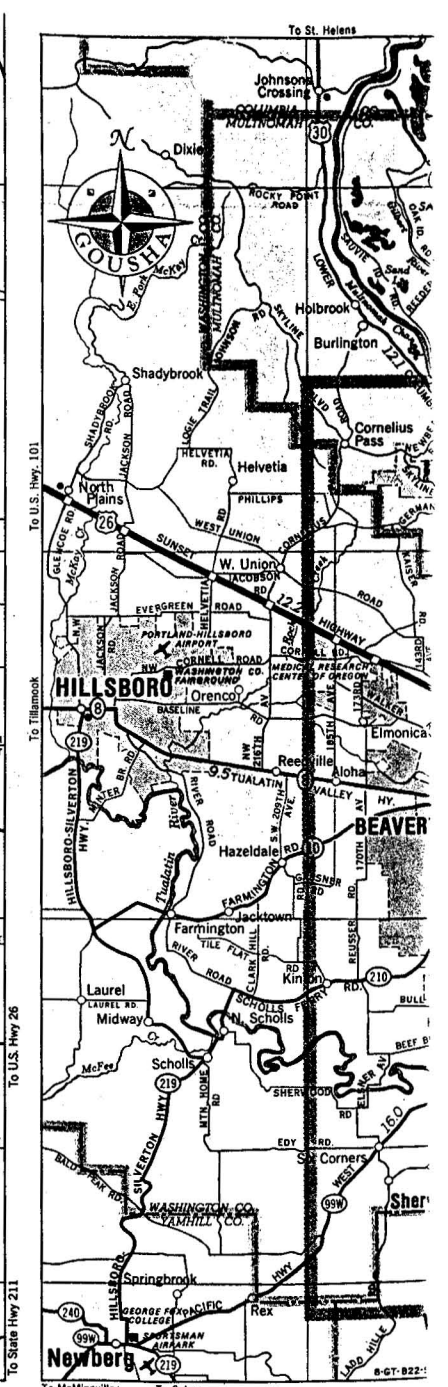
This map is for planning purposes only. Mapped wetland boundaries were not flagged or surveyed, but are accurate to within 25 feet. There may be unmapped wetlands subject to regulation. In all cases, actual field conditions determine wetland boundaries. You are advised to contact the Oregon Division of State Lands or the U.S. Army Corps of Engineers with any regulatory questions. This study was funded by the City of Happy Valley and a Technical Assistance Grant from the Oregon Department of Land Conservation and Development (DLCD).

Potentially jurisdictional wetlands and sample sites for the Happy Valley Local Wetlands Inventory, Clackamas County, Oregon.

- N15-M18 53rd PlM-6
- N3-N4 53rd PlQ-10
- R-9 54th AvH10-N10
- V-11 54th AvM6-P6
- M-18 54th PlM-6
- B4-D4 54th PlQ-10
- H9-M9 55th AvH-5
- N8-P8 55th AvH10-M10
- M15-M18 55th AvP10-Q10
- M-16 55th AvM6-O8
- K16-K18 55th DrV-6
- M15-M18 55th DrM-6
- N-3 55th PlN-6
- R-8 55th PlQ-6
- V-4 56th AvH-5
- V-9 56th AvJ10-Q10
- V10-V11 56th AvN6-O6
- B2-K9 56th CtU-6
- N8-P7 56th PlQ-6
- H9-P9 56th PlU-6
- W-9 57th AvK-10-P10
- K-18 57th AvL6-Q7
- M15-M18 57th AvL6-Q7
- M-16 58th AvH10-P10
- P-7 58th AvL6-O6
- Q-8 58th AvL6-O6
- K-18 59th AvH11-N11
- M15-M18 59th AvQ11
- N-3 59th AvN6-O6
- R-8 59th CirQ-6
- V-9 59th CirV-6
- V10-V11 59th PlH-11
- 60thR-11
- 60th AvH-5
- 60th AvH11-Q11
- G16-G17 60th AvL6-O6
- M15-M17 60th AvX-6
- P-7 60th CtQ-6
- P-6 60th PlM-6
- M15-M17 61st AvH-5
- N-3 61st AvN6-R6
- R-8 61st CtL-6
- V10-V11 61st DrL-6
- B2-K9-P7 61st PlQ-6
- H9-M9 62nd AvH-5
- M16-M18 62nd AvJ11-N11
- M15-M17 62nd DrP6-R6
- N-3 62nd DrQ-6
- R-8 062nd PlN6-P6
- V-2 62nd PlQ-6
- V-9 63rd AvH-5
- V10-V11 63rd AvH11-Q11
- B2-C2 63rd AvN6-S6
- K8-P7 63rd CtQ-11
- H9-M9 63rd DrQ-6
- V-2 63rd PlQ-6
- Q-7 64th AvH11-Q11
- N-3 64th AvQ-6
- M15-M18 64th AvR-11
- N3-N4 64th DrQ-6
- V-11 64th PlM-6
- W-9 65th AvH-5
- B2-D1 65th AvJ11-Q11
- K8-P7 65th AvN5-T5-W5
- H9-M9 65th AvT-5
- N15-N18 65th CtR-11
- N7-P7 66th AvH11-Q11
- Q-7 66th AvL5-R5
- M-16 66th CtN-5
- N-3 66th PlL-11
- N17-N18 66th PlP5-P11
- U-2 67th AvJ11-R11
- V-11 67th AvN5-O5
- W-9 67th AvU-5
- N-15 67th CtR-11
- B2-D1 67th PlK-2
- K8-R7 67th PlL-5
- G9-P9 67th StL-5
- M-7 68th AvJ11-P11
- K-17 68th AvL5-M5
- N16-N17 68th AvP5-R5
- N7-P7 68th AvU-5
- K-17 68th CtN-5
- M-8 68th PlQ-5
- K-18 68th PlR-5
- L16-L17 68th PlN-11
- M-4 68th PlP-5
- N-3 69th AvJ11-P11
- N16-N18 69th AvP5-O5
- V-11 69th AvU-5
- V-9 69th CtR-11
- W-9 69th PlP-5
- N-15 70th AvJ11-Q11
- B2-D1 70th AvM5-V5
- K8-P7 70th PlP-5
- I9-M9-N9 71st AvJ11-Q11
- J-6 71st AvM-5
- N16-N17 71st AvP5-U5
- N-15 71st PlB-5
- L-16 71st PlS-5
- Q-7 71st PlP-5
- 72nd AvH11-Q11
- 72nd AvM5-U5
- K-18 73rd AvJ11-Q11
- L-16 73rd AvM6-P6
- N16-N18 73rd CtQ-11



- 89th AvS-5
- 89th AvU-5
- 89th CtS-5
- 89th CtQ-3
- 89th PlN-5
- 89th PlS-5
- 90th AvJ12-S12
- 103rd PlK12,N12
- 104th AvJ12-Q12
- 104th AvL4-U4
- 104th CtL12,Q12
- 121st AvM3,O4
- 121st CtR-13
- 121st PlK3-M3
- 121st PlR-13
- 122nd AvJ13-R13
- 122nd AvK3,M3
- 136th CtR3,S3
- 136th PlK-13
- 136th PlQ3,S3
- 137th AvJ13-P13
- 137th AvJ3-L3,S3
- 154th AvM14-O14
- 154th CtJ-14
- 154th PlK-14
- 154th PlK-2
- 154th TerM2,S2
- 155th AvM14-O14
- 169th PlJ2-P2
- 169th PlK14-L14
- 169th StR-13
- 170th AvK14-P14
- 170th AvM2-X2
- 186th AvK17-L17
- 186th AvK-17
- 186th CtL-17
- 186th CtM-15
- 186th DrK-15
- 186th PlN1-P2
- 187th AvK15-L15
- 187th AvK-17
- 235th AvK17-L17
- 236th AvK-17
- 236th CtL-17
- 237th AvK-17
- 238th AvK17-L17
- 238th DrK-17
- 238th PlK-17
- 242nd AvP-17
- 244th StL-17
- 250thN-17
- 252ndN-17
- 252nd AvP-17
- 257th AvP-18
- 257th DrJ-18
- Country Ridge DrF-15
- Country View CirD-16
- Countryside DrE-14
- Country DrD-16
- Forest Home RdG-17
- Forest StF-13
- Fort Vancouver CirD-9
- Juniper AvE-13
- K StE-8
- Kaiser AvG-18
- Jefferson StE-8
- Jordan WayB-8
- JoyG-18
- June DrD-9
- Juniper AvE-13
- K StE-8
- Kaiser AvG-18
- Matney RdC-18
- Maxon RdF-12
- May StD-9
- McClellandE-8
- McGillivray BlvdE12,F13
- NorwoodF17-G17
- Norwood CirF-17
- Notchlog DrA-8
- Nourse RdF-18
- O StD-9
- OakG-18
- Rivercrest DrG-13
- Riveridge DrF-12
- Riverside DrE-10
- Riverside LaF-10
- Riverside LaF-11



- 12
- 16
- 16
- 15

5.2.2 Distribution and Location of Wetlands

The majority of the potentially jurisdictional waters identified through the inventory are associated with the banks of Mt. Scott Creek and its tributaries (MS-1, MS-5, MS-11, and MS-14). These areas are generally dominated by a forested overstory and along Mt. Scott Creek are inundated or saturated to the surface for much of the year. The largest wetland (23.5 acres), MS-14, is located within the headwaters of Mt. Scott Creek in the northeastern portion of the study area. MS-14 includes a portion of the elementary school's ball field and the majority of city park property north and east of the school, and is contiguous with wetland northeast of the study area boundary.

Two other relatively large wetland areas occur within the city limits. These wetlands are: MS-10, which is an open field east of the LDS Church and dominated in part by weedy grasses and forbs, such as birds-foot trefoil (*Lotus corniculatus*) and creeping buttercup (*Ranunculus repens*); and MS-13, a wet meadow immediately west of Happy Valley Park that currently is being enhanced as a wetland mitigation area (A.G. Crook Company, 1996).

The majority of the other wetlands and intermittent drainageways are associated with seasonal groundwater seeps. Wetlands, such as PH-1 and MS-17, however, have shallow groundwater tables long enough into the growing season to create anaerobic soil conditions. These wetlands are dominated by vegetation, such as soft rush (*Juncus effusus*), slender rush (*Juncus tenuis*), and velvet grass (*Holcus lanatus*), which are adapted for life in saturated soils.

The water in many of the intermittent drainages in Happy Valley, such as MS-2 and PH-2, is not present long enough to create anaerobic soil conditions and, consequently, these areas do not contain hydric soils. In addition, the duration of water associated with these areas is relatively short and not sufficient for a dominance by hydrophytes.

Appendix B contains wetland summary sheets identifying the wetland types for all wetlands and intermittent drainageways identified through the LWI.

It should be noted, that large wetland areas occur near the city limits, but outside of the study area. All of these wetlands, which are often associated with the soil type Powell Silt Loam, have been identified through the North Clackamas Urban Area Wetlands Inventory (SRI/SHAPIRO, 1994).

5.3 Wetland Quality Assessment

An assessment of the quality for each of the 17 wetlands identified through the inventory was conducted using OFWAM (1993). OFWAM assesses six functions and three conditions, as described in Section 2.5.2. All of the summary sheets showing the results for each of the functions and conditions assessed by the methodology are included in an addendum to this document.

6.0 REFERENCES

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- U.S.D.A. Soil Conservation Service, 1989. *Hydric soils of Clackamas County, Oregon*.
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- U.S. Geological Survey topographic map (Gladstone, Oregon, 1:24000, 7.5-minute quadrangle, 1961, photorevised 1984).



Appendix A

Wetland Delineation Data Sheets

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY County: CLACKAMAS Investigator: FS, JF	Project #: 7945188-05 State: OR Township: 1S	Date: 05/17/95 Range: 2E Section: 27 Sample Site: MS-3-5
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Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED
 Mottles: NO
 Matrix Color: 10YR 3/3 >10"
 Hydric Soil Criteria met: NO
 Comment: SILTY CLAY LOAM; 0-10" 10YR 3/2 SILT LOAM

Hydrology

Inundated: NO
 Depth: "
 Saturated Soils: NO
 Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO
 Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	CAREX SP.	FACW	15%	
Herb	FESTUCA ARUNDINACEA	FAC-	5%	
Herb	HOLCUS LANATUS	FAC	20%	
Herb	JUNCUS EFFUSUS	FACW	35%	
Herb	POA PRATENSIS	FAC	5%	
Herb	RUMEX ACETOSELLA	FACU+	5%	85%
Woody Vine	RUBUS LACINIATUS	FACU+	10%	
Woody Vine	RUBUS URSINUS	FACU	90%	15%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-06 Date: 05/17/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 27
 Investigator: FS, JF Sample Site: MS-3-6

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 6
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: OBVIOUS SURFACE DRAINAGE PATH THROUGH WOODS/SEASONAL, RAPID FLOWS

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>POPULUS TRICHOCARPA</i>	FAC	100%	50%
Sapling/Shrub	<i>CORYLUS CORNUTA</i>	FACU	15%	
Sapling/Shrub	<i>CRATAEGUS MONOGYNA</i>	NI	25%	
Sapling/Shrub	<i>RHAMNUS PURSHIANA</i>	FAC-	20%	
Sapling/Shrub	<i>SPIRAEA DOUGLASII</i>	FACW	20%	
Sapling/Shrub	<i>SYMPHORICARPOS ALBUS</i>	FACU	20%	35%
Herb	<i>CAREX DEWEYANA</i>	FAC+	90%	5%
Woody Vine	<i>RUBUS URSINUS</i>	FACU	100%	10%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 43%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-07 Date: 05/30/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: FS,DC,JF Sample Site: MS-1-7

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/3
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	<i>CRATAEGUS MONOGYNA</i>	NI	35%	
Sapling/Shrub	<i>CYTISUS SCOPARIUS</i>	UPL	65%	40%
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	60%	
Herb	<i>CHRYSANTHEMUM LEUCANTHEMUM</i>	UPL	15%	
Herb	<i>DACTYLIS GLOMERATA</i>	FACU	15%	
Herb	<i>VICIA SATIVA</i>	UPL	5%	40%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	100%	20%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 0%
 Hydrophytic Vegetation Criteria met: NO
 Comment:

Determination: Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-08 Date: 05/30/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: FS,DC,JF Sample Site: MS-1-8

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 7.5YR 2/2
 Mottles: YES Mottle Color: 7.5YR 3/4
 Hydric Soil Criteria met: YES
 Comment: SOME GRAVEL; SILT LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: ALGAL MATS; EVIDENCE OF PONDING

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	<i>CRATAEGUS MONOGYNA</i>	NI	100%	30%
Herb	<i>EPILOBIUM WATSONII</i>	FACW-	5%	
Herb	<i>HOLCUS LANATUS</i>	FAC	30%	
Herb	<i>JUNCUS EFFUSUS</i>	FACW	20%	
Herb	<i>JUNCUS TENUIS</i>	FACW-	15%	
Herb	<i>POA TRIVIALIS</i>	FACW	20%	
Herb	<i>RUMEX SP.</i>	FAC	5%	30%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	100%	40%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 60%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-09 Date: 06/01/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 34
 Investigator: FS,DC Sample Site: MS-1-9

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 5/1 0-7"
 Mottles: NO
 Hydric Soil Criteria met: YES
 Comment: 0-7" MIXED WITH 10YR 3/2 IN BANDS, VERY ORGANIC SILT; >7" ROCK

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 6
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>ALNUS RUBRA</i>	FAC	30%	
Tree	<i>POPULUS TRICHOCARPA</i>	FAC	35%	
Tree	<i>SALIX LASIANDRA</i>	FACW+	35%	20%
Sapling/Shrub	<i>ALNUS RUBRA</i>	FAC	100%	10%
Herb	<i>GLYCERIA ELATA</i>	FACW+	5%	
Herb	<i>PHALARIS ARUNDINACEA</i>	FACW	20%	
Herb	<i>SCIRPUS MICROCARPUS</i>	OBL	30%	
Herb	<i>URTICA DIOICA</i>	FAC+	20%	
Herb	<i>VERONICA AMERICANA</i>	OBL	25%	70%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-10 Date: 06/01/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 34
 Investigator: FS,DC Sample Site: MS-1-10

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/3
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: SILT LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	POPULUS TRICHOCARPA	FAC	100%	10%
Herb	CIRSIIUM ARVENSE	FACU+	20%	
Herb	DACTYLIS GLOMERATA	FACU	20%	
Herb	FESTUCA ARUNDINACEA	FAC-	30%	
Herb	GALIIUM APARINE	FACU	10%	
Herb	VICIA SATIVA	UPL	15%	80%
Woody Vine	RUBUS LACINIATUS	FACU+	100%	10%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 17%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-11 Date: 06/07/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: DC, JF Sample Site: MS-17-11

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2 >5"
 Mottles: YES Mottle Color: 5YR 4/4
 Hydric Soil Criteria met: YES
 Comment: SANDY SILTY CLAY; 0-5" 10YR 3/3 W/7.5YR 3/3 MOTTS.

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 12
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	<i>CRATAEGUS MONOGYNA</i>	NI	100%	10%
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	15%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	10%	
Herb	<i>HOLCUS LANATUS</i>	FAC	30%	
Herb	<i>JUNCUS EFFUSUS</i>	FACW	30%	
Herb	<i>JUNCUS ENSIFOLIUS</i>	FACW	15%	90%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-12 Date: 06/08/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: DC, JF Sample Site: MS-17-12

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/4 >7"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: 0-7" 10YR 3/3

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	<i>CRATAEGUS MONOGYNA</i>	NI	50%	
Sapling/Shrub	<i>CYTISUS SCOPARIUS</i>	UPL	50%	20%
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	25%	
Herb	<i>CHRYSANTHEMUM LEUCANTHEMUM</i>	UPL	20%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	10%	
Herb	<i>PLANTAGO LANCEOLATA</i>	FAC	20%	
Herb	<i>POA PRATENSIS</i>	FAC	20%	
Herb	<i>VICIA SATIVA</i>	UPL	5%	80%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 33%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination: **Non-Wetland**

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-13 Date: 06/01/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: FS,DC Sample Site: MS-1-13

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: SANDY SILT LOAM WITH GRAVEL IN TOP LAYERS

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>ALNUS RUBRA</i>	FAC	60%	
Tree	<i>FRAXINUS LATIFOLIA</i>	FACW	40%	30%
Sapling/Shrub	<i>ILEX AQUIFOLIUM</i>	UPL	15%	
Sapling/Shrub	<i>OEMLERIA CERASIFORMIS</i>	FACU	30%	
Sapling/Shrub	<i>RUBUS SPECTABILIS</i>	FAC+	30%	
Sapling/Shrub	<i>SYMPHORICARPOS ALBUS</i>	FACU	20%	35%
Herb	<i>ATHYRIUM FILIX-FEMINA</i>	FAC	15%	
Herb	<i>CIRCAEA ALPINA</i>	FAC+	25%	
Herb	<i>POLYSTICHUM MUNITUM</i>	FACU	20%	
Herb	<i>STACHYS COOLEYAE</i>	FACW	20%	
Herb	<i>TELLIMA GRANDIFLORA</i>	UPL	20%	30%
Woody Vine	<i>RUBUS URSINUS</i>	FACU	100%	5%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 50%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-14 Date: 05/30/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: FS,DC,JF Sample Site: MS-4-14

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/3
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment: SILT LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>CRATAEGUS MONOGYNA</i>	NI	70%	
Tree	<i>PYRUS MALUS</i>	UPL	30%	20%
Sapling/Shrub	<i>CORYLUS CORNUTA</i>	FACU	80%	
Sapling/Shrub	<i>ILEX AQUIFOLIUM</i>	UPL	20%	20%
Herb	<i>DACTYLIS GLOMERATA</i>	FACU	20%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	30%	
Herb	<i>LOLIUM PERENNE</i>	FACU	5%	
Herb	<i>POA PRATENSIS</i>	FAC	20%	
Herb	<i>TRIFOLIUM DUBIUM</i>	UPL	15%	50%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	100%	10%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 13%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-15 Date: 05/30/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: FS,DC,JF Sample Site: MS-4-15

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: YES Mottle Color: 7.5YR 3/4
 Hydric Soil Criteria met: YES
 Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: EVIDENCE OF PONDING

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>CRATAEGUS MONOGYNA</i>	NI	40%	20%
Tree	<i>POPULUS TRICHOCARPA</i>	FAC	60%	
Herb	<i>AGROSTIS STOLONIFERA</i>	FAC-	20%	80%
Herb	<i>EPILOBIUM WATSONII</i>	FACW-	20%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	15%	
Herb	<i>POA TRIVIALIS</i>	FACW	30%	
Herb	<i>RUMEX CRISPUS</i>	FAC+	5%	

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 60%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY County: CLACKAMAS Investigator: FS,DC,JF	State: OR	Project #: 7945188-16 Township: 1S	Date: 05/30/95 Range: 2E Section: 35 Sample Site: MS-19-16
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Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED
 Mottles: NO
 Matrix Color: 10YR 3/2
 Hydric Soil Criteria met: NO
 Comment: SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO
 Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>PRUNUS SP.</i>	UPL	20%	
Tree	<i>SALIX SCOULERIANA</i>	FAC	80%	40%
Sapling/Shrub	<i>CORNUS STOLONIFERA</i>	FACW	70%	
Sapling/Shrub	<i>SYMPHORICARPOS ALBUS</i>	FACU	30%	30%
Herb	<i>CAREX DEWEYANA</i>	FAC+	30%	
Herb	<i>CIRCAEA ALPINA</i>	FAC+	20%	
Herb	<i>POA SP.</i>	FACU	5%	15%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	100%	15%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 57%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination: Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-17 Date: 06/08/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: DC, JF Sample Site: MS-20-17

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/3
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment: SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment: MOIST ONLY

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	90%	
Herb	<i>HOLCUS LANATUS</i>	FAC	10%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 0%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY	Project #: 7945188-18	Date: 05/17/95
County: CLACKAMAS	State: OR	Township: 1S
Investigator: FS, JF	Range: 2E	Section: 26
		Sample site: MS-7-18

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: NO
 Hydric Soil Criteria met: NO

Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO

Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>ACER MACROPHYLLUM</i>	FACU	80%	
Tree	<i>POPULUS TRICHOCARPA</i>	FAC	10%	
Tree	<i>PSEUDOTSUGA MENZIESII</i>	UPL	10%	40%
Sapling/Shrub	<i>CORYLUS CORNUTA</i>	FACU	20%	
Sapling/Shrub	<i>ILEX AQUIFOLIUM</i>	UPL	5%	
Sapling/Shrub	<i>OEMLERIA CERASIFORMIS</i>	FACU	20%	
Sapling/Shrub	<i>SYMPHORICARPOS ALBUS</i>	FACU	45%	20%
Herb	<i>DISPORUM HOOKERI</i>	UPL	10%	
Herb	<i>POLYSTICHUM MUNITUM</i>	FACU	85%	
Herb	<i>TRILLIUM OVATUM</i>	NI	5%	5%
Woody Vine	<i>HEDERA HELIX</i>	UPL	100%	35%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 0%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-19 Date: 05/17/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: FS, JF Sample Site: MS-6-19

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 5YR 3/3
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>POPULUS TRICHOCARPA</i>	FAC	100%	50%
Herb	<i>HOLCUS LANATUS</i>	FAC	60%	
Herb	<i>POA ANNUA</i>	FAC	5%	
Herb	<i>POA PRATENSIS</i>	FAC	20%	
Herb	<i>POLYSTICHUM MUNITUM</i>	FACU	5%	50%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-20 Date: 05/17/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: FS, JF Sample Site: MS-6-20

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: YES Mottle Color: 5YR 3/4
 Hydric Soil Criteria met: YES
 Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: EVIDENCE OF PONDING IN DRAINAGEWAY; ~3' FROM INCISED CHANNEL

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	<i>CRATAEGUS DOUGLASII</i>	FAC	20%	
Sapling/Shrub	<i>SALIX SCOULERIANA</i>	FAC	80%	40%
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	20%	
Herb	<i>GEUM MACROPHYLLUM</i>	FACW+	10%	
Herb	<i>PHALARIS ARUNDINACEA</i>	FACW	40%	
Herb	<i>POA TRIVIALIS</i>	FACW	20%	60%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 80%
 Hydrophytic Vegetation Criteria met: YES
 Comment:

Determination: Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-21 Date: 06/01/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: FS,DC Sample Site: MS-5-21

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 4/3
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment: SILT LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>CORYLUS CORNUTA</i>	FACU	100%	30%
Herb	<i>BROMUS RIGIDUS</i>	UPL	5%	
Herb	<i>HOLCUS LANATUS</i>	FAC	20%	
Herb	<i>HYPOCHAERIS RADICATA</i>	UPL	15%	
Herb	<i>LOLIUM PERENNE</i>	FACU	10%	
Herb	<i>VICIA SATIVA</i>	UPL	50%	50%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	40%	
Woody Vine	<i>RUBUS URSINUS</i>	FACU	60%	20%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 20%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-22 Date: 06/01/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: FS,DC Sample Site: MS-5-22

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: YES Mottle Color: 7.5YR 3/4
 Hydric Soil Criteria met: YES
 Comment: SANDY SILT LOAM; CONCRETIONS PRESENT

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: ALGAL MATS; EVIDENCE OF PONDING; FLOOD BORNE DEBRIS

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	SALIX LASIANDRA	FACW+	100%	30%
Sapling/Shrub	SALIX LASIANDRA	FACW+	80%	
Sapling/Shrub	SALIX SITCHENSIS	FACW	20%	20%
Herb	PHALARIS ARUNDINACEA	FACW	100%	50%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-23 Date: 05/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-8-23

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 4/2 >12"
 Mottles: YES Mottle Color: 7.5YR 4/4
 Hydric Soil Criteria met: YES
 Comment: 0-8" 10YR 3.5/2 W/O MOTTS.; SOME MIX OF COLORS >12" MAY BE DIST.

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: WETLAND DRAINAGE PATTERN; VERY MOIST TO SURF. BUT NO SEEPAGE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>ALOPECURUS PRATENSIS</i>	FACW	5%	
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	20%	
Herb	<i>EPILOBIUM WATSONII</i>	FACW-	5%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	10%	
Herb	<i>HOLCUS LANATUS</i>	FAC	20%	
Herb	<i>JUNCUS EFFUSUS</i>	FACW	5%	
Herb	<i>JUNCUS TENUIS</i>	FACW-	5%	
Herb	<i>POA PRATENSIS</i>	FAC	25%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY	Project #: 7945188-24	Date: 05/19/95
County: CLACKAMAS	State: OR	Township: 1S
Investigator: FS,DC,JF	Range: 2E	Section: 26
	Sample Site: MS-8-24	

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED
 Mottles: NO

Matrix Color: 10YR 3/3
 Hydric Soil Criteria met: NO

Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO

Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>DACTYLIS GLOMERATA</i>	FACU	10%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	20%	
Herb	<i>HOLCUS LANATUS</i>	FAC	10%	
Herb	<i>POA PRATENSIS</i>	FAC	20%	
Herb	<i>TRIFOLIUM PRATENSE</i>	FACU	10%	
Herb	<i>VICIA SATIVA</i>	UPL	20%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 33%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination: Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-25 Date: 05/30/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-9-25

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 7.5YR 4/4 >10"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: SILTY CLAY LOAM; 3-10" 10YR 3/2 NO MOTTS., SILT LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	AMELANCHIER ALNIFOLIA	FACU	80%	10%
Sapling/Shrub	CRATAEGUS DOUGLASII	FAC	20%	
Sapling/Shrub	CRATAEGUS MONOGYNA	NI	80%	30%
Herb	ANTHOXANTHUM ODORATUM	FACU	40%	
Herb	FESTUCA ARUNDINACEA	FAC-	35%	
Herb	HOLCUS LANATUS	FAC	20%	50%
Woody Vine	RUBUS DISCOLOR	FACU	50%	
Woody Vine	RUBUS URSINUS	FACU	50%	10%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 25%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-26 Date: 05/30/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample site: MS-9-26

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: YES Mottle Color: 10YR 4/6
 Hydric Soil Criteria met: YES
 Comment: DISTURBED - MIXED WITH 10YR 4/3; SOME GRAVEL

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: EVIDENCE OF PONDING IN DITCH (30"W X 1'D); SOILS MOIST, NOT SAT.

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	<i>CRATAEGUS MONOGYNA</i>	NI	10%	
Sapling/Shrub	<i>SALIX SCOULERIANA</i>	FAC	5%	
Sapling/Shrub	<i>SPIRAEA DOUGLASII</i>	FACW	85%	80%
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	25%	
Herb	<i>HOLCUS LANATUS</i>	FAC	70%	20%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-27 Date: 05/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-10-27

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/4 >11"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: 0-11" 10YR 3/3 W/O MOTTS.

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	60%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	20%	
Herb	<i>LOTUS CORNICULATUS</i>	FAC	10%	
Herb	<i>POA PRATENSIS</i>	FAC	5%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 0%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY County: CLACKAMAS Investigator: FS,DC,JF	State: OR	Project #: 7945188-28 Township: 1S	Date: 05/19/95 Range: 2E Section: 26 Sample Site: MS-10-28
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Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED
 Mottles: YES

Matrix Color: 10YR 3/2
 Mottle Color: 10YR 3/4
 Hydric Soil Criteria met: YES

Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 12
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES

Comment: SOIL SATURATED TO SURFACE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	15%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	10%	
Herb	<i>HOLCUS LANATUS</i>	FAC	20%	
Herb	<i>JUNCUS EFFUSUS</i>	FACW	20%	
Herb	<i>LOTUS CORNICULATUS</i>	FAC	20%	
Herb	<i>POA PRATENSIS</i>	FAC	10%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-29 Date: 05/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-1↑-29

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 5/3 >11"
 Mottles: YES Mottle Color: 7.5YR 4/6
 Hydric Soil Criteria met: NO
 Comment: SILTY CLAY LOAM; 0-11" 10YR 3/2 NO MOTTS.

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	40%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	10%	
Herb	<i>JUNCUS EFFUSUS</i>	FACW	20%	
Herb	<i>POA PRATENSIS</i>	FAC	20%	
Herb	<i>VICIA SP.</i>	UPL	5%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination: Non-Wetland
 Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-30 Date: 05/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-10-30

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 2.5Y 5/2 >9"
 Mottles: YES Mottle Color: 7.5YR 4/6
 Hydric Soil Criteria met: YES
 Comment: 0-9" 10YR 3/2 W/7.5YR 3/4 MOTTS.

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: EVIDENCE OF LONG-TERM PONDING; SWALE UP TO 6' WIDE/SHALLOW

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	JUNCUS EFFUSUS	FACW	10%	
Herb	LOTUS CORNICULATUS	FAC	15%	
Herb	POA TRIVIALIS	FACW	10%	
Herb	RANUNCULUS REPENS	FACW	20%	
Herb	TYPHA LATIFOLIA	OBL	20%	
Herb	VERONICA AMERICANA	OBL	20%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-31 Date: 09/28/94
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: DC,PF Sample Site: MS-5-31

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 4/1
 Mottles: NO
 Hydric Soil Criteria met: YES
 Comment: SILT LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	PHALARIS ARUNDINACEA	FACW	100%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-32 Date: 09/28/94
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: DC,PF Sample Site: MS-5-32

Soils

Mapped Series and Phase: BORGES SILTY CLAY LOAM
 On Hydric Soils List: YES
 Drainage Class: POORLY DRAINED Matrix Color: 10YR 4/2
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: SILT LOAM; HARD PAN AT 10" DEPTH

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	AGROSTIS TENUIS	FAC	30%	
Herb	CENTAURIUM UMBELLATUM	FAC	10%	
Herb	CHRYSANTHEMUM LEUCANTHEMUM	UPL	10%	
Herb	PLANTAGO LANCEOLATA	FAC	15%	
Herb	TRIFOLIUM REPENS	FACU+	20%	
Herb	VICIA SATIVA	UPL	10%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 50%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-33 Date: 09/28/94
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: DC,PF Sample Site: MS-5-33

Soils

Mapped Series and Phase: BORGES SILTY CLAY LOAM
 On Hydric Soils List: YES
 Drainage Class: POORLY DRAINED Matrix Color: 10YR 4/1
 Mottles: NO Hydric Soil Criteria met: YES
 Comment: SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: MOIST TO SURFACE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	AGROSTIS TENUIS	FAC	5%	
Herb	EPILOBIUM WATSONII	FACW-	5%	
Herb	JUNCUS EFFUSUS	FACW	10%	
Herb	PHALARIS ARUNDINACEA	FACW	30%	
Herb	SCIRPUS MICROCARPUS	OBL	50%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY	Project #: 7945188-34	Date: 09/28/94
County: CLACKAMAS	State: OR	Township: 1S
Investigator: DC,PF	Range: 2E	Section: 35
		Sample Site: MS-5-34

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 4/3
 Mottles: NO
 Hydric Soil Criteria met: NO

Comment: SILT LOAM, COMPACTED

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO

Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>AGROSTIS TENUIS</i>	FAC	20%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	30%	
Herb	<i>PHLEUM PRATENSE</i>	FAC-	30%	
Herb	<i>PLANTAGO LANCEOLATA</i>	FAC	15%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 33%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-35 Date: 09/28/94
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 35
 Investigator: DC,PF Sample Site: MS-5-35

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 4/1
 Mottles: NO Hydric Soil Criteria met: YES
 Comment: SILT LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	PHALARIS ARUNDINACEA	FACW	100%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-36 Date: 05/10/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC Sample Site: MS-12-36

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 7.5YR 4/3 >8"
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment: 0-8" 10YR 3/2; OCCASIONAL IRON CONCRETIONS IN UPPER LAYER

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	<i>CRATAEGUS MONOGYNA</i>	NI	100%	20%
Herb	<i>AGROSTIS TENUIS</i>	FAC	10%	
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	20%	
Herb	<i>FESTUCA RUBRA</i>	FAC+	15%	
Herb	<i>HOLCUS LANATUS</i>	FAC	20%	
Herb	<i>HYPOCHAERIS RADICATA</i>	UPL	15%	
Herb	<i>PLANTAGO LANCEOLATA</i>	FAC	20%	75%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	100%	5%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 40%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-37 Date: 05/10/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC Sample Site: MS-12-37

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 4/2 >9"
 Mottles: YES Mottle Color: 7.5YR 3/4
 Hydric Soil Criteria met: YES
 Comment: 0-9" 10YR 3/2

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: <18
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: PERCHED WATER TABLE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	20%	
Herb	<i>HOLCUS LANATUS</i>	FAC	20%	
Herb	<i>LOTUS CORNICULATUS</i>	FAC	10%	
Herb	<i>POA TRIVIALIS</i>	FACW	25%	
Herb	<i>RANUNCULUS REPENS</i>	FACW	20%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 75%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-38 Date: 05/10/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC Sample Site: MS-11-38

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: YES Mottle Color: 7.5YR 3/3
 Hydric Soil Criteria met: YES
 Comment: H2S ODOR

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 4
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>ALNUS RUBRA</i>	FAC	100%	60%
Herb	<i>GALIUM APARINE</i>	FACU	15%	
Herb	<i>PHALARIS ARUNDINACEA</i>	FACW	30%	
Herb	<i>RANUNCULUS REPENS</i>	FACW	35%	40%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-39 Date: 05/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-11-39

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 7.5YR 3/3
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>ALNUS RUBRA</i>	FAC	10%	
Tree	<i>PSEUDOTSUGA MENZIESII</i>	UPL	90%	40%
Sapling/Shrub	<i>CORYLUS CORNUTA</i>	FACU	80%	
Sapling/Shrub	<i>ROSA NUTKANA</i>	FAC	20%	15%
Herb	<i>PHALARIS ARUNDINACEA</i>	FACW	40%	
Herb	<i>POLYSTICHUM MUNITUM</i>	FACU	20%	
Herb	<i>TELLIMA GRANDIFLORA</i>	UPL	20%	15%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	70%	
Woody Vine	<i>RUBUS URSINUS</i>	FACU	30%	30%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 25%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-40 Date: 05/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-11-40

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/1 >7"
 Mottles: YES Mottle Color: 7.5YR 3/4
 Hydric Soil Criteria met: YES
 Comment: SILTY CLAY LOAM; 0-7" 10YR 3/2 NO MOTTS.

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 12
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	ALNUS RUBRA	FAC	100%	40%
Sapling/Shrub	CORNUS STOLONIFERA	FACW	50%	
Sapling/Shrub	CORYLUS CORNUTA	FACU	50%	5%
Herb	ATHYRIUM FILIX-FEMINA	FAC	20%	
Herb	PHALARIS ARUNDINACEA	FACW	50%	
Herb	VERATRUM CALIFORNICUM	FACW+	20%	40%
Woody Vine	RUBUS DISCOLOR	FACU	80%	
Woody Vine	RUBUS URSINUS	FACU	20%	15%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 63%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-41 Date: 05/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-14-41

Soils

Mapped Series and Phase: BORGES SILTY CLAY LOAM
 On Hydric Soils List: YES
 Drainage Class: POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: YES Mottle Color: 7.5YR 3/4
 Hydric Soil Criteria met: YES
 Comment: SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 9
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	AGROSTIS TENUIS	FAC	80%	
Herb	RANUNCULUS REPENS	FACW	20%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment: VEGETATION DISTURBED DUE TO MOWING. PLAYGROUND

Determination: Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY	Project #: 7945188-42	Date: 05/03/95
County: CLACKAMAS	State: OR	Township: 1S
Investigator: FS,DC,JF	Range: 2E	Section: 25
	Sample Site: MS-16-42	

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED
 Mottles: NO

Matrix Color: 10YR 3/3
 Hydric Soil Criteria met: NO

Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 0
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES

Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>EPILOBIUM WATSONII</i>	FACW-	15%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	60%	
Herb	<i>RANUNCULUS REPENS</i>	FACW	20%	80%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	100%	20%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 33%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-43 Date: 05/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS, JF Sample Site: JC-3-43

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2 >11"
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment: DISTURBED SOIL; 0-11" 10YR 3/3 NO MOTTS., SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment: HAS BEEN TILED-BREAK NEAR SAMP. PIT (TILE AT ~12") MOIST NOT SAT.

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	50%	
Herb	<i>GALIUM APARINE</i>	FACU	5%	
Herb	<i>HOLCUS LANATUS</i>	FAC	20%	
Herb	<i>POA PRATENSIS</i>	FAC	20%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-45 Date: 05/17/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS, JF Sample Site: JC-45

Soils

7
3

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 7.5YR 3/2 >12"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: SILTY CLAY LOAM; 0-12" 10YR 3/2 NO MOTTS., SILT LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	FESTUCA ARUNDINACEA	FAC-	40%	
Herb	GALIUM APARINE	FACU	10%	
Herb	HOLCUS LANATUS	FAC	20%	
Herb	POA PRATENSIS	FAC	20%	
Herb	TARAXACUM OFFICINALE	FACU	5%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-46 Date: 05/09/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: JC-3-46

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 4/2 >9"
 Mottles: YES Mottle Color: 10YR 4/4
 Hydric Soil Criteria met: YES
 Comment: SILTY CLAY LOAM; 0-9" 7.5YR 2/2

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 12
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	AGROSTIS TENUIS	FAC	25%	
Herb	ANTHOXANTHUM ODORATUM	FACU	15%	
Herb	CAREX SP.	FACW	5%	
Herb	FESTUCA ARUNDINACEA	FAC-	20%	
Herb	HOLCUS LANATUS	FAC	20%	
Herb	LOTUS CORNICULATUS	FAC	5%	
Herb	LUPINUS SP.	FACU	5%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination: Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY	Project #: 7945188-47	Date: 05/09/95
County: CLACKAMAS	State: OR	Township: 1S
Investigator: FS,DC,JF	Range: 2E	Section: 26
	Sample Site: JC-1-47	

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED
 Mottles: NO
 Matrix Color: 7.5YR 3/2 >11"
 Hydric Soil Criteria met: NO
 Comment: 0-11" 10YR 3/2

Hydrology

Inundated: YES Depth: "
 Saturated Soils: YES Depth to Water Table: <18
 Active Oxidized Rhizospheres Present: NO
 Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	ALNUS RUBRA	FAC	50%	
Tree	CORYLUS CORNUTA	FACU	50%	60%
Sapling/Shrub	OEMLERIA CERASIFORMIS	FACU	100%	5%
Herb	ATHYRIUM FILIX-FEMINA	FAC	10%	
Herb	CAREX DEWEYANA	FAC+	5%	
Herb	CIRCAEA ALPINA	FAC+	20%	
Herb	GEUM MACROPHYLLUM	FACW+	10%	
Herb	POLYSTICHUM MUNITUM	FACU	25%	
Herb	TELLIMA GRANDIFLORA	UPL	25%	30%
Woody Vine	RUBUS URSINUS	FACU	100%	5%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 29%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination: Non-Wetland

Comment: SAMPLE SITE IN CHANNEL OF INTERMITTENT DRAINAGE

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-48 Date: 05/09/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: JC-1-48

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 7.5YR 3/2 >10"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: 0-10" 10YR 2/2 NO MOTTS.

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>ALNUS RUBRA</i>	FAC	60%	
Tree	<i>SALIX SCOULERIANA</i>	FAC	40%	40%
Sapling/Shrub	<i>CORYLUS CORNUTA</i>	FACU	50%	
Sapling/Shrub	<i>OEMLERIA CERASIFORMIS</i>	FACU	20%	
Sapling/Shrub	<i>PHYSOCARPUS CAPITATUS</i>	FACW-	30%	30%
Herb	<i>POLYSTICHUM MUNITUM</i>	FACU	100%	5%
Woody Vine	<i>RUBUS URSINUS</i>	FACU	100%	25%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 43%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-49 Date: 05/09/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: JC-2-49

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/3
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>DACTYLIS GLOMERATA</i>	FACU	10%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	20%	
Herb	<i>PHALARIS ARUNDINACEA</i>	FACW	5%	
Herb	<i>POA PRATENSIS</i>	FAC	25%	
Herb	<i>RANUNCULUS REPENS</i>	FACW	20%	
Herb	<i>TARAXACUM OFFICINALE</i>	FACU	20%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 50%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination: Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-50 Date: 05/09/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: JC-2-50

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2
 Mottles: YES Mottle Color: 7.5YR 3/4
 Hydric Soil Criteria met: YES
 Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 4
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE; EVIDENCE OF PONDING

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>SALIX LASIANDRA</i>	FACW+	100%	40%
Herb	<i>PHALARIS ARUNDINACEA</i>	FACW	60%	
Herb	<i>RANUNCULUS REPENS</i>	FACW	20%	
Herb	<i>SOLANUM DULCAMARA</i>	FAC+	20%	60%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-51 Date: 11/08/96
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-1-51

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/4 0-18"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: SILT LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	<i>CORYLUS CORNUTA</i>	FACU	20%	
Sapling/Shrub	<i>CRATAEGUS MONOGYNA</i>	*FACU+	40%	
Sapling/Shrub	<i>CYTISUS SCOPARIUS</i>	UPL	40%	20%
Herb	<i>ANTHOXANTHUM ODORATUM</i>	FACU	40%	
Herb	<i>CHRYSANTHEMUM LEUCANTHEMUM</i>	UPL	20%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	40%	60%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	60%	
Woody Vine	<i>RUBUS URSINUS</i>	FACU	40%	20%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 0%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-52 Date: 11/08/96
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: FS,DC,JF Sample Site: MS-1-52

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/3 0-18"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	ACER MACROPHYLLUM	FACU	40%	
Tree	PSEUDOTSUGA MENZIESII	*FACU	60%	40%
Sapling/Shrub	ACER MACROPHYLLUM	FACU	50%	
Sapling/Shrub	CORYLUS CORNUTA	FACU	50%	10%
Herb	ASARUM CAUDATUM	*FACU	20%	
Herb	POLYSTICHUM MUNITUM	FACU	50%	
Herb	VANCOUVERIA HEXANDRA	UPL	30%	45%
Woody Vine	RUBUS URSINUS	FACU	100%	5%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 0%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7971034-53 Date: 03/18/97
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: DC Sample Site: MS-22-53

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2 0-18+ "
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment: MIXED W/5YR 4/4 & 7.5YR 4/3; VERY DISTURB. SOILS, SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 7
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE, WATER ON SURFACE; RECENT RAINS

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	CHRYSANTHEMUM LEUCANTHEMUM	UPL	30%	
Herb	FESTUCA ARUNDINACEA	FAC-	10%	
Herb	HOLCUS LANATUS	FAC	10%	
Herb	JUNCUS EFFUSUS	FACW	10%	
Herb	LOLIUM PERENNE	FACU	30%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 0%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7971034-54 Date: 03/18/97
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: DC Sample Site: MS-22-54

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 4/2 0-18"
 Mottles: YES Mottle Color: 7.5YR 3/3
 Hydric Soil Criteria met: YES
 Comment: SILTY CLAY LOAM; UNDISTURBED SOIL

Hydrology

Inundated: YES Depth: .5" Saturated Soils: YES Depth to Water Table: 11
 Active Oxidized Rhizospheres Present: YES Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE; WATER FLOWING ON SURFACE; RECENT RAINS

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>EPILOBIUM WATSONII</i>	FACW-	20%	
Herb	<i>HOLCUS LANATUS</i>	FAC	20%	
Herb	<i>JUNCUS EFFUSUS</i>	FACW	60%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7971034-55 Date: 03/18/97
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: DC Sample Site: MS-22-55

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 5/3 2-18"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: CLAY; 0-2" 10YR 3/2 W/7.5YR 3/4 MOTTS., CLAY

Hydrology

Inundated: YES Depth: 2 " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: FLOWING WATER 2" DEEP BY 18" WIDE; INTERMITTENT STREAM

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	ALNUS RUBRA	FAC	100%	40%
Sapling/Shrub	CORYLUS CORNUTA	FACU	100%	10%
Herb	FESTUCA ARUNDINACEA	FAC-	20%	
Herb	POLYSTICHUM MUNITUM	FACU	40%	
Herb	RANUNCULUS REPENS	FACW	40%	20%
Woody Vine	RUBUS DISCOLOR	FACU	100%	30%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 33%
 Hydrophytic Vegetation Criteria met: NO

Comment: BARE CHANNEL; VEGETATION ON BANKS

Determination: Non-Wetland

Comment: INTERMITTENT STREAM

WETLAND DELINEATION DATA FORM

GRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7971034-56 Date: 03/18/97
 County: CLACKAMAS state: OR Township: 1S Range: 2E Section: 26
 Investigator: DC Sample Site: MS-22-56

Soils

Mapped Series and Phase: CASCADE SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 5/3 8-18+ "
 Mottles: YES Mottle Color: 7.5YR 3/3
 Hydric Soil Criteria met: NO
 Comment: CLAY; 0-8" 10YR 3/3, SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 10
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE; RECENT RAINS

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	ALNUS RUBRA	FAC	70%	
Sapling/Shrub	POPULUS TRICHOCARPA	FAC	30%	30%
Herb	AGROSTIS TENUIS	FAC	30%	
Herb	FESTUCA ARUNDINACEA	FAC-	20%	
Herb	JUNCUS EFFUSUS	FACW	50%	60%
Woody Vine	RUBUS DISCOLOR	FACU	100%	10%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination: Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY	Project #: 7971034-57	Date: 01/19/95
County: CLACKAMAS	State: OR	Township: 1S
Investigator: DC/FS	Range: 2E	Section: 26
	Sample Site: MS-14-57	

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: MODERATELY WELL DRAINED
 Mottles: NO

Matrix Color: 10YR 2.5/2
 Hydric Soil Criteria met: NO

Comment: 0-18", SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 12
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED AT 10"

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>PSEUDOTSUGA MENZIESII</i>	*FACU	100%	50%
Sapling/Shrub	<i>ALNUS RUBRA</i>	FAC	90%	
Sapling/Shrub	<i>PRUNUS SP.</i>	UPL	10%	10%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	80%	
Woody Vine	<i>RUBUS URSINUS</i>	FACU	20%	40%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 25%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination: Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY	Project #: 7971034-59	Date: 01/19/95
County: CLACKAMAS	State: OR	Township: 1S
Investigator: DC/FS	Range: 2E	Section: 26
	Sample Site: MS-14-59	

Soils

Mapped Series and Phase: BORGES SILTY CLAY LOAM
 On Hydric Soils List: YES
 Drainage Class: POORLY DRAINED
 Mottles: NO
 Matrix Color: 10YR 3/3 0-10"
 Hydric Soil Criteria met: NO
 Comment: SILTY CLAY LOAM; 10+" 10YR 4/3 W/SUBTLE 7.5YR 4/6 MOTTS., CLAY

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>PSEUDOTSUGA MENZIESII</i>	*FACU	100%	40%
Herb	<i>AGROSTIS TENUIS</i>	FAC	30%	
Herb	<i>DACTYLIS GLOMERATA</i>	FACU	20%	
Herb	<i>FESTUCA ARUNDINACEA</i>	FAC-	20%	
Herb	<i>VICIA SATIVA</i>	UPL	10%	20%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	100%	40%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 20%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7971034-60 Date: 01/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: DC/FS Sample Site: MS-14-60

Soils

Mapped Series and Phase: BORGES SILTY CLAY LOAM
 On Hydric Soils List: YES
 Drainage Class: POORLY DRAINED Matrix Color: 10YR 5/2 10-18"
 Mottles: YES Mottle Color: 7.5YR 4/6
 Hydric Soil Criteria met: YES
 Comment: CLAY; 0-10" 10YR 2/2, SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 1
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED TO SURFACE

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	ROSA PISOCARPA	FAC	100%	20%
Herb	AGROSTIS TENUIS	FAC	30%	
Herb	ANTHOXANTHUM ODORATUM	FACU	10%	
Herb	CAREX LEPORINA	FACW	20%	
Herb	RANUNCULUS REPENS	FACW	20%	80%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination:

Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7971034-61 Date: 01/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: DC/FS Sample Site: MS-14-61

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: MODERATELY WELL DRAINED Matrix Color: 10YR 3/3 0-18"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	CRATAEGUS MONOGYNA	*FACU+	100%	20%
Herb	AGROSTIS TENUIS	FAC	30%	
Herb	CIRSIUM ARVENSE	FACU+	20%	
Herb	DACTYLIS GLOMERATA	FACU	25%	
Herb	PHLEUM PRATENSE	FAC-	20%	40%
Woody Vine	RUBUS DISCOLOR	FACU	100%	40%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 17%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7971034-62 Date: 01/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: DC/FS Sample Site: MS-14-62

Soils

Mapped Series and Phase: BORGES SILTY CLAY LOAM
 On Hydric Soils List: YES
 Drainage Class: POORLY DRAINED Matrix Color: 10YR 3/2 0-18"
 Mottles: YES Mottle Color: 7.5YR 4/4 >10"
 Hydric Soil Criteria met: YES
 Comment: SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 6
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED AT 3"

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	AGROPYRON SP.	FACU	10%	
Herb	AGROSTIS TENUIS	FAC	50%	
Herb	HOLCUS LANATUS	FAC	20%	
Herb	PHLEUM PRATENSE	FAC-	10%	100%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination: Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7971034-63 Date: 01/19/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 26
 Investigator: DC/FS Sample Site: MS-14-63

Soils

Mapped Series and Phase: POWELL SILT LOAM
 On Hydric Soils List: NO
 Drainage Class: MODERATELY WELL DRAINED Matrix Color: 7.5YR 3/2
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: 0-18+", SILTY CLAY LOAM

Hydrology

Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 9
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES
 Comment: SOIL SATURATED AT 7"

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	AGROPYRON SP.	FACU	20%	
Herb	AGROSTIS TENUIS	FAC	30%	
Herb	CIRSIUM ARVENSE	FACU+	20%	
Herb	FESTUCA ARUNDINACEA	FAC-	10%	
Herb	GALIUM APARINE	FACU	10%	40%
Woody Vine	RUBUS DISCOLOR	FACU	100%	60%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 25%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-01 Date: 05/17/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 27
 Investigator: FS, JF Sample Site: PH-1-1

Soils

Mapped Series and Phase: CASCADE SILT LOAM STONY SUBSTRATUM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 7.5YR 3/4 >10"
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment: 0-10" 7.5YR 3/2 NO MOTTS. S/L; >10" SILTY CLAY; DENSE LOWER LAYER

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment: SURF. LAYER SAT.; HARD PAN LAYER DRY; FLOWING WATER ~1' W X 1" D

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Herb	<i>EPILOBIUM WATSONII</i>	FACW-	50%	
Herb	<i>TOLMIEA MENZIESII</i>	FAC	50%	50%
Woody Vine	<i>RUBUS URSINUS</i>	FACU	100%	50%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 67%
 Hydrophytic Vegetation Criteria met: YES

Comment:

Determination: Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Metf

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-02 Date: 05/17/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 27
 Investigator: FS, JF Sample Site: PH-1-2

Soils

Mapped Series and Phase: CASCADE SILT LOAM STONY SUBSTRATUM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 2.5YR 3/3
 Mottles: NO
 Hydric Soil Criteria met: NO
 Comment:

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>ALNUS RUBRA</i>	FAC	100%	20%
Sapling/Shrub	<i>ACER CIRCINATUM</i>	FAC-	20%	
Sapling/Shrub	<i>AMELANCHIER ALNIFOLIA</i>	FACU	20%	
Sapling/Shrub	<i>CRATAEGUS MONOGYNA</i>	NI	5%	
Sapling/Shrub	<i>OEMLERIA CERASIFORMIS</i>	FACU	5%	
Sapling/Shrub	<i>PHYSOCARPUS CAPITATUS</i>	FACW-	20%	
Sapling/Shrub	<i>SYMPHORICARPOS ALBUS</i>	FACU	30%	50%
Herb	<i>POLYSTICHUM MUNITUM</i>	FACU	60%	
Herb	<i>TELLIMA GRANDIFLORA</i>	UPL	30%	10%
Woody Vine	<i>RUBUS DISCOLOR</i>	FACU	40%	
Woody Vine	<i>RUBUS URSINUS</i>	FACU	60%	20%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 22%
 Hydrophytic Vegetation Criteria met: NO
 Comment:

Determination:

Non-Wetland

Comment:

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Method

Applicant: CITY OF HAPPY VALLEY County: CLACKAMAS Investigator: FS, JF	Project #: 7945188-03 Date: 05/17/95 State: OR Township: 1S Range: 2E Section: 27 Sample Site: PH-1-3			
Soils				
Mapped Series and Phase: CASCADE SILT LOAM STONY SUBSTRATUM On Hydric Soils List: NO Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 10YR 3/2 >11" Mottles: YES Mottle Color: 5YR 4/4 Hydric Soil Criteria met: YES Comment: 0-11" 10YR 3/2 W/O MOTTS.				
Hydrology				
Inundated: NO Depth: " Saturated Soils: YES Depth to Water Table: 4 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: YES Comment: SOIL SATURATED AT SURFACE; FLOWING WATER 1-2' WIDE BY UP TO 1" D				
Vegetation				
Type	Dominant Species	FWS Status	Stratum	Overall
Sapling/Shrub	<i>SALIX SCOULERIANA</i>	FAC	85%	
Sapling/Shrub	<i>SPIRAEA DOUGLASII</i>	FACW	15%	40%
Herb	<i>CAREX SP.</i>	FACW	10%	
Herb	<i>HOLCUS LANATUS</i>	FAC	5%	
Herb	<i>JUNCUS EFFUSUS</i>	FACW	20%	
Herb	<i>POA TRIVIALIS</i>	FACW	40%	
Herb	<i>VERONICA AMERICANA</i>	OBL	20%	60%
Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 100% Hydrophytic Vegetation Criteria met: YES				
Comment:				
Determination: Wetland				
Comment:				

WETLAND DELINEATION DATA FORM

SRI/SHAPIRO

Routine Onsite Met

Applicant: CITY OF HAPPY VALLEY Project #: 7945188-04 Date: 05/17/95
 County: CLACKAMAS State: OR Township: 1S Range: 2E Section: 27
 Investigator: FS, JF Sample Site: PH-1-4

Soils

Mapped Series and Phase: CASCADE SILT LOAM STONY SUBSTRATUM
 On Hydric Soils List: NO
 Drainage Class: SOMEWHAT POORLY DRAINED Matrix Color: 7.5YR 3/4 >9"
 Mottles: NO Hydric Soil Criteria met: NO
 Comment: 0-9" 10YR 3/2 W/O MOTTS.

Hydrology

Inundated: NO Depth: " Saturated Soils: NO Depth to Water Table: >18
 Active Oxidized Rhizospheres Present: NO Wetland Hydrology Criteria met: NO
 Comment:

Vegetation

Type	Dominant Species	FWS Status	Stratum	Overall
Tree	<i>ALNUS RUBRA</i>	FAC	30%	
Tree	<i>SALIX SCOULERIANA</i>	FAC	70%	50%
Sapling/Shrub	<i>ACER CIRCINATUM</i>	FAC-	10%	
Sapling/Shrub	<i>RHAMNUS PURSHIANA</i>	FAC-	10%	
Sapling/Shrub	<i>ROSA GYMNOCARPA</i>	FACU	20%	
Sapling/Shrub	<i>RUBUS PARVIFLORUS</i>	FAC-	30%	
Sapling/Shrub	<i>SYMPHORICARPOS ALBUS</i>	FACU	30%	45%
Herb	<i>POLYSTICHUM MUNITUM</i>	FACU	55%	
Herb	<i>PTERIDIUM AQUILINUM</i>	FACU	20%	
Herb	<i>TELLIMA GRANDIFLORA</i>	UPL	20%	5%

Percentage of dominant (>= 20%) species that are FAC, FACW or OBL: 25%
 Hydrophytic Vegetation Criteria met: NO

Comment:

Determination:

Non-Wetland

Comment:



Appendix B

Summary Sheets

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/9/95		Wetland Mapping Code: JC-1	
Investigator(s): FS, DC, JF		Size (acres): 0.014	
Location			
Legal: T1S R2E 26		Tax lot(s): AB100, AB200, AB500	
Other: West of 137th Avenue on Clatsop, north border of project boundary			
Hydrologic basin: Johnson Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Stormwater runoff, intermittent drainage			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Oemleria cerasiformis</i>	<i>Rubus ursinus</i>	<i>Circaea alpina</i>
<i>Corylus cornuta</i>			<i>Tellima grandiflora</i>
Comments			
Drainage parallels the road at north end of boundary. N-S side drainage has more water upslope to the south. Highly eroded, but not prolonged, by obvious stormwater runoff. Tree overstory mostly red alder and a few willows. Planted Douglas firs and grand firs.			
SS# 47,48			

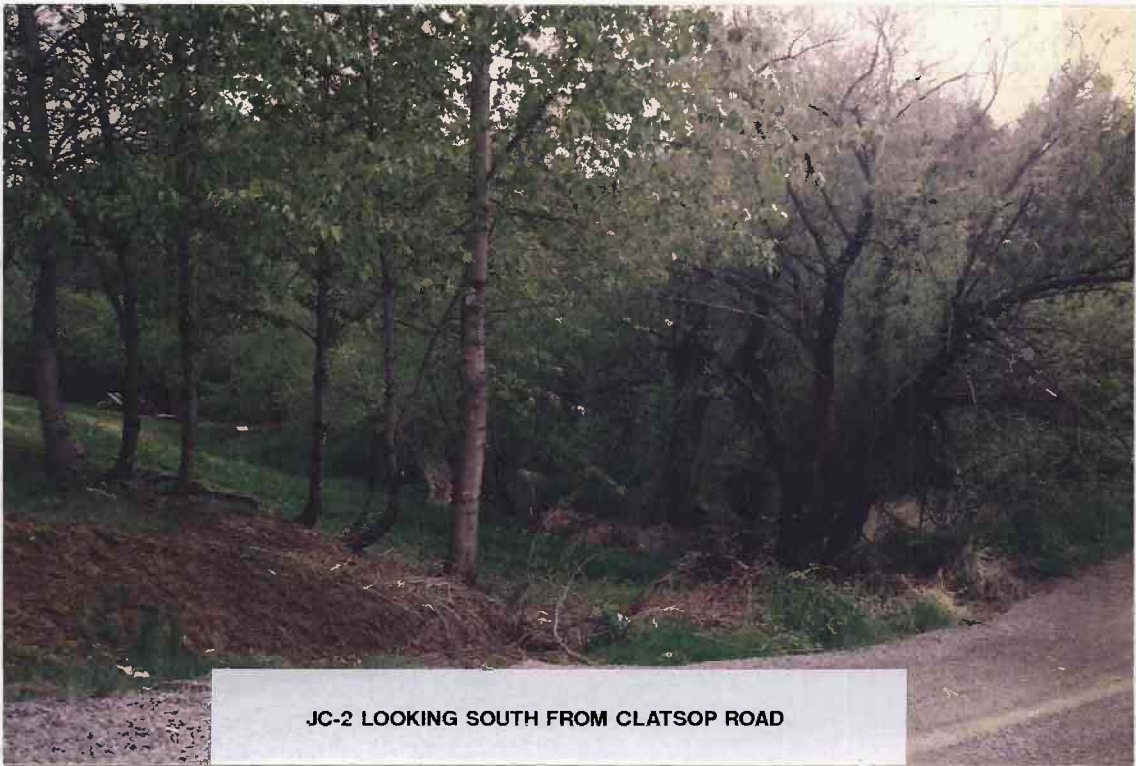
Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/9/95, 5/10/95		Wetland Mapping Code: JC-2	
Investigator(s): FS, DC, JF		Size (acres): 0.5	
Location			
Legal: T1S R2E 26		Tax lot(s): BA100	
Other: North end of 132nd Avenue, north end of survey area			
Hydrologic basin: Johnson Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Perennial drainage			
Wetland classification(s): PFO			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>			<i>Epilobium watsonii</i>
<i>Alnus rubra</i>			<i>Phalaris arundinacea</i>
<i>Pinus monticola</i>			<i>Ranunculus repens</i>
<i>Salix lasiandra</i>			<i>Solanum dulcamara</i>
Comments			
Drainage (perennial?) flows to the north, out of survey area into Johnson Creek watershed. Some impact to floodplain – several nearby houses and clearing activities on east bank. Floodplain 60' wide near road crossing at boundary. Both incised and sheet flow over most of the plain. West side of floodplain saturated to inundated, and very boggy. Water flowing ~ 2' wide, 6" deep approaching two 24" culverts.			
SS# 49,50			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



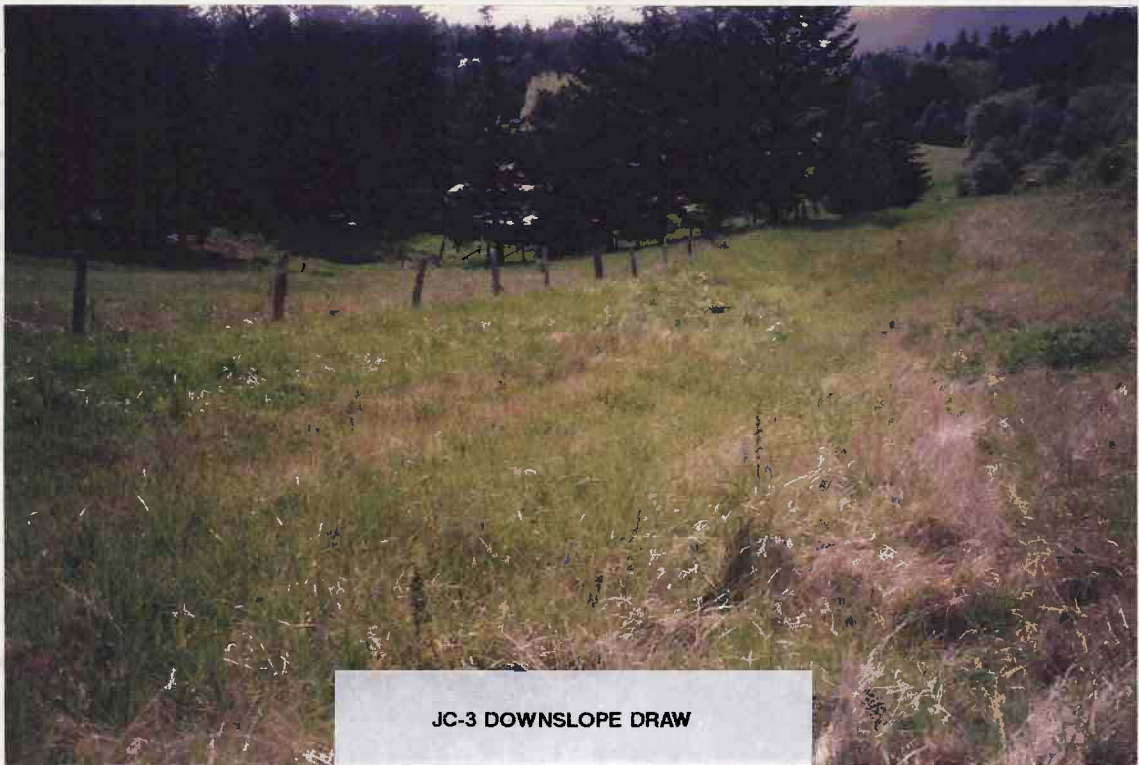
JC-2 LOOKING SOUTH FROM CLATSOP ROAD

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/9/95 and 5/17/95		Wetland Mapping Code: JC-3	
Investigator(s): FS, JF		Size (acres): 0.09	
Location			
Legal: T1S R2E 26		Tax lot(s): AB500, AB1800	
Other: Bill Stingel's property, west side of 132nd Avenue, and field NE			
Hydrologic basin: Johnson Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Surface runoff, groundwater seepage			
Wetland classification(s): PEM			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
			<i>Agrostis tenuis</i>
			<i>Anthoxanthum odoratum</i>
			<i>Festuca arundinacea</i>
			<i>Glyceria sp.</i>
			<i>Holcus lanatus</i>
Comments			
Runoff water is kept near the surface by clay layer tilled in drainageways. Obvious drainage during rainy periods – open fields subject to upslope seepage – perched water table. Soil in tilled field moist, but not saturated. Area at the base of 3 drain tilled swales was at one time dammed. Surface water there was flowing ~ 1' W x 0.5" D on 5/9/95.			
SS# 43,45,46			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



JC-3 DOWNSLOPE DRAW

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/30/95, 6/1/95		Wetland Mapping Code: MS-1	
Investigator(s): FS, DC, JF		Size (acres): 3.09	
Location			
Legal: T1S R2E 34 and 35		Tax lot(s): 34: D1800, D1900, DA8700	
Other: Mt. Scott Creek, west of SE 129th Avenue		35: C1000, C900, C800,	
Hydrologic basin: Mt. Scott Creek		C700, C601, B500, BB600	
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Mt. Scott Creek			
Wetland classification(s): PFO, PSS, POW/Perennial stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Inus rubra</i>	<i>Alnus rubra</i>	<i>Rubus discolor</i>	<i>Cirsium arvense</i>
<i>Populus trichocarpa</i>	<i>Crataegus monogyna</i>	<i>Rubus laciniatus</i>	<i>Dactylis glomerata</i>
<i>Salix lasiandra</i>			<i>Festuca arundinacea</i>
			<i>Holcus lanatus</i>
			<i>Juncus effusus</i>
			<i>Phalaris arundinacea</i>
			<i>Poa trivialis</i>
			<i>Scirpus microcarpus</i>
			<i>Urtica dioica</i>
			<i>Veronica americana</i>
Comments			
Upper end of drainageway flowing SE to Mt. Scott Creek is mostly under a stand of Douglas fir. It continues through a thicket of Himalayan blackberry and English hawthorne. Large volumes of water flows through this drainage related to storm events. Small side drainage issues from culvert (24") that originates above Mt. Scott Creek Lane. Riparian area has been narrowed by clearing but still has good structural diversity as a functional wildlife corridor. At south end of creek, a farm pond (70' x 70') has been created by large earthen dam road crossing. Small amount of wetland vegetation along bypass channel section of stream south of dam has been impacted for >200' but then re-enters mixed decid./conif. forest overstory.			
S# 7,8,9,10,13,51,52			

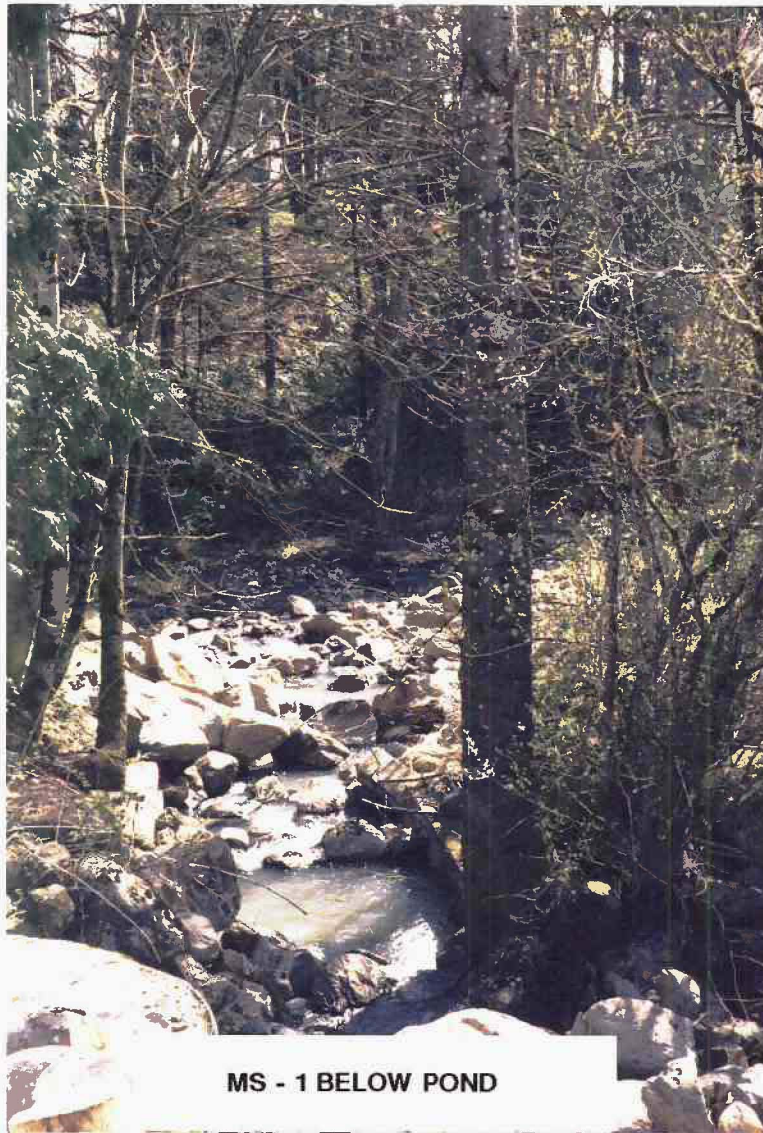
Wetland Classification Codes:

PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water



MS - 1 BELOW POND



MS-1 AROUND DATA POINT 7,8

HAPPY VALLEY LOCAL WETLANDS INVENTORY

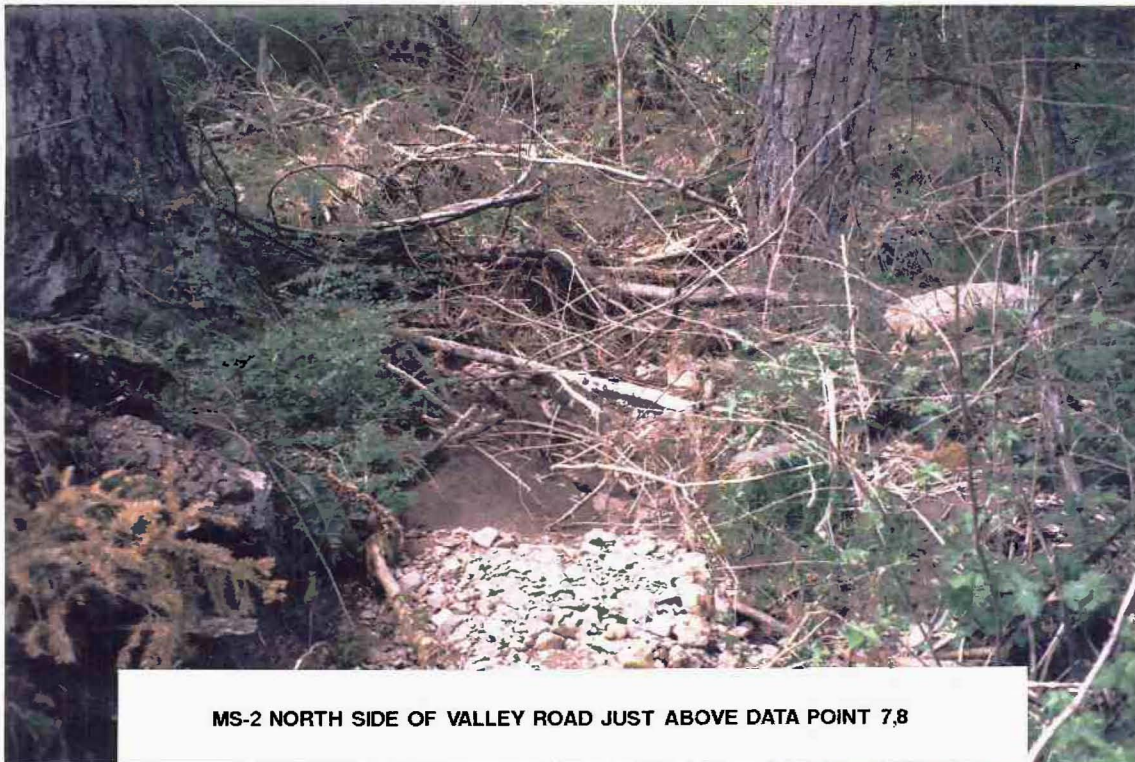
– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: MS-2	
Investigator(s): FS, JF		Size (acres): 2.09	
Location			
Legal: T1S R2E 34		Tax lot(s): 101, 100, AB1600, AB600,	
Other: South of Idleman Road on Hillside Drive		AB700, AB800, 400	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Groundwater seepage, overland sheet flow, intermittent			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>	<i>Corylus cornuta</i>	<i>Rubus discolor</i>	<i>Athyrium filix-femina</i>
<i>Populus trichocarpa</i>	<i>Crataegus monogyna</i>	<i>Rubus ursinus</i>	<i>Polystichum munitum</i>
<i>Pseudotsuga menziesii</i>	<i>Oemleria cerasiformis</i>		
	<i>Prunus sp.</i>		
	<i>Salix sp.</i>		
	<i>Symphoricarpos albus</i>		
Comments			
Limited access to drainageways. Flow appears to be intermittent beneath mixed wooded areas.			
Vegetation consists mainly of relatively mature, mostly deciduous stand among residences.			

Wetland Classification Codes:
PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



MS-2 at Cresthill Road



MS-2 NORTH SIDE OF VALLEY ROAD JUST ABOVE DATA POINT 7,8

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: MS-3	
Investigator(s): FS, JF		Size (acres): 0.13	
Location			
Legal: T1S R2E 34		Tax lot(s): DC601, DC600, DC500,	
Other: West side of Idleman Road, south of Dorset Lane		DC100, DC200	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Groundwater seepage, surface drainage			
Wetland classification(s): Intermittent stream/seep			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Symphocarpus albus</i>	<i>Rubus ursinus</i>	<i>Carex deweyana</i>
<i>Prunus sp.</i>			
<i>Populus trichocarpa</i>			
Comments			
Soil is not hydric, probably not wetland. Seep area may be feed by septic fields. Obvious surface drainage path through woods – rapid seasonal flows. Flow is piped under fill from new light blue house, and continues south through wooded area to road. Area north of woods obviously disturbed and cut over. Possible surface drainage at lower end of slope. Lots of yard debris dumped in area.			
SS# 5,6			

Wetland Classification Codes:

PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/30/95		Wetland Mapping Code: MS-4	
Investigator(s): FS, DC, JF		Size (acres): 0.02	
Location			
Legal: T1S R2E 35		Tax lot(s): BB1200	
Other: West side of 129th, north of SE Valley Lane			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Surface water			
Wetland classification(s): PEM, PFO			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Crataegus monogyna</i>			<i>Agrostis stolonifera</i>
<i>Populus trichocarpa</i>			<i>Epilobium watsonii</i>
			<i>Festuca arundinacea</i>
			<i>Poa trivialis</i>
Comments			
Obvious ponding in the area, ~ 25' x 15'. Not wet or saturated during site visit. Mostly bare ground in pond. Wetland is patchy within a flat area downslope from a disturbed area with asphalted areas and other areas of fill.			
SS# 14,15			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/30/95, 6/1/95		Wetland Mapping Code: MS-5	
Investigator(s): FS, DC, JF		Size (acres): 4.50	
Location			
Legal: T1S R2E 35		Tax lot(s): BA1500, BA1600, BA1700, BA1800,	
Other: Mt. Scott Creek, east of 129th Avenue, near		BA1900, BA2100, A1900, A1800,	
Mt. Scott Creek Lane, south of King Road		BA100, A1700, BA200, A1701, BA2200,	
Hydrologic basin: Mt. Scott Creek		B900, B300, B201, B100, B202, B200	
Soils			
Mapped series: Cascade silt loam, Powell silt loam			
Taxonomic class: Cascade: Fine-silty, mixed, mesic Typic Fragiumbrept			
Powell: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Mt. Scott Creek			
Wetland classification(s): PFO, PSS, PEM			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Salix lasiandra</i>	<i>Rubus discolor</i>	<i>Alopecurus pratensis</i>
<i>Populus trichocarpa</i>	<i>Salix sitchensis</i>		<i>Athyrium filix-femina</i>
<i>Pseudotsuga menziesii</i>	<i>Sambucus racemosa</i>		<i>Phalaris arundinacea</i>
<i>Salix scouleriana</i>	<i>Symphoricarpos albus</i>		<i>Tellima grandiflora</i>
Comments			
Overstory of Douglas fir, black cottonwood, and red alder. Scattered large Douglas firs up to 48" DBH.			
Most other Douglas fir and cottonwoods ~ 24" DBH. Tributary to Mt. Scott Creek enters channel from the north and is deeply incised, 3-4' W, 3-4' D. Flowing water ~ 20" W x 2" D. No access in north end beyond point where sewer pipeline grading opens out into a field. Appears that extensive ponding takes place north of the creek. Wetland bench between creek and SE Scott Creek Lane ~ 50' W. Shrubs and low deciduous trees-willows, red alder line the creek in the downstream part.			
SS# 21,22,31,32,33,34,35			

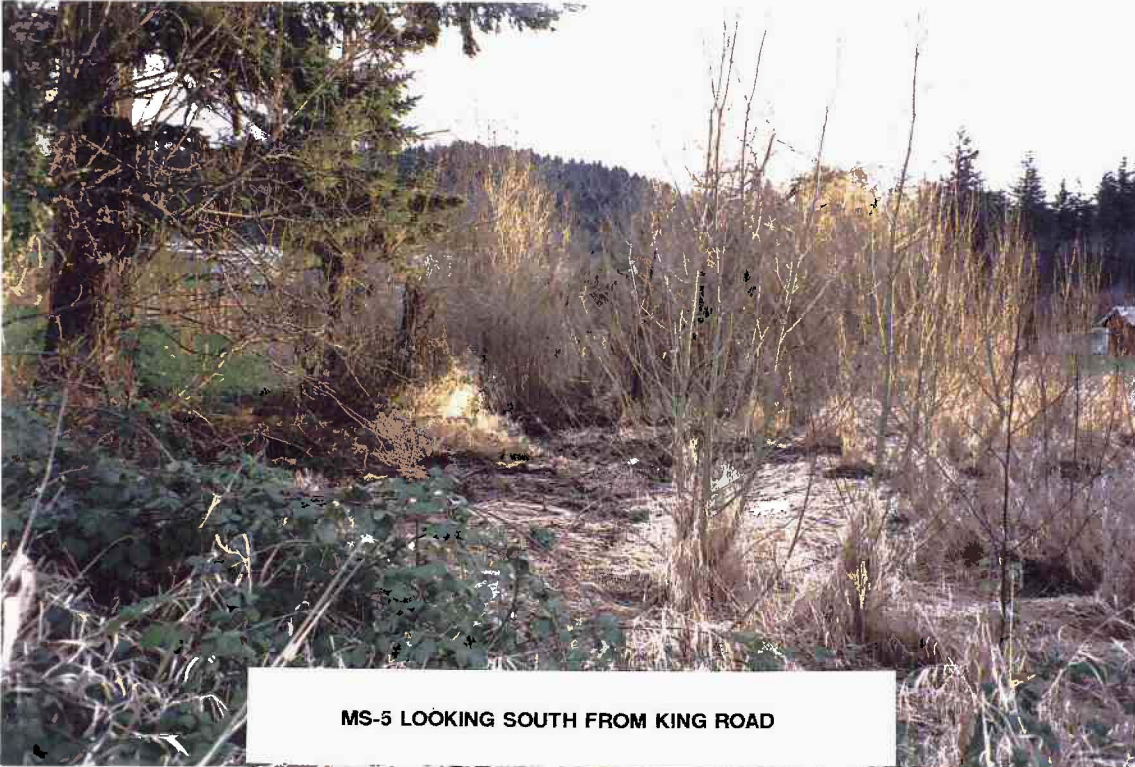
Wetland Classification Codes:

PFO = alustrineforested

PSS = alustrinescrub-shrub

PEM = alustrine emergent

POW = alustrineo enwater



HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: MS-6	
Investigator(s): FS, JF		Size (acres): 0.28	
Location			
Legal: T1S R2E 35		Tax lot(s): BB501, BB400, BB100	
Other: West side of 129th, south of intersection of King Road			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Surface drainage			
Wetland classification(s): PEM, PSS			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
	<i>Salix scouleriana</i>		<i>Phalaris arundinacea</i>
	<i>Crataegus douglasii</i>		<i>Festuca arundinacea</i>
			<i>Poa trivialis</i>
Comments			
Drainage flows toward the SE to Mt. Scott Creek, isolated by culverts. Channel is ~ 30" W x 15" D, with flowing water ~ 30" W x 6" D. Strong orange/rust cast in water, with lots of silt and algal growth. Side slope vegetation has been disturbed. Lots of yard debris and other dumping into channel.			
SS# 19,20			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



MS-6 FROM 129TH

HAPPY VALLEY LOCAL WETLANDS INVENTORY

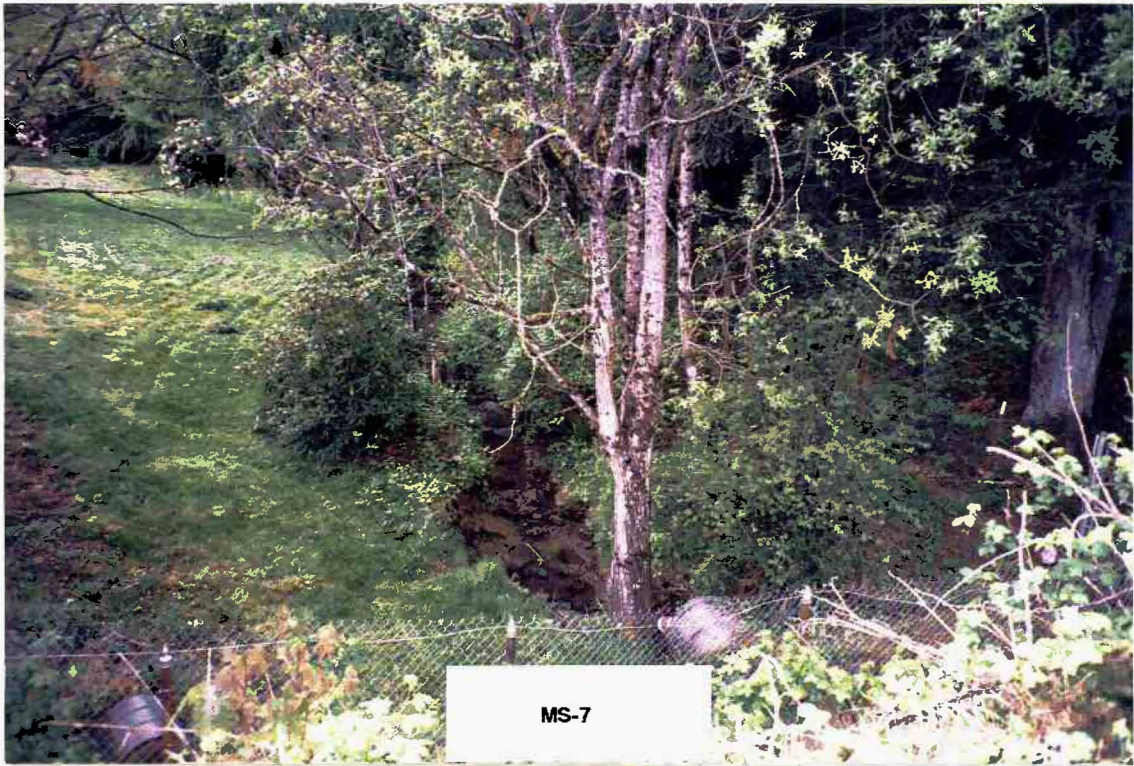
– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: MS-7	
Investigator(s): FS, JF		Size (acres): 0.06	
Location			
Legal: T1S R2E 26 and 27		Tax lot(s): 26: CB2000, CB2100, CC302, CC201	
Other: North and south of Greiner Lane, west side		CC202, CC200, CC800, CC900,	
of Mt. Scott Blvd.		CC1000, CC1100, CC1200, CC1300,	
Hydrologic basin: Mt. Scott Creek		CC3500. 27: DA2800, DA2700	
Soils			
Mapped series: 13D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Intermittent surface drainage			
Wetland classification(s): Intermittent stream/PEM at S end			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>	<i>Corylus cornuta</i>	<i>Hedera helix</i>	<i>Polystichum munitum</i>
<i>Pseudotsuga menziesii</i>	<i>Oemleria cerasiformis</i>		<i>Veronica americana</i>
	<i>Symphoricarpos albus</i>		<i>Epilobium watsonii</i>
Comments			
Incised channel flows south, roughly parallels Mt. Scott Blvd. Canopy of mixed deciduous and coniferous forest; Douglas firs and mostly bigleaf maple closer to the water. Water is restricted to the channel which has moderately sloping terraces on both sides. Channel measures 3-4' W and 2' D. Flowing water measured at 12" W and 1" D. Creek bed: 65% cobbles, 25% boulders, 10% silt. OFF-SITE: At the southern end the water flows into a culvert that is placed too high and has allowed an emergent wetland area to form approximately 10 feet wide narrowing to 3 feet in the north where the water flows from a culvert under a driveway.			
SS# 18			

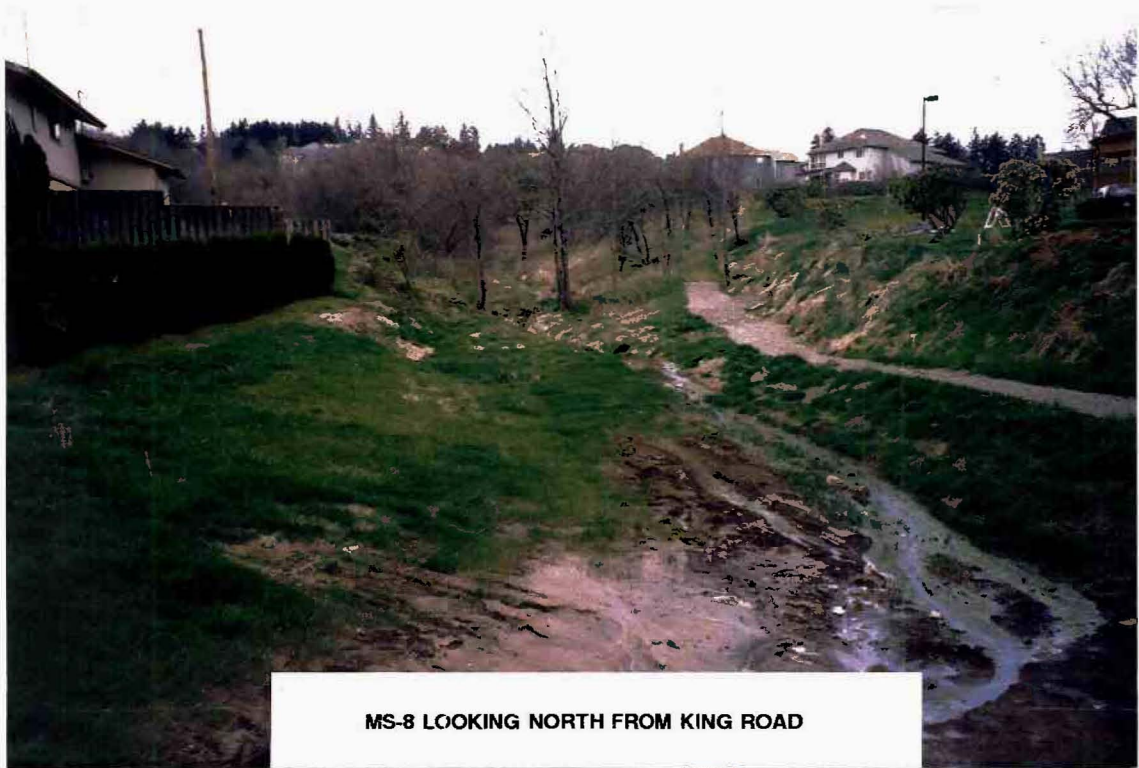
Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub PEM = palustrine emergent

POW = palustrine open water



MS-7



MS-8 LOOKING NORTH FROM KING ROAD

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/30/95		Wetland Mapping Code: MS-9	
Investigator(s): FS, DC, JF		Size (acres): 0.003	
Location			
Legal: T1S R2E 26		Tax lot(s): CD3100	
Other: West side of 132nd Avenue, north of SE King Road			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13B – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Surface drainage, groundwater seepage			
Wetland classification(s): PSS/intermittent			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Pseudotsuga menziesii</i>	<i>Spiraea douglasii</i>	<i>Rubus ursinus</i>	<i>Anthoxanthum odoratum</i>
			<i>Holcus lanatus</i>
Comments			
Evidence of ponding in ditch, 30" W x 1' D. Soils moist but not saturated. Definitely an intermittent drainageway, dry during site visit. Marginal wetland restricted to ditch, does not continue far to the north, less than 50' long. Thickets in area mostly of hawthorne and Douglas' spiraea. Some domestic apple trees and blackberries also Sitka willow near the sample site.			
SS# 25,26			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

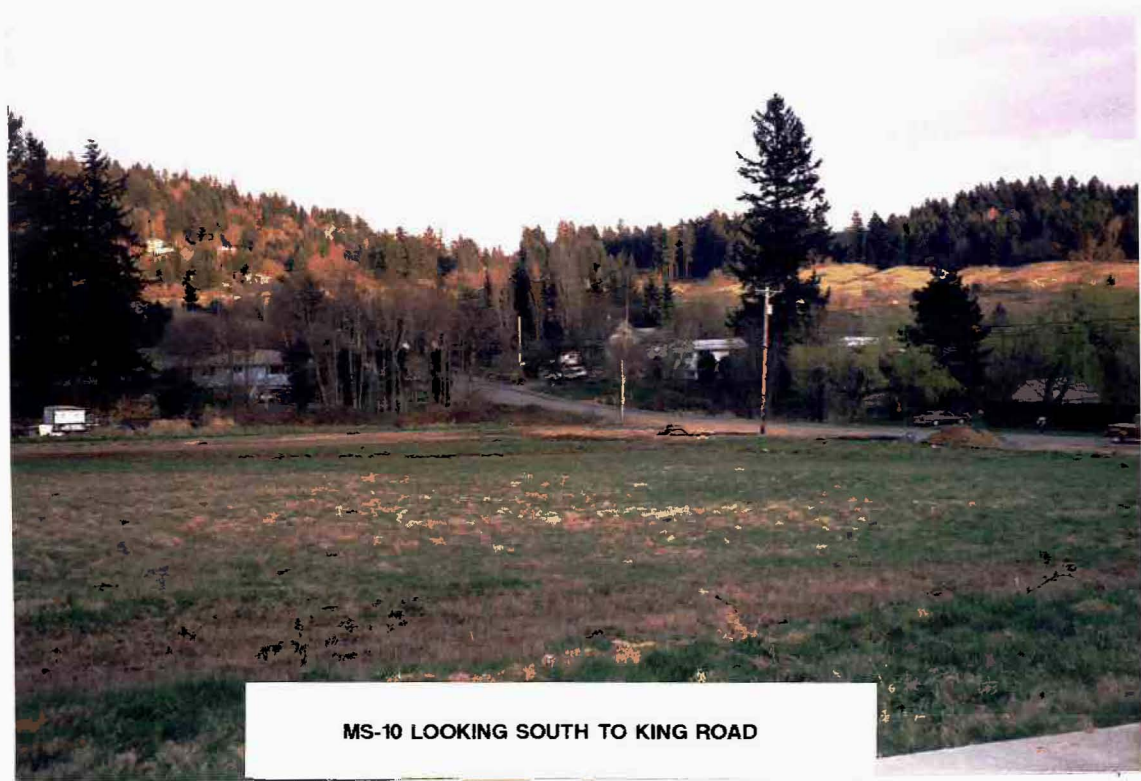
Date(s) of field verification: 5/19/95		Wetland Mapping Code: MS-10	
Investigator(s): FS, DC, JF		Size (acres): 1.80	
Location			
Legal: T1S R2E 26		Tax lot(s): D2201, D2401, D2300, D2400	
Other: NE corner of intersection of 132nd Avenue and SE King Road			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13B – Cascade silt loam, 70B – Powell silt loam			
Taxonomic class: 13B: Fine-silty, mixed, mesic Typic Fragiumbrept			
70B: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Surface drainage, groundwater seepage			
Wetland classification(s): PEM			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
			<i>Holcus lanatus</i>
			<i>Juncus effusus</i>
			<i>Lotus corniculatus</i>
			<i>Ranunculus repens</i>
			<i>Typha latifolia</i>
			<i>Veronica americana</i>
Comments			
In open fields, south of church: Large swales excavated on west and north edges, influence flow across site.			
Clay layer is at surface in swales, indicating topsoil has been scraped off. In (north) east end of swale behind church property, there is obvious long-term ponding measured up to 6' wide.			
SS# 27,28,30			

Wetland Classification Codes:
PFO = palustrine forested

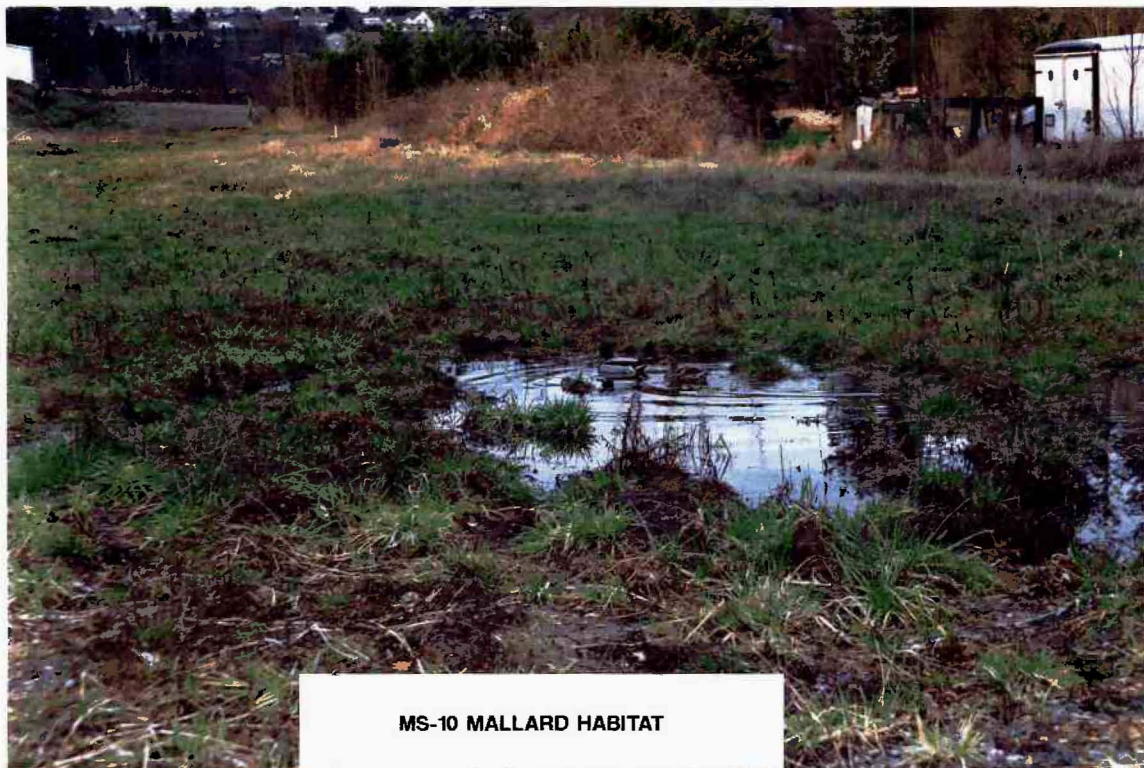
PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water



MS-10 LOOKING SOUTH TO KING ROAD



MS-10 MALLARD HABITAT

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/10/95, 5/19/95		Wetland Mapping Code: MS-11	
Investigator(s): FS, DC, JF		Size (acres): 1.80	
Location			
Legal: T1S R2E 26		Tax lot(s): D1900, D1901, D2000,	
Other: Mt. Scott Creek, north of SE King Road, south end		D2100, D2201, D2500,	
of Happy Valley City Park		D2400, D2700, D1801	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: Powell silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Mt. Scott Creek, groundwater seepage, Mt. Scott Creek flood overflow			
Wetland classification(s): PFO, POW			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Cornus stolonifera</i>	<i>Rubus discolor</i>	<i>Athyrium filix-femina</i>
	<i>Corylus cornuta</i>	<i>Rubus ursinus</i>	<i>Phalaris arundinacea</i>
			<i>Ranunculus repens</i>
			<i>Veratrum californicum</i>
Comments			
Mt. Scott Creek channel is ~7' W, 1-1.5' D, with water flowing 6" D, some pool/riffle sections. Creek bed is cobbled, with boulders and some silt. Ponding on low benches along the creek. The forest overstory is made up of Douglas fir and red alder. Upstream, Mt. Scott Creek measures ~5' W x 6" D, and averages 10' W x 2' D. Sections vary from cobbly with silt to all silt. Wet benches in places receive upslope seepage. Wide benches and large culverts (72" D) in upstream section.			
SS# 29,38,39,40			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water



MS-11 AT NORTH SIDE OF KING ROAD

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/10/95		Wetland Mapping Code: MS-12	
Investigator(s): FS, DC		Size (acres): 0.34	
Location			
Legal: T1S R2E 26		Tax lot(s): CA2000, CA2100, CA2101,	
Other: West side of 132nd Avenue, north of Geneva Way		C2102	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Surface, intermittent stream, culvert/blockage downstream			
Wetland classification(s): PEM/intermittent			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
			<i>Festuca arundinacea</i>
			<i>Holcus lanatus</i>
			<i>Poa trivialis</i>
			<i>Ranunculus repens</i>
Comments			
Swale drains down from Mt. Scott (NW to SE) – low end on west side of 132nd Avenue broadens to ~ 50' wide. Open wet pasture lined by blackberry thickets and hawthorne. Vegetation in the swale is dominated by tall fescue, common velvet grass, bluegrass, and creeping buttercup. Upslope main drainage passes beneath low ridge of douglas fir and heavy blackberry cover. Flows measured at 1–2" deep except in narrow incised channel upslope.			
SS# 36,37			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



MS-12 LOOKING WEST FROM WEST SIDE OF 132ND

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/19/95, 5/30/95		Wetland Mapping Code: MS-13	
Investigator(s): FS, DC, JF		Size (acres): 2.75	
Location			
Legal: T1S R2E 26		Tax lot(s): D1100, D1200, D1300,	
Other: Field west of Happy Valley City Park, south of		D1400, D1500, D1801	
Ridgecrest Road, east of 132nd Avenue			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 70B – Powell silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Surface drainage, groundwater seepage			
Wetland classification(s): PEM			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Fraxinus latifolia</i>	<i>Crataegus douglasii</i>		<i>Alopecurus pratensis</i>
	<i>Crataegus monogyna</i>		<i>Anthoxanthum odoratum</i>
	<i>Amelanchier alnifolia</i>		<i>Festuca arundinacea</i>
			<i>Juncus effusus</i>
			<i>Juncus tenuis</i>
			<i>Ranunculus sp.</i>
Comments			
Delineation by A.G. Crook Company in southern field. Open fields extend north from Mt. Scott Creek riparian strip. Swales in a open pasture. Shrub and tree growth of Oregon ash and hawthorne scattered and along margins. (5/30) North end: Some ditching, hedge rows along east field edge. Dominated by 20' tall Douglas and English hawthorne, western serviceberry. Several shallow swales in field with rushes. Middle field has obviously been drained, current grazing. Ditch between fields. ~ 3.5' of fill in most northerly field.			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

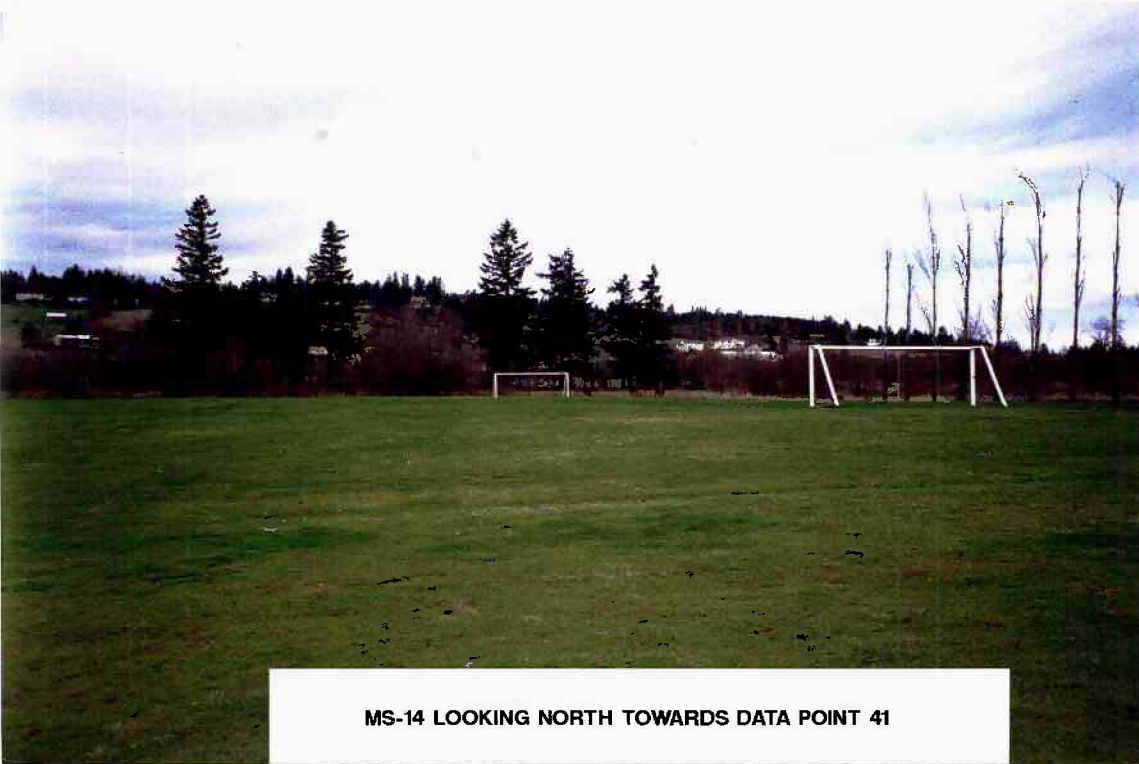
POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

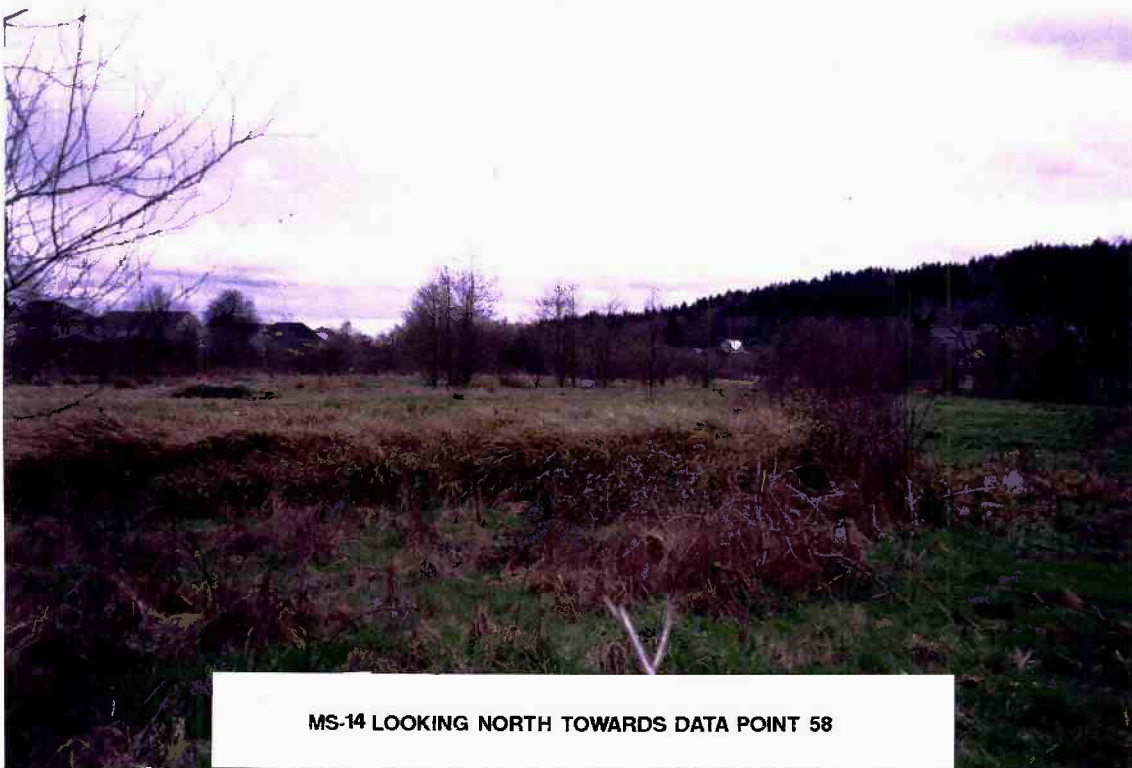
– Wetland Summary Sheet –

Date(s) of field verification: 1/19, 5/19/95		Wetland Mapping Code: MS-14	
Investigator(s): FS, DC, JF		Size (acres): 23.5 within study area	
Location			
Legal: T1S R2E 26		Tax lot(s): DD100, 2800	
Other: North edge of grade school property, north side of SE King Rd., east of city park			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 70B – Powell silt loam, 7B – Borges silty clay loam			
Taxonomic class: 70B – Fine-silty, mixed, mesic Typic Fragiochrept. 7B – fine, mixed, nonacid, mesic, Typic Humaquept.			
Hydrology			
Hydrologic source: Groundwater seepage, surface drainage			
Wetland classification(s): PEM, PSS			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Rosa pisocarpa</i>	<i>Rubus discolor</i>	<i>Mowed lawn grasses</i>
<i>Fraxinus latifolia</i>	<i>Rosa nutkana</i>		<i>Ranunculus repens</i>
<i>Crataegus monogyna</i>			<i>Agrostis tenuis</i>
<i>Crataegus douglasii</i>			<i>Carex leporina</i>
			<i>Anthoxanthum odoratum</i>
			<i>Alopecurus pratensis</i>
			<i>Carex obnupta</i>
			<i>Juncus effusus</i>
Comments			
Southern edge playground vegetation is mowed: 80% lawn grasses, 20% creeping buttercup. NE corner was ponded and saturated in early spring, and still wet on last site visit. Mowed lawn grass cannot be identified. The majority of the wetland is located in an abandoned field with Mt. Scott Creek, flowing through the middle of the wetland. Forested upland areas line the creek in the western end with wide open wet pastures dominating the rest of the wetland. Scrub/shrub wetland areas are located along the northern edge with blackberry thickets dominating many upland island areas.			
SS# 41			

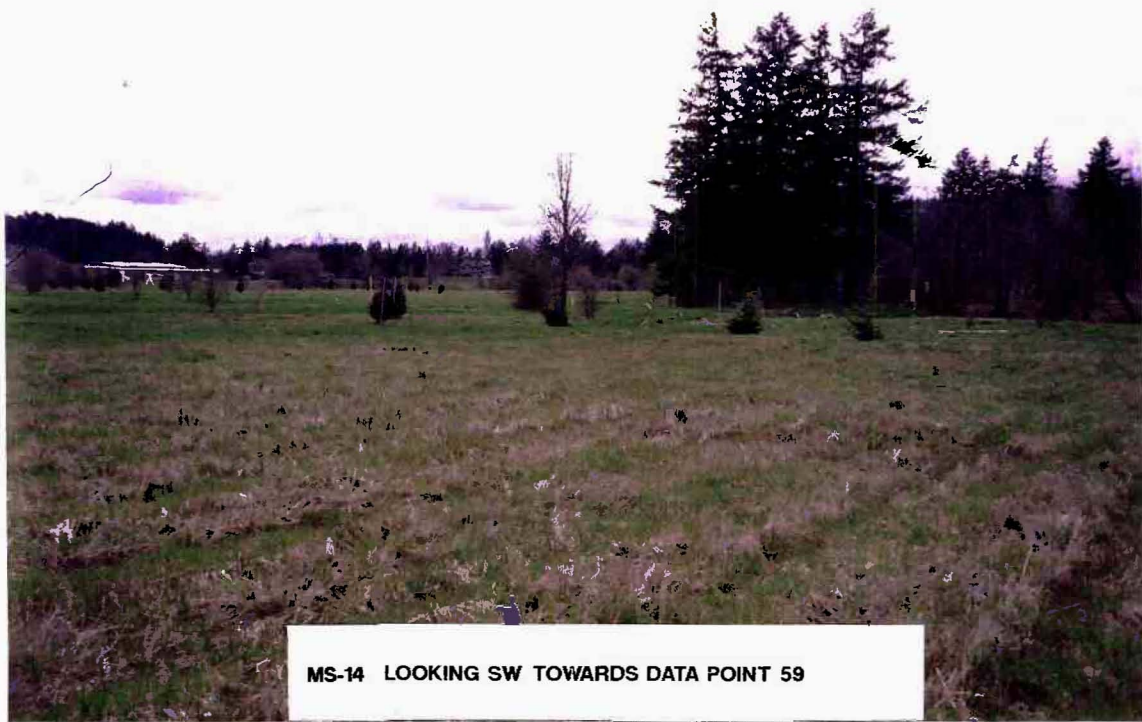
Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



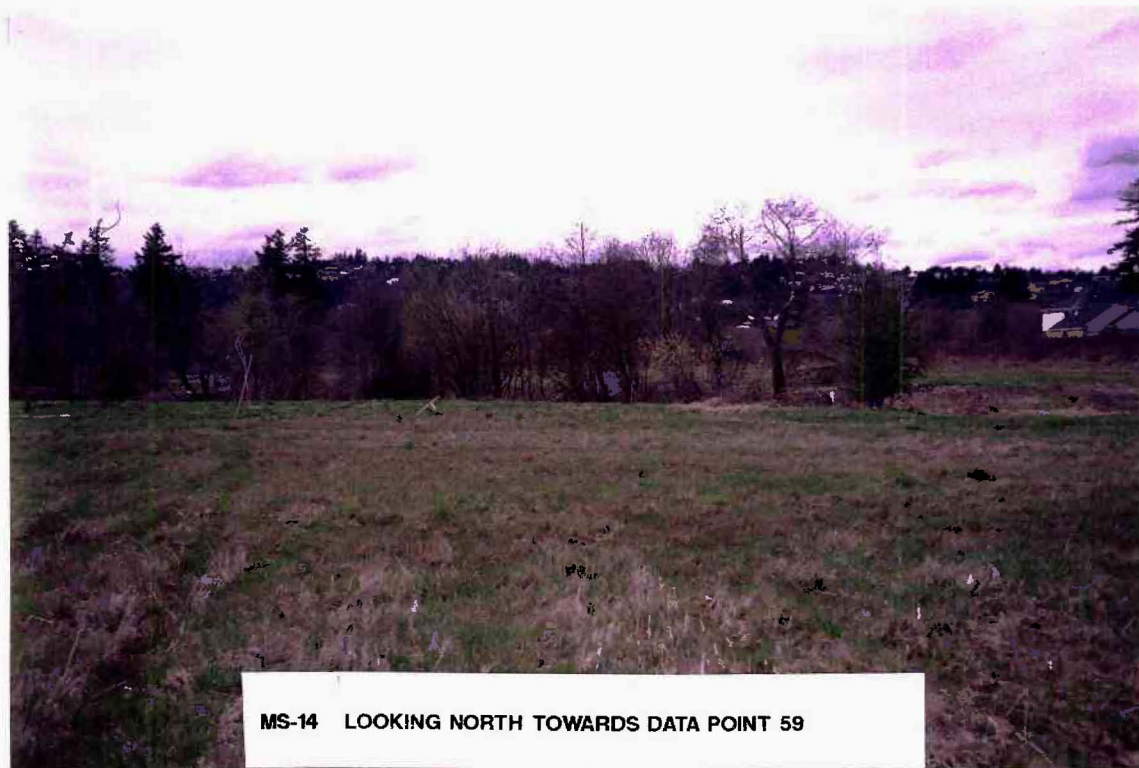
MS-14 LOOKING NORTH TOWARDS DATA POINT 41



MS-14 LOOKING NORTH TOWARDS DATA POINT 58



MS-14 LOOKING SW TOWARDS DATA POINT 59



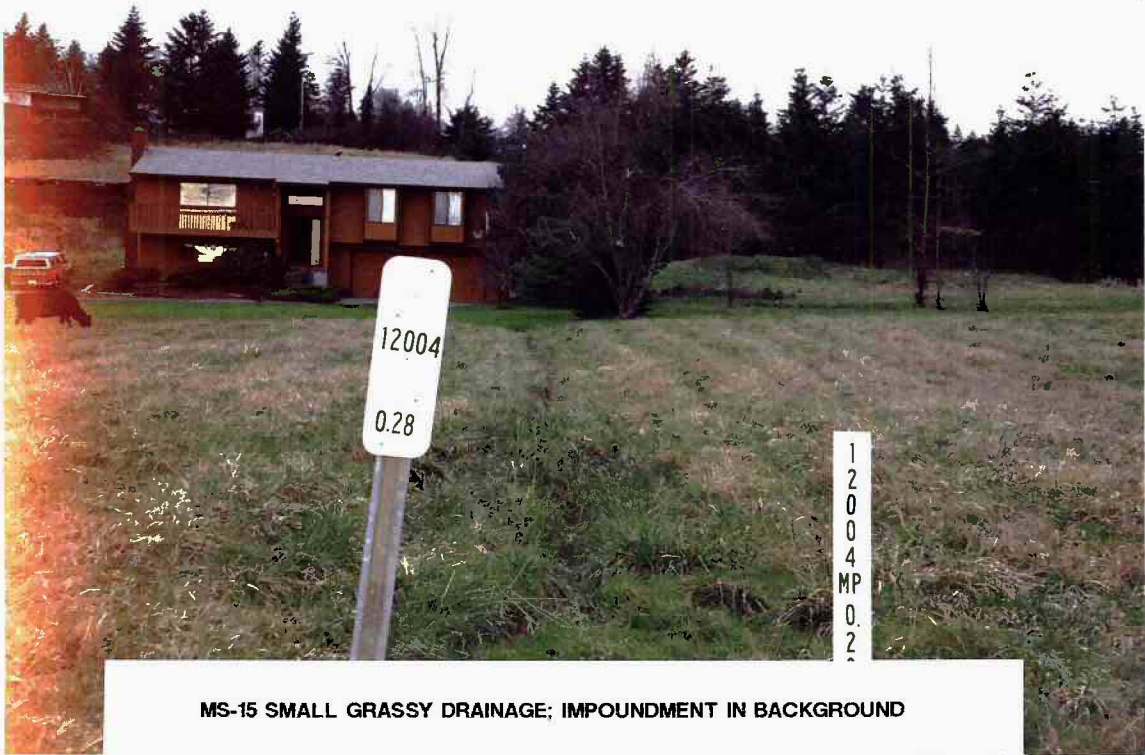
MS-14 LOOKING NORTH TOWARDS DATA POINT 59

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/3/95		Wetland Mapping Code: MS-15	
Investigator(s): FS, DC, JF		Size (acres): 0.02	
Location			
Legal: T1S R2E 26		Tax lot(s): AD100, AD1200, AD1300	
Other: West of Highland Road (145), north of Callahan, west of MSCB			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Upslope runoff, groundwater seepage			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Populus trichocarpa</i>			
Comments			
Drainageway issues from small excavated (~ 20' x 20') pond, fed by upslope runoff (seep?). Pond is contained by earthen berm. Drainageway flows to south from pond within small incised channel (~ 1'-2' W, 4"-5" D). Obvious overflow in sheets during storm events. No vegetation in the pond. Clump of 12+ black cottonwood trees, otherwise scattered hawthorn, domestic apple, and Himalayan blackberry clumps.			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



MS-15 SMALL GRASSY DRAINAGE; IMPOUNDMENT IN BACKGROUND

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/3/95, 5/30/95		Wetland Mapping Code: MS – 16	
Investigator(s): FS, DC, JF		Size (acres): 0.34	
Location			
Legal: T1S R2E 25 and 26		Tax lot(s): 25: B1800, B1802	
Other: West of Highland Road (145), north of Callahan		26: AA4209, AA4200, AA4203	
Hydrologic basin: Mt. Scott Creek		AA4204, AA4210, AD100	
Soils			
Mapped series: 70B – Powell silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Groundwater seepage, overland sheet flow, intermittent stream			
Wetland classification(s): PEM, PSS			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Corylus cornuta</i>	<i>Rubus discolor</i>	<i>Epilobium watsonii</i>
<i>Pseudotsuga menziesii</i>	<i>Crataegus monogyna</i>		<i>Equisetum arvense</i>
<i>Salix scouleriana</i>	<i>Oemleria cerasiformis</i>		<i>Festuca arundinacea</i>
			<i>Ranunculus repens</i>
Comments			
Intermittent swale ~ 150' NW of new house/pool – widens from narrow steep drainageway to ~ 20' wide before being culverted a short distance. Obvious intermittent stormwater flows – heavy erosion in disturbed area behind house. OFF-SITE southern end: Wetland in swale S. of culvert, lush grass (mostly tall fescue, alopecurus pratensis) sides dominated by blackberry and one-seed hawthorne.			
North end – Steep ravine through wooded hillside, next to grated roadway on Lucille Street. No water on site visible but drainageway appears to be stormwater driven. Extends a short distance north of Lucille. Intermittent.			
SS# 42			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water



MS-16 DRAINAGE IN FORESTED DRAW (OFF SITE)

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

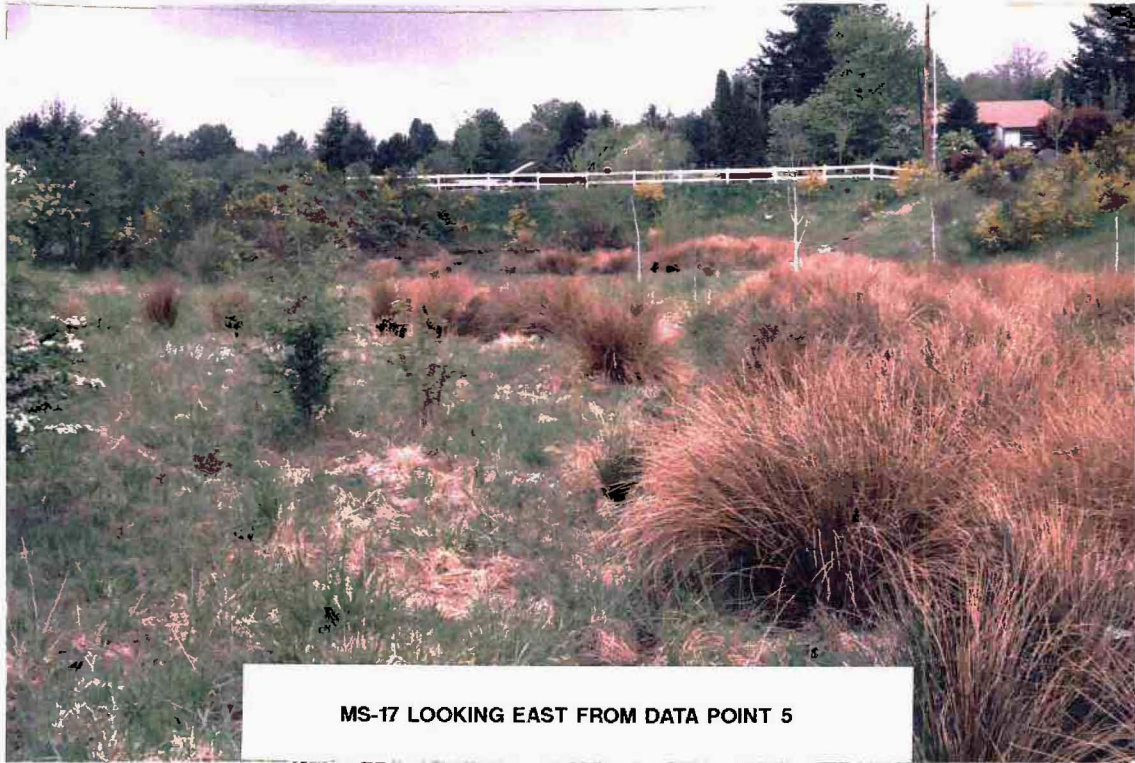
Date(s) of field verification: 6/8/95		Wetland Mapping Code: MS-17	
Investigator(s): DC, JF		Size (acres): 0.30	
Location			
Legal: T1S R2E 35		Tax lot(s): C1801	
Other: East of SE 129th Avenue, south of Mountain Drive			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C and 13D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Stormwater (surface) and groundwater seepage			
Wetland classification(s): PEM, some PSS			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
	<i>Cretaegus monogyna</i>		<i>Holcus lanatus</i>
			<i>Juncus effusus</i>
			<i>Juncus ensifolius</i>
			<i>Juncus tenuis</i>
			<i>Plantago lanceolata</i>
			<i>Poa pretensis</i>
			<i>Anthoxanthum odoratum</i>
			<i>Festuca arundinacea</i>
Comments			
Wetland is used as a stormwater outfall and retention pond, originating from an 18 inch culvert upstream and exits from two large overflow, downstream culverts at SE 129th Avenue. The wetland is confined mostly to a channel an average of 10 feet wide for the upper 200 feet and then spreads out to 50 feet wide for another 200 feet downstream, forming a ponded area (perennial) at the road.			
SS# 11,12			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water



MS-17 LOOKING EAST FROM DATA POINT 5

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/8/95		Wetland Mapping Code: MS-18	
Investigator(s): DC, JF		Size (acres): 0.06	
Location			
Legal: T1S R2E 34 and 35		Tax lot(s): 34: 102, 1800, 190	
Other: West of Mt. Scott Creek, north of Nella Way		35: C600, C700, C800	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Stormwater, intermittent drainageway			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
	<i>Cytisus scoparius</i>	<i>Rubus discolor</i>	<i>Juncus bufonius</i>
	<i>Populus trichocarpa</i>		<i>Lolium perenne</i>
Comments			
Very disturbed excavated or moved drainageway with created pools. Full of boulders and silt. Shows evidence of high erosion and siltation during storm events. Continues through woods, toward Mt. Scott Creek as an intermittent stream, mostly undisturbed but shows signs of siltation. At lower end of housing development, silt deposition as deep as 12", soil shows some mottling, light chroma matrix.			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



MS-18



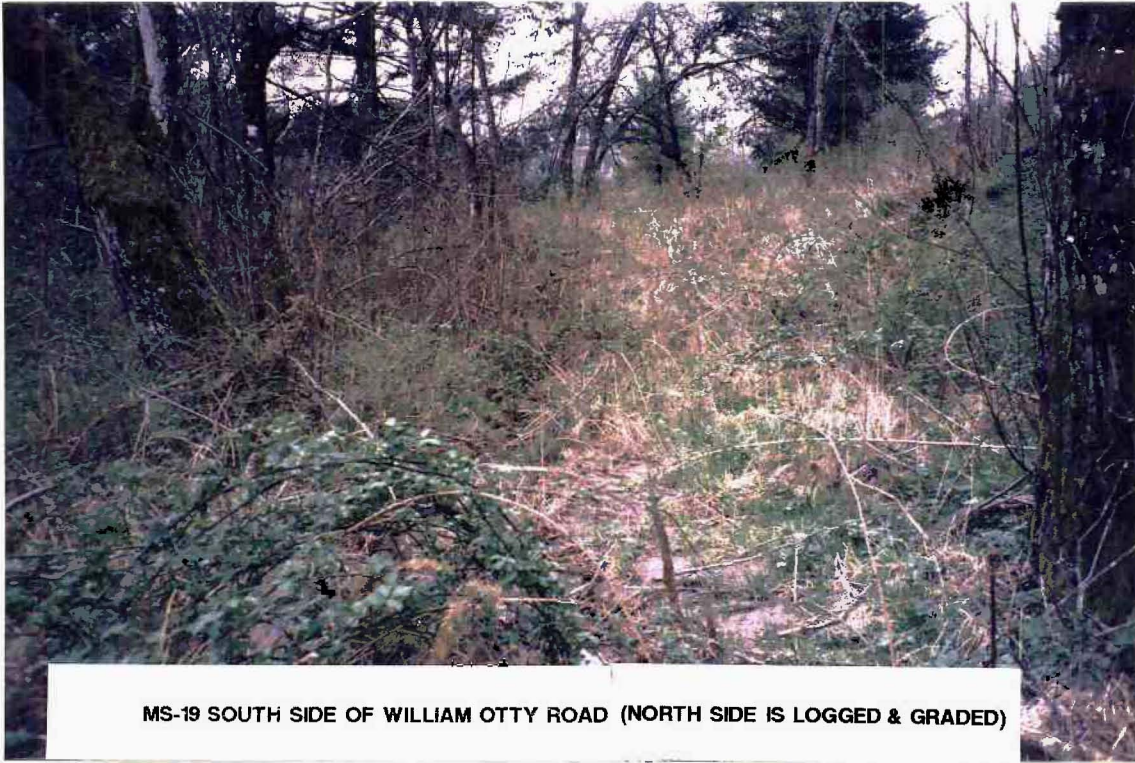
MS-18 UPSLOPE EXCAVATED PONDS

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/30/95		Wetland Mapping Code: MS-19	
Investigator(s): FS, DC, JF		Size (acres): 0.02	
Location			
Legal: T1S R2E 35		Tax lot(s): BB600, BB703	
Other: West of 129th Avenue, south of Wm. Otty Road			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Intermittent drainage, surface			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Populus trichocarpa</i>			<i>Holcus lanatus</i>
			<i>Poa pretensis</i>
Comments			
Upper part of drainageway under Douglas fir overstory. Dominants are Scouler's willow, ornamental cherry, red-osier dogwood, snowberry, Dewey's sedge, fringe cups, small enchanter's nightshade, and Himalayan blackberry.			
SS# 16			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



MS-19 SOUTH SIDE OF WILLIAM OTTY ROAD (NORTH SIDE IS LOGGED & GRADED)

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 6/8/95		Wetland Mapping Code: MS-20	
Investigator(s): DC, JF		Size (acres): 0.009	
Location			
Legal: T1S R2E 35		Tax lot(s): BB501, BB801, BB800	
Other: West of 129th Avenue, north of Wm. Otty Road			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumb rept			
Hydrology			
Hydrologic source: Intermittent drainage, surface			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
			<i>Festuca arundinacea</i>
Comments			
Swale has bigleaf maple and Himalayan blackberry at upper end. A domestic apple tree in center of swale in horse pasture. ORs present where horses have compacted soils. Soils not hydric.			
SS# 17			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 9/28/94, 5/10/95		Wetland Mapping Code: MS-21	
Investigator(s): DC, PF		Size (acres): 0.02	
Location			
Legal: T1S R2E 35		Tax lot(s): A2000, A1900, BA200,	
Other: East of 129th Avenue, south of Mt. Scott Creek Ln.		BA2200	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: Powell silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Intermittent drainage, surface			
Wetland classification(s): PFO, PSS/ Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Crataegous monogyna</i>		<i>Rubus discolor</i>	
<i>Pseudostuga menziesii</i>			
Comments			
The southern-most drainage originates in an excavated and bermed pond in a front yard of a house then flows through a culvert ~ 100+' under roadways. The banks in the northern portion are dominated by Himalayan black hawthorne. A branch joins from the east. Both channels are 1-4' W, 1' D and dry at both times of visit.			
After joining, the water in the channels cross a roadway in culvert and the channel is located in upland Douglas fir-dominated forest flowing into Mt. Scott Creek to the north.			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



MS-21



MS-21

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 3/18/1997		Wetland Mapping Code: MS-22	
Investigator(s): DC		Size (acres): 0.13	
Location			
Legal: T1S R2E 35		Tax lot(s): CB 3200	
Other: East side of 129th Avenue, south of Lazy Hawk Ranch development.			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Seep, surface, intermittent stream, culvert/blockage downstream			
Wetland classification(s): PEM/intermittent			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
			<i>Festuca arundinacea</i>
			<i>Holcus lanatus</i>
			<i>Epilobium watsonii</i>
			<i>Ranunculus repens</i>
			<i>Rumex sp.</i>
Comments			
Seep area, with an intermittent drainage joining near the exit to the wetland. Soils are very disturbed due to excavation and regrading associated with development of an underground stormwater detention structure.			
Surrounding land is open pasture with scattered blackberry and hawthorne thickets. Vegetation in the wetland is dominated by weedy upland and wetland species. Very disturbed site, soils have been mixed and regraded.			
SS# 53, 54, 55, 56			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: PH-1	
Investigator(s): FS, JF		Size (acres): 0.14	
Location			
Legal: T1S R2E 27		Tax lot(s): CA2700	
Other: North side of Tyler Road, east of City View Drive			
Hydrologic basin: Phillips Creek			
Soils			
Mapped series: 14D – Cascade silt loam			
Taxonomic class: Fine – silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Drainage channel			
Wetland classification(s): PSS/intermittent			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
	<i>Salix scouleriana</i>		<i>Juncus effusus</i>
	<i>Spiraea douglasii</i>		<i>Poa trivialis</i>
			<i>Veronica americana</i>
Comments			
In north end of site, the drainageway opens up. Impacted significantly by limited clearing activities, and may be wetter as a result. North of fenceline (no access) wet area narrows to incised drainage under more complete red alder cover. Broad swale with drainageway on south side without access culverted under Tyler Road. Limited water flow, probably intermittent. Dominant overstory of willows.			
SS# 1,2,3,4			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



PH-1 LOOKING NORTH FROM TYLER ROAD

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: PH-2	
Investigator(s): FS, JF		Size (acres): 0.04	
Location			
Legal: T1S R2E 27		Tax lot(s): CC1500, CC890,	
Other: West end of SE Idleman Road, south of Walnut Drive CD3500, CD3800			
Hydrologic basin: Phillips Creek			
Soils			
Mapped series: 14D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumb rept			
Hydrology			
Hydrologic source: Intermittent drainage			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>	<i>Corylus cornuta</i>	<i>Rubus discolor</i>	
<i>Pseudotsuga menziesii</i>	<i>Salix scouleriana</i>		
Comments			
Incised drainage feeding to SW from below water tower on Idleman Road. Large culvert (30" D) below road, with small amount of water trickling out (2" W x 1/4" D). Wooded area with scattered mature Douglas firs, but mostly Scouler's willow and bigleaf maple.			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: PH-3	
Investigator(s): FS, DC		Size (acres): 0.04	
Location			
Legal: T1S R2E 34		Tax lot(s): CB 200	
Other: South of SE Idleman Road, west of Lenore Street, in SW corner of UGB			
Hydrologic basin: Phillips Creek			
Soils			
Mapped series: 13B,C,D; 14D,E – Cascade silt loam and Cascade silt loam, stony stratum			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Surface water			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>	<i>Corylus cornuta</i>	<i>Rubus discolor</i>	<i>pasture grasses</i>
<i>Pseudotsuga menziesii</i>			
Comments			
OFFSITE – Shallow drainage draining open pastures and roadside ditches from Idleman Rd. Intermittent drainage with small amount of water (6" to 12" W x 6" D) flowing through open pasture. Wooded area south of the drainage with Douglas fir and bigleaf maple.			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

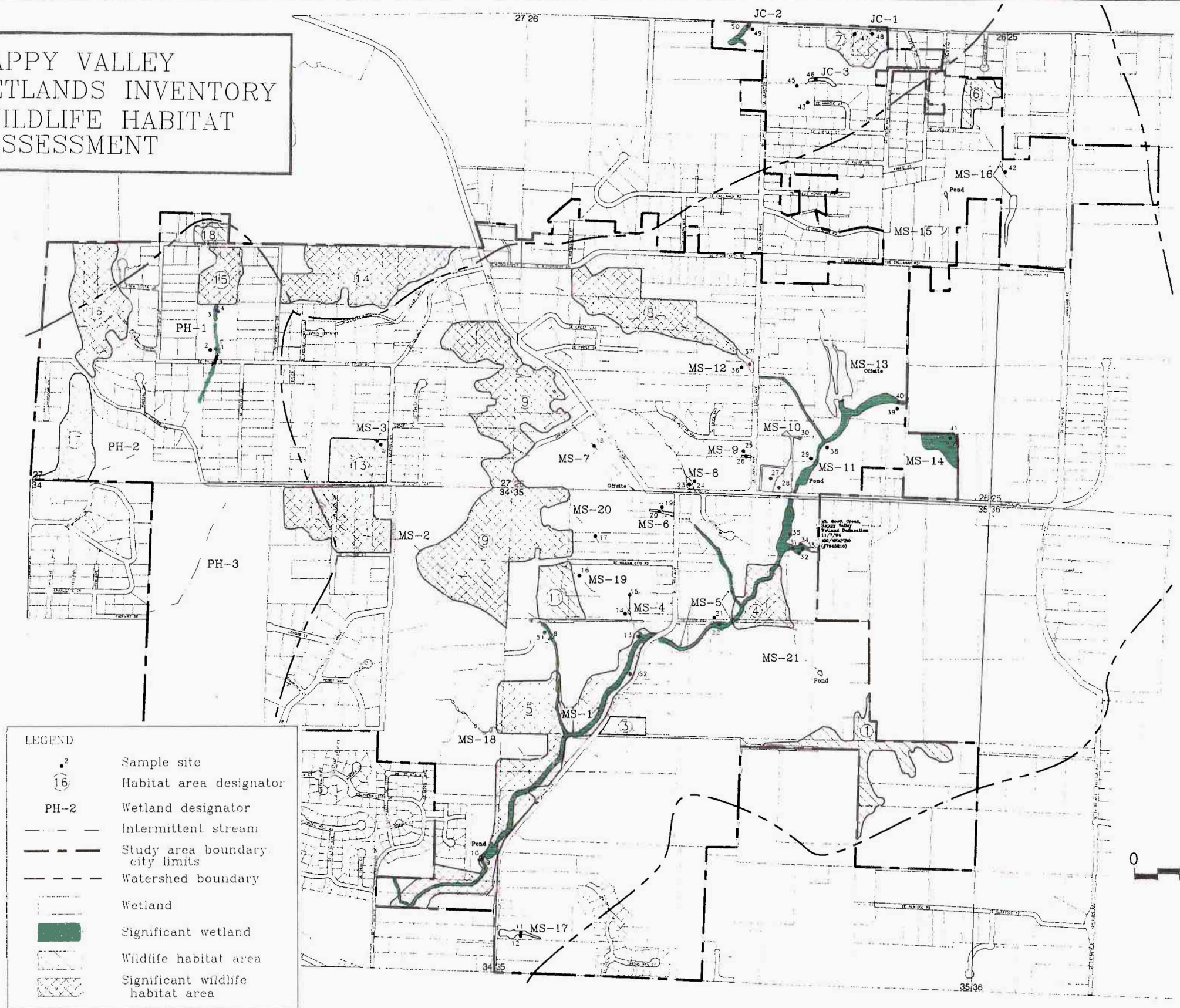


PH-3 BOTTOM OF DRAW



PH-3 BOTTOM OF DRAW AT FAIRWAY DRIVE

HAPPY VALLEY
LOCAL WETLANDS INVENTORY
AND WILDLIFE HABITAT
ASSESSMENT



LEGEND

•	Sample site
①	Habitat area designator
PH-2	Wetland designator
---	Intermittent stream
---	Study area boundary
---	city limits
---	Watershed boundary
■	Wetland
■	Significant wetland
▨	Wildlife habitat area
▨	Significant wildlife habitat area



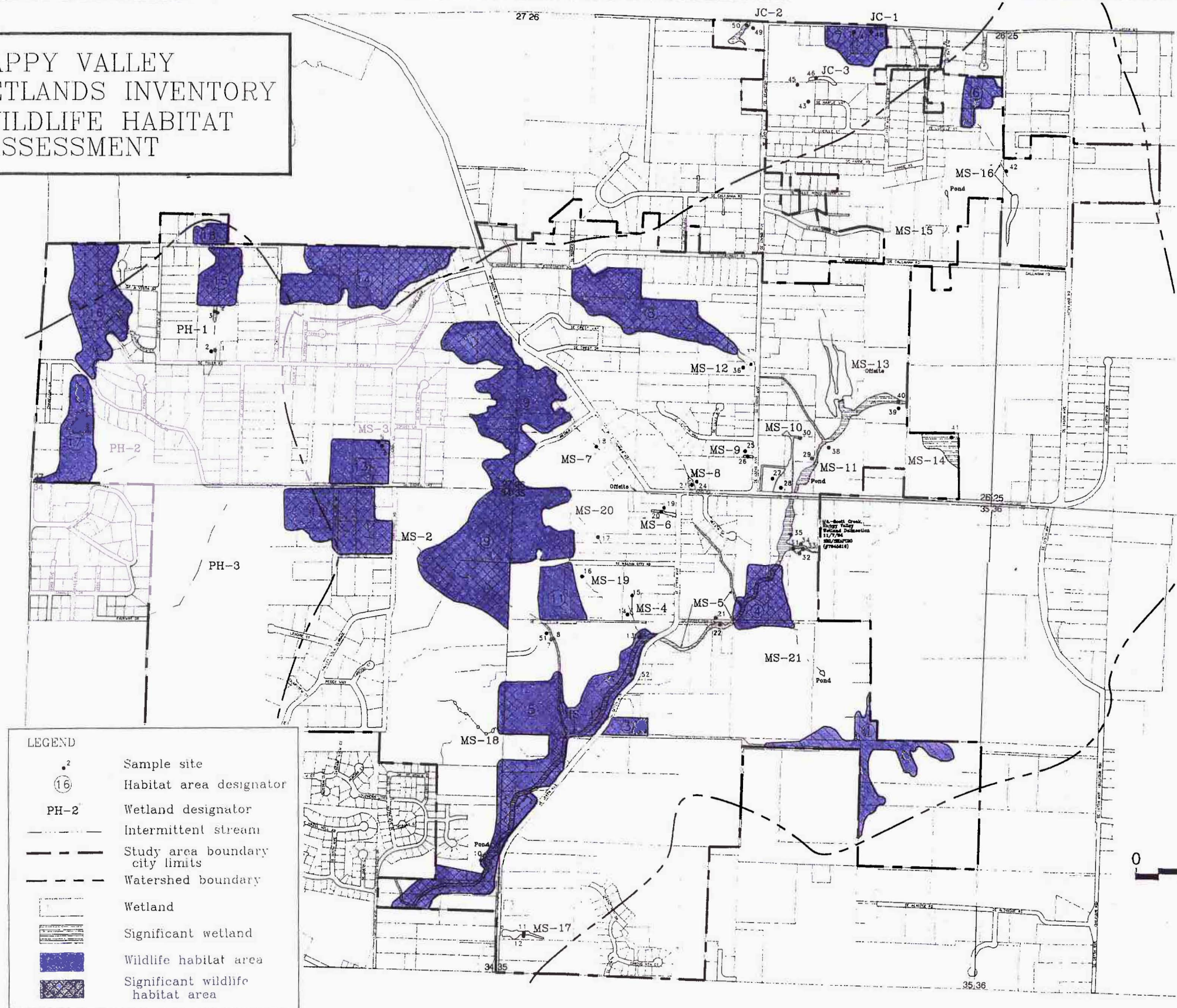
Don't include
14 and other

7945188 12/6/96

Significant wetlands for the Happy Valley Local Wetlands Inventory and Wildlife Habitat Assessment, Clackamas County, Oregon.

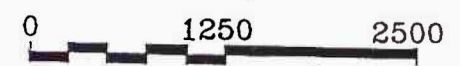
FIGURE
5

HAPPY VALLEY
LOCAL WETLANDS INVENTORY
AND WILDLIFE HABITAT
ASSESSMENT



LEGEND

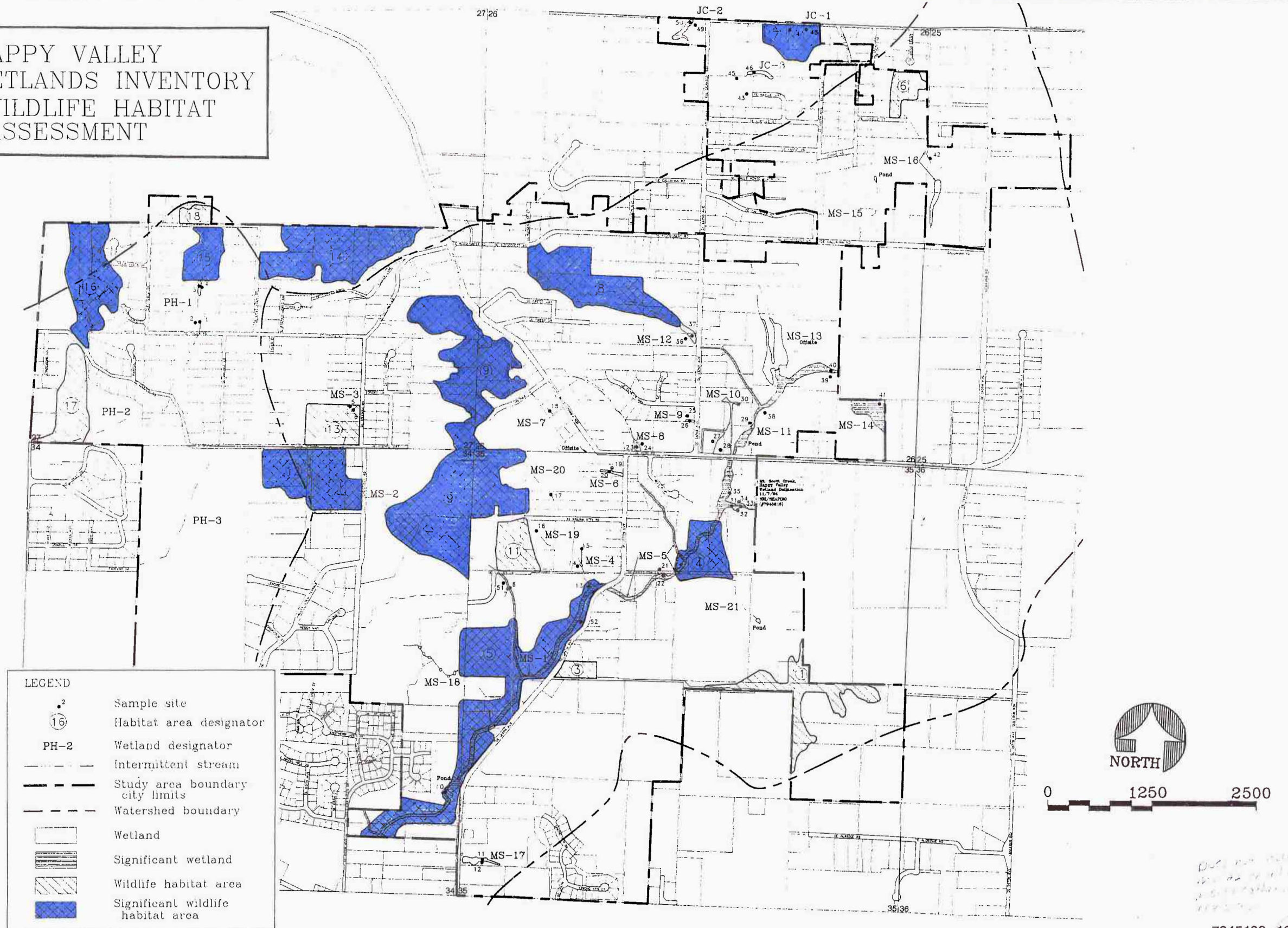
- ² Sample site
- Ⓛ¹⁶ Habitat area designator
- PH-2 Wetland designator
- - - Intermittent stream
- Study area boundary
- - - city limits
- - - Watershed boundary
- Wetland
- Significant wetland
- Wildlife habitat area
- Significant wildlife habitat area



Does not include
ms-22 or all of
ms-14 & other
minor changes
7945188 12/6/96

Wildlife habitat for the Happy Valley Local Wetlands Inventory and Wildlife Habitat Assessment, Clackamas County, Oregon.

HAPPY VALLEY
LOCAL WETLANDS INVENTORY
AND WILDLIFE HABITAT
ASSESSMENT



*Do not include
MS-12, MS-13, MS-14, MS-15, MS-16, MS-17, MS-18, MS-19, MS-20, MS-21, MS-22, MS-23, MS-24, MS-25, MS-26, MS-27, MS-28, MS-29, MS-30, MS-31, MS-32, MS-33, MS-34, MS-35, MS-36, MS-37, MS-38, MS-39, MS-40, MS-41, MS-42, MS-43, MS-44, MS-45, MS-46, MS-47, MS-48*

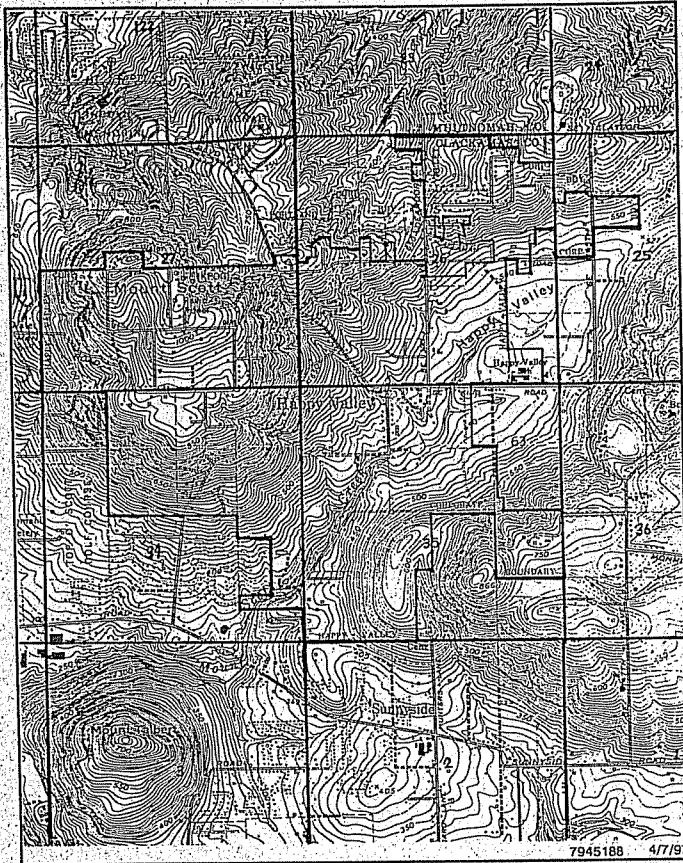
7945188 12/6/96

Significant wildlife habitat for the Happy Valley Local Wetlands Inventory and Wildlife Habitat Assessment, Clackamas County, Oregon.

FIGURE
7

Addendum to Happy Valley Local Wetlands Inventory OFWAM and Significant Wetland Areas

Original 1995 LWI ~~OFWAM~~
mapping and 1st ~~OFWAM~~
publicized OFWAM)



Prepared for
City of Happy Valley

Prepared by



SRI/SHAPIRO/AGCO, Inc.

April 7, 1997

**Addendum to Happy Valley
Local Wetlands Inventory
OFWAM and Significant Wetland Areas**

Prepared for

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City of Happy Valley
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Prepared by

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April 7, 1997

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1.0 INTRODUCTION

In October 1994, the City of Happy Valley was awarded a Technical Assistance Grant by the Oregon Department of Land Conservation and Development (DLCD) to conduct a Local Wetlands Inventory (LWI) and identify significant wetlands and significant wildlife habitat within the city limits. The project area, which includes the city limits, is shown on Figure 1. In December, 1994, Happy Valley contracted with SRI/SHAPIRO/AGCO, Inc. (SHAPIRO) to conduct the work items described in the grant.

In March 1997, Happy Valley entered into a contract with SHAPIRO to update and finalize the LWI portion of the project. A final report was produced that documented the methodology and results of the LWI, and included minor adjustments to a few wetland boundaries as well as minor corrections (SHAPIRO, 1997). The report included descriptions and mapping of 28 wetland and waterway sites for a total of approximately 39.7 acres of potentially jurisdictional waters of the state (Figure 2). Appendix A contains wetland summary sheets identifying the wetland types for all wetlands and intermittent drainageways identified through the LWI.

SHAPIRO applied the *Oregon Freshwater Assessment Methodology* (OFWAM; Roth et al., 1993) and developed a significant wetlands criteria in 1994. The results from the OFWAM and significant wetlands analysis are documented in this addendum to the LWI report, which will be valuable for comparative purposes but will not be used by the City of Happy Valley to meet Goal 5 requirements. This analysis was conducted prior to adoption of the revised OFWAM (Roth, et al., 1996) and draft significant wetlands criteria developed by the Oregon Division of State Lands (DSL; 1996). The revised OFWAM (1996), significant wetlands (1996) and wildlife area assessment will be updated by other consultants. The updated analyses will complement the LWI report and will comply with the new Goal 5 (1996) rules.

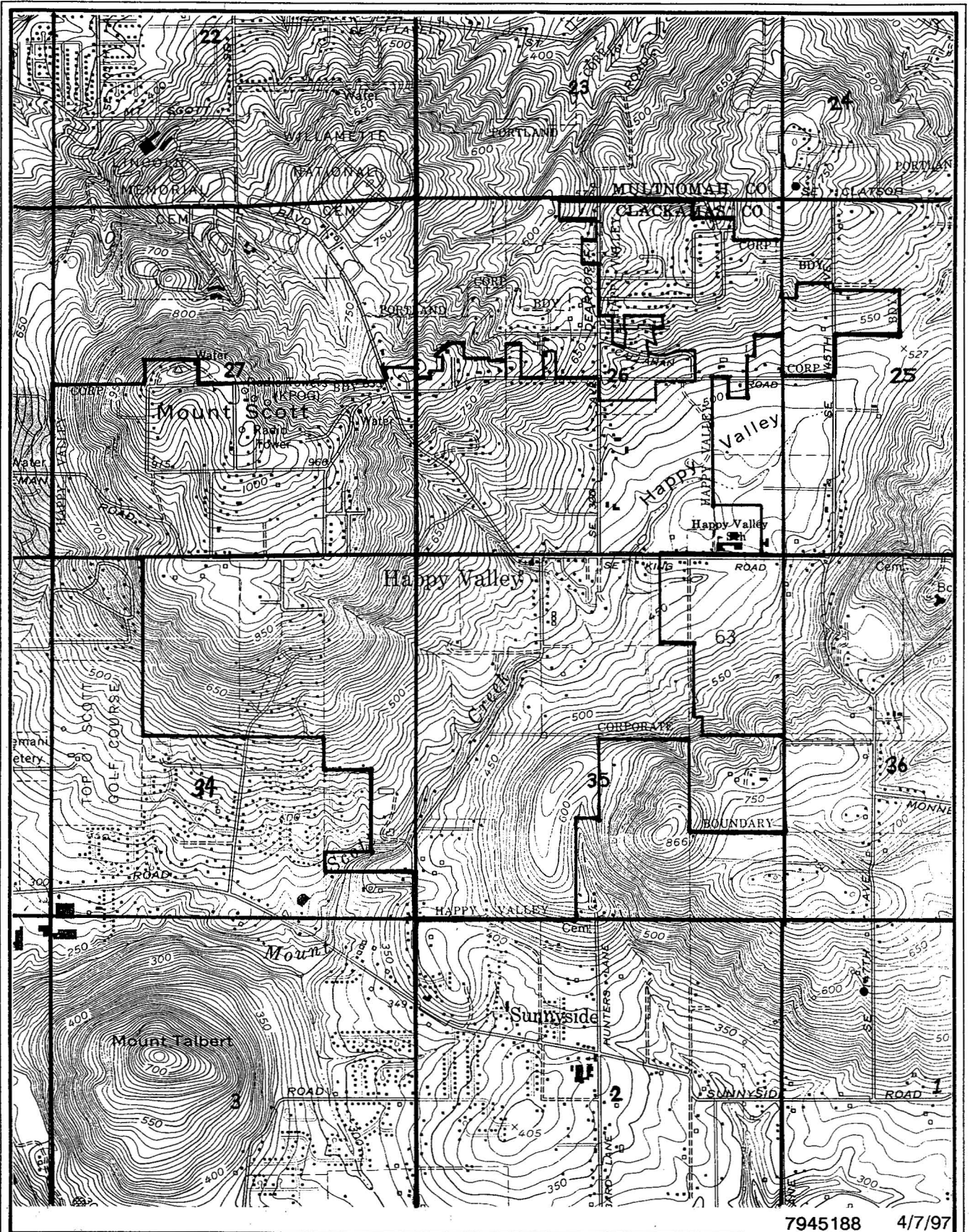
2.0 WETLAND FUNCTIONS AND VALUES

2.1 Overview

Wetlands were once considered of little value to society. They were seen as breeding grounds for pests and disease and as obstacles to economic development. Many wetlands were drained, filled, and converted to serve some other purpose. In recent years, however, there has been an increasing awareness of the values of wetlands. This recognition of wetland functions and values (e.g. wildlife habitat, floodwater storage, natural water treatment), has resulted in the enactment of state and federal laws protecting wetlands.

It is also recognized, however, that the quality of wetlands can vary widely. To determine the value of a wetland, it is necessary to conduct an assessment of the functions it performs. These functions are assessed by measuring physical characteristics such as diversity of vegetation, water storage capacity, shape, size, and location in the landscape. Not all wetland functions are performed equally by each wetland, and it is possible to rank wetlands within an area relative to one other in terms of the degree to which specific functions are performed.

All wetlands have value in that they are a composite of certain soil characteristics, vegetation, and water. However, some wetlands may provide particular values consistent with the local community's needs, such as encouraging tourism, providing educational opportunities, or they



Location and generalized topography for the Happy Valley Local Wetlands Inventory and Wildlife Habitat Assessment in Clackamas County, Oregon (U.S.G.S. Gladstone, Oregon, 7.5-minute quadrangle, 1:24000, 1961, photorevised 1984).

FIGURE
1

are simply pleasing to look at. The evaluation process allows a community to identify these wetlands and develop a management strategy that is consistent with the planning goals.

2.2 The Oregon Freshwater Wetland Assessment Methodology

To conduct an assessment of the relative quality of a wetland, the Oregon Freshwater Wetland Assessment Methodology (OFWAM) was developed by an interagency committee. The methodology is intended for use by planners, public officials, and community members for planning and educational purposes. Completion of this method provides basic information, which is not intended for evaluation of detailed, site-specific impacts on individual wetlands.

OFWAM is based on the idea that an understanding of the wetland system functions and conditions at local, state, and federal levels is necessary in order to make management decisions. Recommended uses of OFWAM include collection of basic information about wetlands in an assessment area, creation of a database of functions and conditions and other wetland data, support of decision-making and planning within a jurisdiction, and education.

OFWAM requires that the same functions and conditions be evaluated for each wetland within a study area. This does not determine the wetland's overall value. Listed below are the functions and conditions used in OFWAM. OFWAM is designed to be open-ended, and therefore this does not represent a complete list. Other functions and conditions may be added later, or some may be dropped if not important to the user.

Wetland Functions

Wildlife Habitat: Evaluates the habitat diversity for species usually associated with wetlands, without emphasizing one particular species. Wetlands assessed by OFWAM can provide diverse habitat for wildlife, habitat for some wildlife species, or do not provide habitat.

Fish Habitat: Evaluates how a wetland contributes to fish habitat in streams, ponds or lakes associated with a wetland. The questions are suitable for both warmwater and coldwater fish and no particular species is emphasized. Wetlands assessed by OFWAM can contribute to fish habitat, potentially contribute or do not contribute to fish habitat.

Water Quality: Evaluates the potential of a wetland to reduce the impacts of excess nutrients in stormwater runoff on downstream waters. A wetland assessed by OFWAM can provide water quality benefits, have the potential to provide or not provide water quality benefits.

Hydrologic Control: Evaluates the effectiveness of a wetland to reduce downstream flood peaks and store floodwaters. A wetland assessed by OFWAM can provide, have the potential to provide, or does not provide hydrologic control.

Education: Evaluates the suitability of a wetland to provide educational opportunity and act as an "outdoor classroom." A wetland assessed by OFWAM can have educational uses, have the potential to provide or be not appropriate for educational uses.

Recreation: Evaluates the suitability of a wetland and associated watercourses for non-powered boating, fishing, and similar recreational activities. A wetland assessed by OFWAM can provide, have the potential to provide, or not provide recreational opportunities.

Table 1. Key to Results of the Oregon Freshwater Wetland Assessment Methodology for the Happy Valley Local Wetlands Inventory

Wildlife Habitat	(1) Wetland provides diverse habitat for wildlife
	(2) Wetland provides habitat for some wildlife species
	(3) Wetland does not provide wildlife habitat or has limited use by wildlife
Fish Habitat	(1) Wetland contributes to fish habitat
	(2) Wetland potentially contributes to fish habitat
	(3) Wetland does not contribute to fish habitat
Water Quality	(1) Wetland provides water–quality benefits
	(2) Wetland has the potential to provide water–quality benefits
	(3) Wetland does not provide water–quality benefits
Hydrologic Control	(1) Wetland provides hydrologic control
	(2) Wetland has the potential to provide hydrologic control
	(3) Wetland does not provide hydrologic control
Sensitivity to Impact	(1) Wetland is sensitive to secondary effects
	(2) Wetland is potentially sensitive to secondary effects
	(3) Wetland is not sensitive to secondary effects
Enhancement Potential	(1) Wetland can be enhanced
	(2) Wetland has some potential for enhancement
	(3) Wetland has little enhancement potential
Education	(1) Wetland has educational uses
	(2) Wetland has potential for educational use
	(3) Wetland site is not appropriate for educational use
Recreation	(1) Wetland provides recreational opportunities
	(2) Wetland has the potential to provide recreational activities
	(3) Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	(1) Wetland is considered to be pleasing
	(2) Wetland is considered to be potentially pleasing
	(3) Wetland is not pleasing

**Table 2. Results of the Oregon Freshwater Wetland Assessment Methodology for the City of Happy Valley
Local Wetlands Inventory.**

Wetland Code	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Sensitivity to Impact	Enhance. Potential	Education	Recreation	Aesthetic Quality	Wetland Size
JC-1	Intermittent drainage									
JC-2	2	2	1	2	2	1	1	3	1	0.50
JC-3	2	N/A	2	2	2	2	1	3	2	0.09
MS-1	1	1	2	2	2	2	1	2	1	3.09
MS-2	Intermittent drainage									
MS-3	Intermittent drainage									
MS-4	2	N/A	2	3	2	1	1	3	2	0.02
MS-5	1	1	2	2	2	2	1	2	1	4.50
MS-6	2	N/A	1	2	2	1	3	3	2	0.28
MS-7	Intermittent drainage									
MS-8	2	N/A	2	3	2	1	2	1	1	0.10
MS-9	2	2	1	2	2	1	2	3	2	0.01
MS-10	2	N/A	2	2	2	1	2	2	1	1.78
MS-11	1	2	2	2	2	2	1	1	1	1.80
MS-12	2	N/A	2	2	2	1	1	2	1	0.34
MS-13	2	N/A	2	2	2	2	3	3	1	2.75
MS-14	1	1	1	2	2	1	2	1	1	23.50
MS-15	Intermittent drainage									
MS-16	2	N/A	2	3	2	1	1	2	1	0.34
MS-17	2	N/A	2	2	2	1	2	3	1	0.30
MS-18	Intermittent drainage									
MS-19	Intermittent drainage									
MS-20	Intermittent drainage									
MS-21	Intermittent drainage									
MS-22	2	N/A	2	2	2	2	2	3	2	0.13
PH-1	2	2	1	2	2	1	1	3	1	0.14
PH-2	Intermittent drainage									
PH-3	Intermittent drainage									

- 1 Provides function or condition
- 2 Potential to provide function
- 3 Does not provide function or condition

Total Wetland Area (acres)	39.67
-----------------------------------	--------------

Wetland Conditions

Enhancement Potential: Evaluates the suitability of a degraded wetland for enhancement. A wetland providing this condition does not provide one or more of the functions assessed by OFWAM. A wetland fulfilling this condition, therefore, would be of lower overall quality than a wetland providing wildlife habitat, fish habitat, etc.

Aesthetic Quality: Evaluates the visual and aesthetic quality of the wetland. Wetlands can be considered pleasing, potentially pleasing, or not pleasing.

Sensitivity to Impact: Evaluates whether a wetland is susceptible to secondary effects of impacts. For example, a wetland that is sensitive to secondary effects is not as resilient to human impacts as a wetland that has already been disturbed, such as agricultural wetlands.

An assessment of the quality for each of the 17 wetlands identified through the inventory was conducted using the *Oregon Freshwater Assessment Methodology* (OFWAM; Roth et al., 1993). OFWAM assesses 6 functions and 3 conditions. Appendix B contains all of the summary sheets showing the results for each of the functions and conditions assessed by the methodology.

Although OFWAM provides qualitative information on the relative value of wetlands and does not have a numerical ranking, numbers were assigned to the assessment criteria for the purposes of this study. The numbers were assigned as follows: number 1, if a wetland provides a function or condition; number 2, if a wetland has the potential to provide a function or condition; and number 3, if a wetland fails to provide a function or condition. Table 1 is a key to the numbers assigned to the assessment criteria for each of the functions and conditions. Table 2 shows the results of the quality assessment conducted on all of the wetlands identified through the inventory.

The results of the quality assessment indicates that the wetlands associated with a perennial water source, such as Mt. Scott Creek (MS-1, MS-5, MS-11, and MS-14), provide diverse habitat for wildlife, have educational uses, and are considered to be aesthetically pleasing. In general, disturbed wetlands such as MS-10, which are both open pastures disturbed by mowing or grazing horses, were considered to be of the lowest quality. Although these wetlands are relatively large, they do not possess a diverse assemblage of plants and do not provide wetland-dependant wildlife habitat. These wetland areas can be enhanced as wetland mitigation sites, which already is occurring in MS-13.

Other factors that lowered the quality of the wetlands in Happy Valley is the proximity of the wetland to a busy road, such as SE 129th Avenue, the lack of standing water throughout the year, and a single wetland type, such as in a wet meadow.

3.0 CRITERIA FOR DETERMINING SIGNIFICANT WETLANDS WITHIN THE CITY OF HAPPY VALLEY

3.1 Overview

Part of the Technical Assistance Grant from DLCD was to determine significant resources for purposes of Statewide Planning Goal 5. Goal 5 was established to conserve open space and protect natural and scenic resources. The Goal requires that programs be provided to insure open

space, protect scenic areas, historic areas and natural resources for future generations, and promote healthy and visually attractive environments in harmony with the natural landscape character. The location, quality, and quantity of the resources listed by the goal shall be inventoried by the local government. This includes an inventory of significant natural resources, consisting of wetlands, wildlife habitat, natural areas, and open space.

An inventory of the significant wetlands and wildlife habitat within Happy Valley was conducted as part of the Technical Assistance Grant. A discussion of the criteria and the identification of significant wetlands is provided below.

3.2 Significant Wetlands

The results of the quality assessment and the Local Wetlands Inventory were used to determine which wetlands within Happy Valley were significant. The landscape position of a wetland, its vegetative structure, its hydrology, and other questions that determine the overall quality of a wetland are all assessed within the questions determined by OFWAM. Therefore, particular emphasis was placed on wetlands providing the functions or conditions assessed by OFWAM.

The results of the quality assessment are included in Table 2. Of the functions and conditions assessed by OFWAM, wildlife habitat, fish habitat, water quality, hydrologic control, education, aesthetic quality, and sensitivity to impact, were used in the determination of significance.

Recreation and Enhancement Potential were not used in the determination of significance. Recreation was not used due to the fact that, in general, the wetlands of Happy Valley do not provide recreational opportunities. The only recreation opportunities the wetlands afford is passive recreation, such as bird watching, which is captured in the wildlife habitat and fish habitat functions. Fishing, hunting, and recreational boat use is generally not conducted within the city limits.

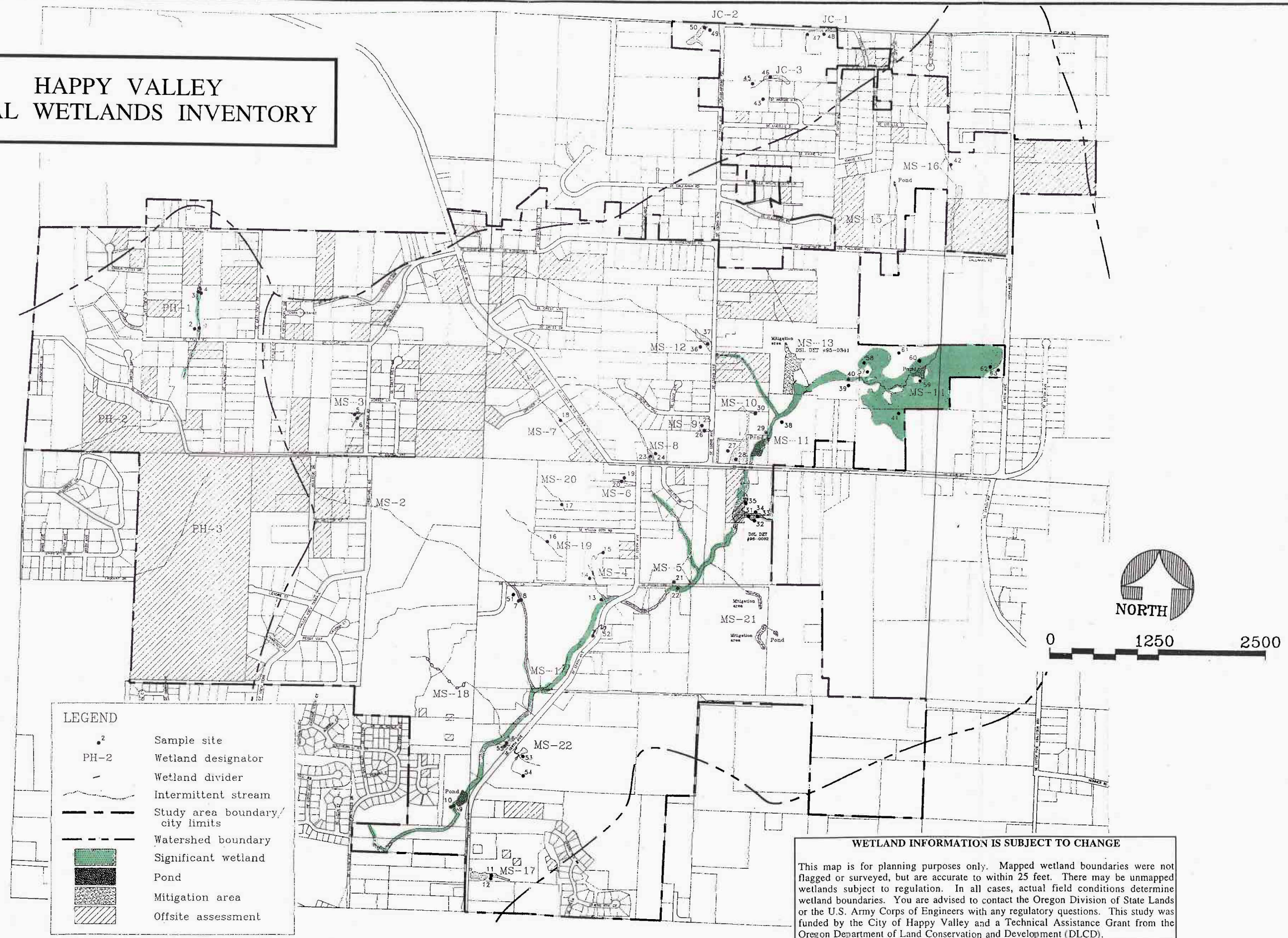
In addition, enhancement potential was also not used to determine the significance of a wetland. OFWAM determines that a wetland provides this condition when that wetland is degraded. Therefore, lower quality wetlands within the city would be ranked higher than high quality wetlands that need no enhancement. For this reason, it was considered inappropriate as a criteria for assessing whether a wetland should be designated as significant.

The following criteria were used to determine significant wetlands within Happy Valley:

1. All wetlands associated with a perennial water course, such as Mt. Scott Creek.
2. All wetlands providing three or more of the functions and conditions assessed by OFWAM, except enhancement potential and recreation.
3. All wetlands contiguous with wetlands determined to be significant by Clackamas County as documented in *North Clackamas Urban Area Wetland Inventory and Goal 5 Assessment* (SRI/SHAPIRO, 1994).
4. All wetlands providing diverse wildlife habitat, as determined by OFWAM.

Figure 3 shows the location of all significant wetlands within the City. These wetlands were designated as significant if they satisfied any one of the criteria listed above. Those wetlands in Happy Valley listed as significant include: JC-2, MS-1, MS-5, MS-11, MS-14, and PH-1. The approximate wetland area associated with these wetlands is 34.53 acres. The area of wetland determined not to be significant is approximately 6.14 acres.

HAPPY VALLEY LOCAL WETLANDS INVENTORY

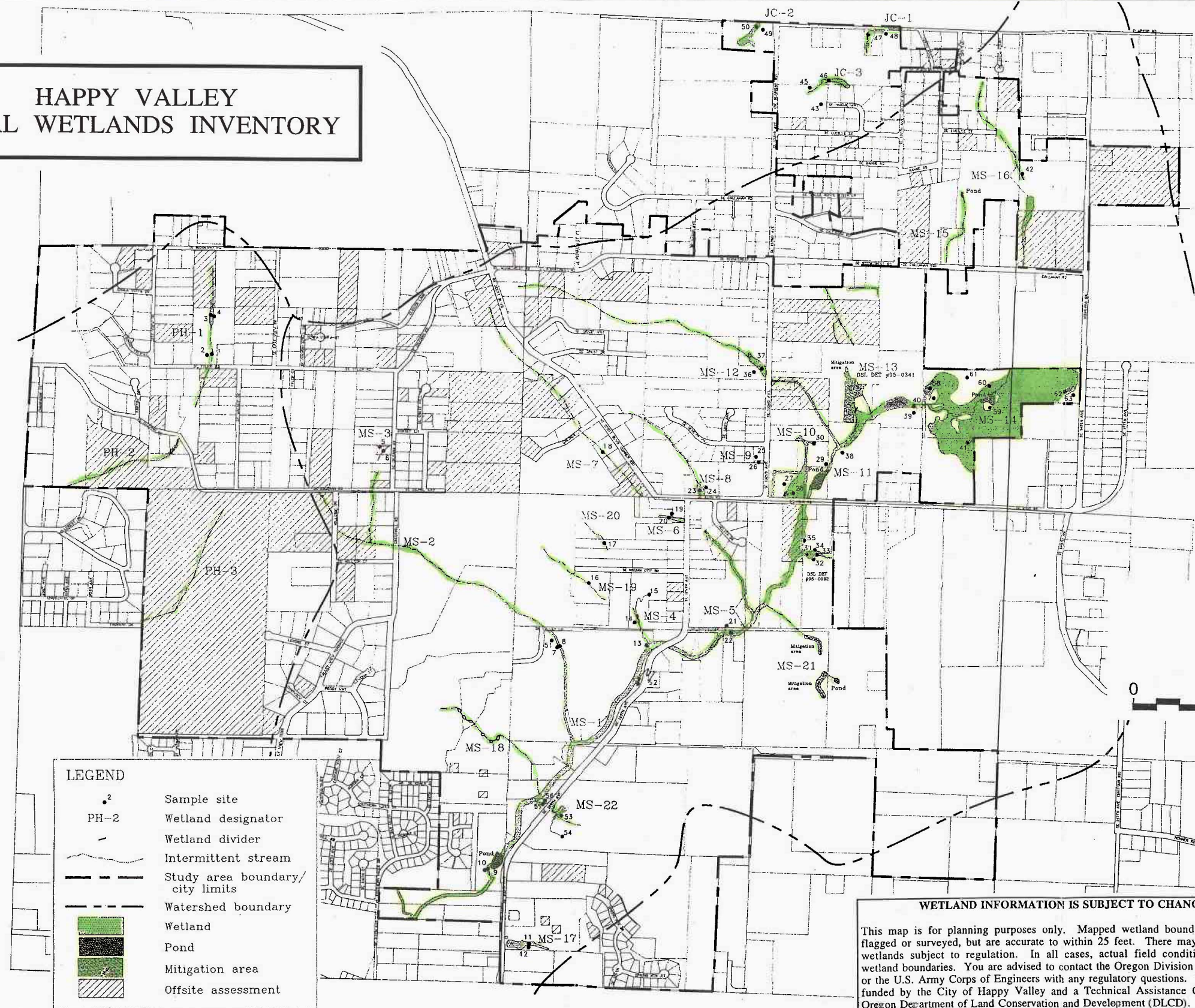


Significant wetlands for the Happy Valley Local Wetlands Inventory, Clackamas County, Oregon.

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FIGURE
3

HAPPY VALLEY LOCAL WETLANDS INVENTORY



LEGEND

- Sample site
- Wetland designator
- Wetland divider
- Intermittent stream
- Study area boundary/city limits
- Watershed boundary
- Wetland
- Pond
- Mitigation area
- Offsite assessment


 NORTH


WETLAND INFORMATION IS SUBJECT TO CHANGE

This map is for planning purposes only. Mapped wetland boundaries were not flagged or surveyed, but are accurate to within 25 feet. There may be unmapped wetlands subject to regulation. In all cases, actual field conditions determine wetland boundaries. You are advised to contact the Oregon Division of State Lands or the U.S. Army Corps of Engineers with any regulatory questions. This study was funded by the City of Happy Valley and a Technical Assistance Grant from the Oregon Department of Land Conservation and Development (DLCD).

Potentially jurisdictional wetlands and sample sites for the Happy Valley Local Wetlands Inventory, Clackamas County, Oregon.

7945188 4/7/97

**FIGURE
2**

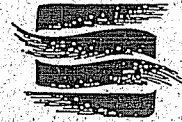
4.0 REFERENCES

Oregon Division of State Lands, 1996. *Draft Rules for Identifying Significant Wetlands*.

Roth, Emily, Richard Olson, Patty Snow, and Richard Summer, 1993. *Oregon Freshwater Assessment Methodology*. Prepared by the Wetlands Program, Oregon Division of State Lands, Salem, Oregon.

Roth, Emily, Richard Olson, Patty Snow, and Richard Summer, 1996. *Oregon Freshwater Assessment Methodology*, revised edition. Prepared by the Wetlands Program, Oregon Division of State Lands, Salem, Oregon.

SRI/SHAPIRO/AGCO, 1997. *Happy Valley Wetlands Inventory*.



Appendix A

Summary Sheets

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/9/95		Wetland Mapping Code: JC-1	
Investigator(s): FS, DC, JF		Size (acres): 0.014	
Location			
Legal: T1S R2E 26		Tax lot(s): AB100, AB200, AB500	
Other: West of 137th Avenue on Clatsop, north border of project boundary			
Hydrologic basin: Johnson Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Stormwater runoff, intermittent drainage			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Oemleria cerasiformis</i>	<i>Rubus ursinus</i>	<i>Circaea alpina</i>
<i>Corylus cornuta</i>			<i>Tellima grandiflora</i>
Comments			
Drainage parallels the road at north end of boundary. N-S side drainage has more water upslope to the south. Highly eroded, but not prolonged, by obvious stormwater runoff. Tree overstory mostly red alder and a few willows. Planted Douglas firs and grand firs.			
SS# 47,48			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/9/95, 5/10/95		Wetland Mapping Code: JC-2	
Investigator(s): FS, DC, JF		Size (acres): 0.5	
Location			
Legal: T1S R2E 26		Tax lot(s): BA100	
Other: North end of 132nd Avenue, north end of survey area			
Hydrologic basin: Johnson Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Perennial drainage			
Wetland classification(s): PFO			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>			<i>Epilobium watsonii</i>
<i>Alnus rubra</i>			<i>Phalaris arundinacea</i>
<i>Pinus monticola</i>			<i>Ranunculus repens</i>
<i>Salix lasiandra</i>			<i>Solanum dulcamara</i>
Comments			
Drainage (perennial?) flows to the north, out of survey area into Johnson Creek watershed. Some impact to floodplain – several nearby houses and clearing activities on east bank. Floodplain 60' wide near road crossing at boundary. Both incised and sheet flow over most of the plain. West side of floodplain saturated to inundated, and very boggy. Water flowing ~ 2' wide, 6" deep approaching two 24" culverts.			
SS# 49,50			

Wetland Classification Codes:
PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/30/95, 6/1/95		Wetland Mapping Code: MS-1	
Investigator(s): FS, DC, JF		Size (acres): 3.09	
Location			
Legal: T1S R2E 34 and 35		Tax lot(s): 34: D1800, D1900, DA8700	
Other: Mt. Scott Creek, west of SE 129th Avenue		35: C1000, C900, C800,	
Hydrologic basin: Mt. Scott Creek		C700, C601, B500, BB600	
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumb rept			
Hydrology			
Hydrologic source: Mt. Scott Creek			
Wetland classification(s): PFO, PSS, POW/Perennial stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Alnus rubra</i>	<i>Rubus discolor</i>	<i>Cirsium arvense</i>
<i>Populus trichocarpa</i>	<i>Crataegus monogyna</i>	<i>Rubus laciniatus</i>	<i>Dactylis glomerata</i>
<i>Salix lasiandra</i>			<i>Festuca arundinacea</i>
			<i>Holcus lanatus</i>
			<i>Juncus effusus</i>
			<i>Phalaris arundinacea</i>
			<i>Poa trivialis</i>
			<i>Scirpus microcarpus</i>
			<i>Urtica dioica</i>
			<i>Veronica americana</i>
Comments			
Upper end of drainageway flowing SE to Mt. Scott Creek is mostly under a stand of Douglas fir. It continues through a thicket of Himalayan blackberry and English hawthorne. Large volumes of water flows through this drainage related to storm events. Small side drainage issues from culvert (24") that originates above Mt. Scott Creek Lane. Riparian area has been narrowed by clearing but still has good structural diversity as a functional wildlife corridor. At south end of creek, a farm pond (70' x 70') has been created by large earthen dam road crossing. Small amount of wetland vegetation along bypass channel section of stream south of dam has been impacted for >200' but then re-enters mixed decid./conif. forest overstory.			
SS# 7,8,9,10,13			

Wetland Classification Codes:

PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: MS-2	
Investigator(s): FS, JF		Size (acres): 2.09	
Location			
Legal: T1S R2E 34		Tax lot(s): 101, 100, AB1600, AB600,	
Other: South of Idleman Road on Hillside Drive		AB700, AB800, 400	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Groundwater seepage, overland sheet flow, intermittent			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>	<i>Corylus cornuta</i>	<i>Rubus discolor</i>	<i>Athyrium filix-femina</i>
<i>Populus trichocarpa</i>	<i>Crataegus monogyna</i>	<i>Rubus ursinus</i>	<i>Polystichum munitum</i>
<i>Pseudotsuga menziesii</i>	<i>Oemleria cerasiformis</i>		
	<i>Prunus sp.</i>		
	<i>Salix sp.</i>		
	<i>Symphoricarpos albus</i>		
Comments			
Limited access to drainageways. Flow appears to be intermittent beneath mixed wooded areas.			
Vegetation consists mainly of relatively mature, mostly deciduous stand among residences.			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: MS-3	
Investigator(s): FS, JF		Size (acres): 0.13	
Location			
Legal: T1S R2E 34		Tax lot(s): DC601, DC600, DC500,	
Other: West side of Idleman Road, south of Dorset Lane		DC100, DC200	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Groundwater seepage, surface drainage			
Wetland classification(s): Intermittent stream/seep			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Symphocarpus albus</i>	<i>Rubus ursinus</i>	<i>Carex deweyana</i>
<i>Prunus sp.</i>			
<i>Populus trichocarpa</i>			
Comments			
Soil is not hydric, probably not wetland. Seep area may be feed by septic fields. Obvious surface drainage path through woods – rapid seasonal flows. Flow is piped under fill from new light blue house, and continues south through wooded area to road. Area north of woods obviously disturbed and cut over. Possible surface drainage at lower end of slope. Lots of yard debris dumped in area.			
SS# 5,6			

Wetland Classification Codes:

PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/30/95, 6/1/95		Wetland Mapping Code: MS-5	
Investigator(s): FS, DC, JF		Size (acres): 4.50	
Location			
Legal: T1S R2E 35		Tax lot(s): BA1500, BA1600, BA1700, BA1800,	
Other: Mt. Scott Creek, east of 129th Avenue, near		BA1900, BA2100, A1900, A1800,	
Mt. Scott Creek Lane, south of King Road		BA100, A1700, BA200, A1701, BA2200,	
Hydrologic basin: Mt. Scott Creek		B900, B300, B201, B100, B202, B200	
Soils			
Mapped series: Cascade silt loam, Powell silt loam			
Taxonomic class: Cascade: Fine-silty, mixed, mesic Typic Fragiumbrept			
Powell: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Mt. Scott Creek			
Wetland classification(s): PFO, PSS, PEM			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Salix lasiandra</i>	<i>Rubus discolor</i>	<i>Alopecurus pratensis</i>
<i>Populus trichocarpa</i>	<i>Salix sitchensis</i>		<i>Athyrium filix-femina</i>
<i>Pseudotsuga menziesii</i>	<i>Sambucus racemosa</i>		<i>Phalaris arundinacea</i>
<i>Salix scouleriana</i>	<i>Symphoricarpos albus</i>		<i>Tellima grandiflora</i>
Comments			
Overstory of Douglas fir, black cottonwood, and red alder. Scattered large Douglas firs up to 48" DBH.			
Most other Douglas fir and cottonwoods ~ 24" DBH. Tributary to Mt. Scott Creek enters channel from the north and is deeply incised, 3-4' W, 3-4' D. Flowing water ~ 20" W x 2" D. No access in north end beyond point where sewer pipeline grading opens out into a field. Appears that extensive ponding takes place north of the creek. Wetland bench between creek and SE Scott Creek Lane ~ 50' W. Shrubs and low deciduous trees - willows, red alder line the creek in the downstream part.			
SS# 21,22,31,32,33,34,35			

Wetland Classification Codes:

PFO = alustrine forested

PSS = alustrine scrub-shrub PEM = alustrine emergent

POW = alustrine emergent water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: MS-6	
Investigator(s): FS, JF		Size (acres): 0.28	
Location			
Legal: T1S R2E 35		Tax lot(s): BB501, BB400, BB100	
Other: West side of 129th, south of intersection of King Road			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Surface drainage			
Wetland classification(s): PEM, PSS			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
	<i>Salix scouleriana</i>		<i>Phalaris arundinacea</i>
	<i>Crataegus douglasii</i>		<i>Festuca arundinacea</i>
			<i>Poa trivialis</i>
Comments			
Drainage flows toward the SE to Mt. Scott Creek, isolated by culverts. Channel is ~ 30" W x 15" D, with flowing water ~ 30" W x 6" D. Strong orange/rust cast in water, with lots of silt and algal growth. Side slope vegetation has been disturbed. Lots of yard debris and other dumping into channel.			
SS# 19,20			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub--shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: MS-7	
Investigator(s): FS, JF		Size (acres): 0.06	
Location			
Legal: T1S R2E 26 and 27		Tax lot(s): 26: CB2000, CB2100, CC302, CC201	
Other: North and south of Greiner Lane, west side		CC202, CC200, CC800, CC900,	
of Mt. Scott Blvd.		CC1000, CC1100, CC1200, CC1300,	
Hydrologic basin: Mt. Scott Creek		CC3500. 27: DA2800, DA2700	
Soils			
Mapped series: 13D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Intermittent surface drainage			
Wetland classification(s): Intermittent stream/PEM at S end			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>	<i>Corylus cornuta</i>	<i>Hedera helix</i>	<i>Polystichum munitum</i>
<i>Pseudotsuga menziesii</i>	<i>Oemleria cerasiformis</i>		<i>Veronica americana</i>
	<i>Symphoricarpos albus</i>		<i>Epilobium watsonii</i>
Comments			
Incised channel flows south, roughly parallels Mt. Scott Blvd. Canopy of mixed deciduous and coniferous forest; Douglas firs and mostly bigleaf maple closer to the water. Water is restricted to the channel which has moderately sloping terraces on both sides. Channel measures 3-4' W and 2' D. Flowing water measured at 12" W and 1" D. Creek bed: 65% cobbles, 25% boulders, 10% silt. OFF-SITE: At the southern end the water flows into a culvert that is placed too high and has allowed an emergent wetland area to form approximately 10 feet wide narrowing to 3 feet in the north where the water flows from a culvert under a driveway.			
SS# 18			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/30/95		Wetland Mapping Code: MS-9	
Investigator(s): FS, DC, JF		Size (acres): 0.003	
Location			
Legal: T1S R2E 26		Tax lot(s): CD3100	
Other: West side of 132nd Avenue, north of SE King Road			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13B – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Surface drainage, groundwater seepage			
Wetland classification(s): PSS/intermittent			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Pseudotsuga mensiezii</i>	<i>Spiraea douglasii</i>	<i>Rubus ursinus</i>	<i>Anthoxanthum odoratum</i>
			<i>Holcus lanatus</i>
Comments			
Evidence of ponding in ditch, 30" W x 1' D. Soils moist but not saturated. Definitely an intermittent drainageway, dry during site visit. Marginal wetland restricted to ditch, does not continue far to the north, less than 50' long. Thickets in area mostly of hawthorne and Douglas' spiraea. Some domestic apple trees and blackberries also Sitka willow near the sample site.			
SS# 25,26			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/19/95		Wetland Mapping Code: MS-10	
Investigator(s): FS, DC, JF		Size (acres): 1.80	
Location			
Legal: T1S R2E 26		Tax lot(s): D2201, D2401, D2300, D2400	
Other: NE corner of intersection of 132nd Avenue and SE King Road			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13B – Cascade silt loam, 70B – Powell silt loam			
Taxonomic class: 13B: Fine-silty, mixed, mesic Typic Fragiumbrept			
70B: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Surface drainage, groundwater seepage			
Wetland classification(s): PEM			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
			<i>Holcus lanatus</i>
			<i>Juncus effusus</i>
			<i>Lotus corniculatus</i>
			<i>Ranunculus repens</i>
			<i>Typha latifolia</i>
			<i>Veronica americana</i>
Comments			
In open fields, south of church: Large swales excavated on west and north edges, influence flow across site.			
Clay layer is at surface in swales, indicating topsoil has been scraped off. In (north) east end of swale behind church property, there is obvious long-term ponding measured up to 6' wide.			
SS# 27,28,30			

Wetland Classification Codes:

PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/10/95, 5/19/95		Wetland Mapping Code: MS-11	
Investigator(s): FS, DC, JF		Size (acres): 1.80	
Location			
Legal: T1S R2E 26		Tax lot(s): D1900, D1901, D2000,	
Other: Mt. Scott Creek, north of SE King Road, south end		D2100, D2201, D2500,	
of Happy Valley City Park		D2400, D2700, D1801	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: Powell silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Mt. Scott Creek, groundwater seepage, Mt. Scott Creek flood overflow			
Wetland classification(s): PFO, POW			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Cornus stolonifera</i>	<i>Rubus discolor</i>	<i>Athyrium filix-femina</i>
	<i>Corylus cornuta</i>	<i>Rubus ursinus</i>	<i>Phalaris arundinacea</i>
			<i>Ranunculus repens</i>
			<i>Veratrum californicum</i>
Comments			
Mt. Scott Creek channel is ~7' W, 1-1.5' D, with water flowing 6" D, some pool/riffle sections. Creek bed is cobbled, with boulders and some silt. Ponding on low benches along the creek. The forest overstory is made up of Douglas fir and red alder. Upstream, Mt. Scott Creek measures ~5' W x 6" D, and averages 10' W x 2' D. Sections vary from cobbly with silt to all silt. Wet benches in places receive upslope seepage. Wide benches and large culverts (72" D) in upstream section.			
SS# 29,38,39,40			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/10/95		Wetland Mapping Code: MS-12	
Investigator(s): FS, DC		Size (acres): 0.34	
Location			
Legal: T1S R2E 26		Tax lot(s): CA2000, CA2100, CA2101,	
Other: West side of 132nd Avenue, north of Geneva Way		C2102	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Surface, intermittent stream, culvert/blockage downstream			
Wetland classification(s): PEM/intermittent			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
			<i>Festuca arundinacea</i>
			<i>Holcus lanatus</i>
			<i>Poa trivialis</i>
			<i>Ranunculus repens</i>
Comments			
Swale drains down from Mt. Scott (NW to SE) – low end on west side of 132nd Avenue broadens to ~ 50' wide.			
Open wet pasture lined by blackberry thickets and hawthorne. Vegetation in the swale is dominated by tall fescue, common velvet grass, bluegrass, and creeping buttercup. Upslope main drainage passes beneath low ridge of douglas fir and heavy blackberry cover. Flows measured at 1-2" deep except in narrow incised channel upslope.			
SS# 36,37			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/19/95, 5/30/95		Wetland Mapping Code: MS-13	
Investigator(s): FS, DC, JF		Size (acres): 2.75	
Location			
Legal: T1S R2E 26		Tax lot(s): D1100, D1200, D1300,	
Other: Field west of Happy Valley City Park, south of		D1400, D1500, D1801	
Ridgecrest Road, east of 132nd Avenue			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 70B – Powell silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Surface drainage, groundwater seepage			
Wetland classification(s): PEM			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Fraxinus latifolia</i>	<i>Crataegus douglasii</i>		<i>Alopecurus pratensis</i>
	<i>Crataegus monogyna</i>		<i>Anthoxanthum odoratum</i>
	<i>Amelanchier alnifolia</i>		<i>Festuca arundinacea</i>
			<i>Juncus effusus</i>
			<i>Juncus tenuis</i>
			<i>Ranunculus sp.</i>
Comments			
Delineation by A.G. Crook Company in southern field. Open fields extend north from Mt. Scott Creek riparian strip.			
Swales in a open pasture. Shrub and tree growth of Oregon ash and hawthorne scattered and along			
margins. (5/30) North end: Some ditching, hedge rows along east field edge. Dominated by 20' tall Douglas and			
English hawthorne, western serviceberry. Several shallow swales in field with rushes. Middle field has			
obviously been drained, current grazing. Ditch between fields. ~ 3.5' of fill in most northerly field.			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 1/19, 5/19/95		Wetland Mapping Code: MS-14	
Investigator(s): FS, DC, JF		Size (acres): 23.5 within study area	
Location			
Legal: T1S R2E 26		Tax lot(s): DD100, 2800	
Other: North edge of grade school property, north side of SE King Rd., east of city park			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 70B – Powell silt loam, 7B – Borges silty clay loam			
Taxonomic class: 70B – Fine-silty, mixed, mesic Typic Fragiochrept. 7B – fine, mixed, nonacid, mesic, Typic Humaquept.			
Hydrology			
Hydrologic source: Groundwater seepage, surface drainage			
Wetland classification(s): PEM, PSS			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Rosa pisocarpa</i>	<i>Rubus discolor</i>	<i>Mowed lawn grasses</i>
<i>Fraxinus latifolia</i>	<i>Rosa nutkana</i>		<i>Ranunculus repens</i>
<i>Crataegus monogyna</i>			<i>Agrostis tenuis</i>
<i>Crataegus douglasii</i>			<i>Carex leporina</i>
			<i>Anthoxanthum odoratum</i>
			<i>Alopecurus pratensis</i>
			<i>Carex obnupta</i>
			<i>Juncus effusus</i>
Comments			
Southern edge playground vegetation is mowed: 80% lawn grasses, 20% creeping buttercup. NE corner was ponded and saturated in early spring, and still wet on last site visit. Mowed lawn grass cannot be identified. The majority of the wetland is located in an abandoned field with Mt. Scott Creek, flowing through the middle of the wetland. Forested upland areas line the creek in the western end with wide open wet pastures dominating the rest of the wetland. Scrub/shrub wetland areas are located along the northern edge with blackberry thickets dominating many upland island areas.			
SS# 41			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/3/95		Wetland Mapping Code: MS-15	
Investigator(s): FS, DC, JF		Size (acres): 0.02	
Location			
Legal: T1S R2E 26		Tax lot(s): AD100, AD1200, AD1300	
Other: West of Highland Road (145), north of Callahan, west of MSCB			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Upslope runoff, groundwater seepage			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Populus trichocarpa</i>			
Comments			
Drainageway issues from small excavated (~ 20' x 20') pond, fed by upslope runoff (seep?). Pond is contained by earthen berm. Drainageway flows to south from pond within small incised channel (~ 1'–2' W, 4"–5" D). Obvious overflow in sheets during storm events. No vegetation in the pond. Clump of 12+ black cottonwood trees, otherwise scattered hawthorn, domestic apple, and Himalayan blackberry clumps.			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/3/95, 5/30/95		Wetland Mapping Code: MS-16	
Investigator(s): FS, DC, JF		Size (acres): 0.34	
Location			
Legal: T1S R2E 25 and 26		Tax lot(s): 25: B1800, B1802	
Other: West of Highland Road (145), north of Callahan		26: AA4209, AA4200, AA4203	
Hydrologic basin: Mt. Scott Creek		AA4204, AA4210, AD100	
Soils			
Mapped series: 70B – Powell silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragioglept			
Hydrology			
Hydrologic source: Groundwater seepage, overland sheet flow, intermittent stream			
Wetland classification(s): PEM, PSS			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Alnus rubra</i>	<i>Corylus cornuta</i>	<i>Rubus discolor</i>	<i>Epilobium watsonii</i>
<i>Pseudotsuga menziesii</i>	<i>Crataegus monogyna</i>		<i>Equisetum arvense</i>
<i>Salix scouleriana</i>	<i>Oemleria cerasiformis</i>		<i>Festuca arundinacea</i>
			<i>Ranunculus repens</i>
Comments			
Intermittent swale ~ 150' NW of new house/pool – widens from narrow steep drainageway to ~ 20' wide before being culverted a short distance. Obvious intermittent stormwater flows – heavy erosion in disturbed area behind house. OFF-SITE southern end: Wetland in swale S. of culvert, lush grass (mostly tall fescue, alopecurus pratensis) sides dominated by blackberry and one-seed hawthorne.			
North end – Steep ravine through wooded hillside, next to grated roadway on Lucille Street. No water on site visible but drainageway appears to be stormwater driven. Extends a short distance north of Lucille. Intermittent.			
SS# 42			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 6/8/95		Wetland Mapping Code: MS-17	
Investigator(s): DC, JF		Size (acres): 0.30	
Location			
Legal: T1S R2E 35		Tax lot(s): C1801	
Other: East of SE 129th Avenue, south of Mountain Drive			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C and 13D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Stormwater (surface) and groundwater seepage			
Wetland classification(s): PEM, some PSS			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
	<i>Cretaegus monogyna</i>		<i>Holcus lanatus</i>
			<i>Juncus effusus</i>
			<i>Juncus ensifolius</i>
			<i>Juncus tenuis</i>
			<i>Plantago lanceolata</i>
			<i>Poa pretensis</i>
			<i>Anthoxanthum odoratum</i>
			<i>Festuca arundinacea</i>
Comments			
Wetland is used as a stormwater outfall and retention pond, originating from an 18 inch culvert upstream and exits from two large overflow, downstream culverts at SE 129th Avenue. The wetland is confined mostly to a channel an average of 10 feet wide for the upper 200 feet and then spreads out to 50 feet wide for another 200 feet downstream, forming a ponded area (perennial) at the road.			
SS# 11,12			

Wetland Classification Codes:

PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/8/95		Wetland Mapping Code: MS-18	
Investigator(s): DC, JF		Size (acres): 0.06	
Location			
Legal: T1S R2E 34 and 35		Tax lot(s): 34: 102, 1800, 190	
Other: West of Mt. Scott Creek, north of Nella Way		35: C600, C700, C800	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Stormwater, intermittent drainageway			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
	<i>Cytisus scoparius</i>	<i>Rubus discolor</i>	<i>Juncus bufonius</i>
	<i>Populus trichocarpa</i>		<i>Lolium perenne</i>
Comments			
Very disturbed excavated or moved drainageway with created pools. Full of boulders and silt. Shows evidence of high erosion and siltation during storm events. Continues through woods, toward Mt. Scott Creek as an intermittent stream, mostly undisturbed but shows signs of siltation. At lower end of housing development, silt deposition as deep as 12", soil shows some mottling, light chroma matrix.			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 6/8/95		Wetland Mapping Code: MS-20	
Investigator(s): DC, JF		Size (acres): 0.009	
Location			
Legal: T1S R2E 35		Tax lot(s): BB501, BB801, BB800	
Other: West of 129th Avenue, north of Wm. Otty Road			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Intermittent drainage, surface			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
			<i>Festuca arundinacea</i>
Comments			
Swale has bigleaf maple and Himalayan blackberry at upper end. A domestic apple tree in center of swale in horse pasture. ORs present where horses have compacted soils. Soils not hydric.			
SS# 17			

Wetland Classification Codes:
 PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 9/28/94, 5/10/95		Wetland Mapping Code: MS-21	
Investigator(s): DC, PF		Size (acres): 0.02	
Location			
Legal: T1S R2E 35		Tax lot(s): A2000, A1900, BA200,	
Other: East of 129th Avenue, south of Mt. Scott Creek Ln.		BA2200	
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: Powell silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiochrept			
Hydrology			
Hydrologic source: Intermittent drainage, surface			
Wetland classification(s): PFO, PSS/ Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Crataegous monogyna</i>		<i>Rubus discolor</i>	
<i>Pseudostuga menziesii</i>			
Comments			
The southern-most drainage originates in an excavated and bermed pond in a front yard of a house then flows through a culvert ~ 100+' under roadways. The banks in the northern portion are dominated by Himalayan black hawthorne. A branch joins from the east. Both channels are 1-4' W, 1' D and dry at both times of visit. After joining, the water in the channels cross a roadway in culvert and the channel is located in upland Douglas fir-dominated forest flowing into Mt. Scott Creek to the north.			

Wetland Classification Codes:
PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 3/18/1997		Wetland Mapping Code: MS-22	
Investigator(s): DC		Size (acres): 0.13	
Location			
Legal: T1S R2E 35		Tax lot(s):	
Other: East side of 129th Avenue, south of Lazy Hawk Ranch development.			
Hydrologic basin: Mt. Scott Creek			
Soils			
Mapped series: 13C – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Seep, surface, intermittent stream, culvert/blockage downstream			
Wetland classification(s): PEM/intermittent			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
			<i>Festuca arundinacea</i>
			<i>Holcus lanatus</i>
			<i>Epilobium watsonii</i>
			<i>Ranunculus repens</i>
			<i>Rumex sp.</i>
Comments			
Seep area, with an intermittent drainage joining near the exit to the wetland. Soils are very disturbed due to excavation and regrading associated with development of an underground stormwater detention structure.			
Surrounding land is open pasture with scattered blackberry and hawthorne thickets. Vegetation in the wetland is dominated by weedy upland and wetland species. Very disturbed site, soils have been mixed and regraded.			
SS# 36,37			

Wetland Classification Codes:
PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: PH-1	
Investigator(s): FS, JF		Size (acres): 0.14	
Location			
Legal: T1S R2E 27		Tax lot(s): CA2700	
Other: North side of Tyler Road, east of City View Drive			
Hydrologic basin: Phillips Creek			
Soils			
Mapped series: 14D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Drainage channel			
Wetland classification(s): PSS/intermittent			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
	<i>Salix scouleriana</i>		<i>Juncus effusus</i>
	<i>Spiraea douglasii</i>		<i>Poa trivialis</i>
			<i>Veronica americana</i>
Comments			
In north end of site, the drainageway opens up. Impacted significantly by limited clearing activities, and may be wetter as a result. North of fenceline (no access) wet area narrows to incised drainage under more complete red alder cover. Broad swale with drainageway on south side without access culverted under Tyler Road. Limited water flow, probably intermittent. Dominant overstory of willows.			
SS# 1,2,3,4			

Wetland Classification Codes:

PFO = palustrine forested

PSS = palustrine scrub-shrub

PEM = palustrine emergent

POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: PH-2	
Investigator(s): FS, JF		Size (acres): 0.04	
Location			
Legal: T1S R2E 27		Tax lot(s): CC1500, CC890,	
Other: West end of SE Idleman Road, south of Walnut Drive		CD3500, CD3800	
Hydrologic basin: Phillips Creek			
Soils			
Mapped series: 14D – Cascade silt loam			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrep			
Hydrology			
Hydrologic source: Intermittent drainage			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>	<i>Corylus cornuta</i>	<i>Rubus discolor</i>	
<i>Pseudotsuga menziesii</i>	<i>Salix scouleriana</i>		
Comments			
Incised drainage feeding to SW from below water tower on Idleman Road. Large culvert (30" D) below road, with small amount of water trickling out (2" W x 1/4" D). Wooded area with scattered mature Douglas firs, but mostly Scouler's willow and bigleaf maple.			

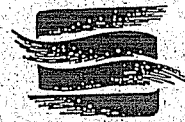
Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water

HAPPY VALLEY LOCAL WETLANDS INVENTORY

– Wetland Summary Sheet –

Date(s) of field verification: 5/17/95		Wetland Mapping Code: PH-3	
Investigator(s): FS, DC		Size (acres): 0.04	
Location			
Legal: T1S R2E 34		Tax lot(s): CB 200	
Other: South of SE Idleman Road, west of Lenore Street, in SW corner of UGB			
Hydrologic basin: Phillips Creek			
Soils			
Mapped series: 13B,C,D; 14D,E – Cascade silt loam and Cascade silt loam, stony stratum			
Taxonomic class: Fine-silty, mixed, mesic Typic Fragiumbrept			
Hydrology			
Hydrologic source: Surface water			
Wetland classification(s): Intermittent stream			
Dominant Vegetation			
Trees	Shrubs	Vines	Herbs
<i>Acer macrophyllum</i>	<i>Corylus cornuta</i>	<i>Rubus discolor</i>	<i>pasture grasses</i>
<i>Pseudotsuga menziesii</i>			
Comments			
OFFSITE – Shallow drainage draining open pastures and roadside ditches from Idleman Rd. Intermittent drainage with small amount of water (6" to 12" W x 6" D) flowing through open pasture. Wooded area south of the drainage with Douglas fir and bigleaf maple.			

Wetland Classification Codes: PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent POW = palustrine open water



Appendix B

OFWAM Results

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/9/95, 5/10/95	Investigator(s):	JF/FS/DC
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	North of 132nd Avenue, northern portion of Happy Valley		
Wetland Code:	JC-2		
Wetland Type(s):	PFO		
Approximate Area (acres):	0.5		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1	A	Q-1	A	Q-1	B	Q-1	C	Q-1	A
Q-2	A	Q-2	C	Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3	C	Q-3	A	Q-3	B	Q-3	A	Q-3	B
Q-4	C	Q-4	A	Q-4	B	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5	C	Q-5	A	Q-5	A	Q-5	A	Q-5	B
Q-6	B	Q-6	C	Q-6	C	Q-6	C			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	A										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	B
Q-2	A	Q-2	C	Q-2	A
Q-3	B	Q-3	C	Q-3	B
Q-4	B	Q-4	B	Q-4	A
Q-5	C	Q-5	A	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	Wetland potentially contributes to fish habitat
Water Quality	Wetland provides water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has educational uses
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/9/95, 5/17/95	Investigator(s):	JF/FS
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	West of 132nd Avenue, northern portion of Happy Valley		
Wetland Code:	JC-3		
Wetland Type(s):	PEM		
Approximate Area (acres):	0.09		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	B	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	C	Q-2	C	Q-2	C	Q-2	B
Q-3	C	Q-3		Q-3	A	Q-3	C	Q-3	B	Q-3	B
Q-4	C	Q-4		Q-4	C	Q-4	B	Q-4	A	Q-4	A
Q-5	B	Q-5		Q-5	B	Q-5	C	Q-5	B	Q-5	C
Q-6	B	Q-6		Q-6	C	Q-6	B			Q-6	B
Q-7	A					Q-7	A				
Q-8	A										
Q-9A											
Q-9B	C										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	B
Q-2	A	Q-2	C	Q-2	B
Q-3	B	Q-3	C	Q-3	B
Q-4	B	Q-4	B	Q-4	A
Q-5	C	Q-5	A	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	Not Applicable
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland has some potential for enhancement
Education	Wetland has educational uses
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be potentially pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	6/1/1995	Investigator(s):	FS/DC
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	Mt. Scott Cr. W of 129th Ave, including intermittent trib W of Wm. Otty Rd.		
Wetland Code:	MS-1		
Wetland Type(s):	PFO1Y, POWKZh		
Approximate Area (acres):	3.09		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	A	Q-1	A	Q-1	A	Q-1	A	Q-1	C	Q-1	C
Q-2	A	Q-2	B	Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3	B	Q-3	B	Q-3	A	Q-3	C	Q-3	A
Q-4	A	Q-4	A	Q-4	A	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5	A	Q-5	C	Q-5	C	Q-5	A	Q-5	A
Q-6	A	Q-6	A	Q-6	C	Q-6	C			Q-6	B
Q-7	A					Q-7	A				
Q-8	A										
Q-9A											
Q-9B	A										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	C
Q-2	A	Q-2	B	Q-2	A
Q-3	A	Q-3	C	Q-3	A
Q-4	B	Q-4	A	Q-4	A
Q-5	C	Q-5	A	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides diverse habitat for wildlife
Fish Habitat	Wetland contributes to fish habitat
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland has some potential for enhancement
Education	Wetland has educational uses
Recreation	Wetland has the potential to provide recreational activities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/17/1995	Investigator(s):	FS/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	W side of Idleman Road, S of Dorset Lane		
Wetland Code:	MS-3		
Wetland Type(s):	PFO		
Approximate Area (acres):	0.13		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	C	Q-1	B	Q-1	C	Q-1	A
Q-2	A	Q-2		Q-2	C	Q-2	C	Q-2	C	Q-2	A
Q-3	C	Q-3		Q-3	A	Q-3	C	Q-3	A	Q-3	B
Q-4	C	Q-4		Q-4	C	Q-4	A	Q-4	A	Q-4	A
Q-5	A	Q-5		Q-5	A	Q-5	A	Q-5	A	Q-5	B
Q-6	A	Q-6		Q-6	C	Q-6	A			Q-6	C
Q-7	C					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	B										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	B
Q-2	B	Q-2	C	Q-2	B
Q-3	B	Q-3	C	Q-3	B
Q-4	A	Q-4	B	Q-4	C
Q-5	C	Q-5	B	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	N/A
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has potential for educational use
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be potentially pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/30/95	Investigator(s):	DC/JF/FS
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	West side of 129th, north of SE Valley Lane		
Wetland Code:	MS-4		
Wetland Type(s):	PEM		
Approximate Area (acres):	0.02		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	B	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3		Q-3	B	Q-3	C	Q-3	A	Q-3	B
Q-4	C	Q-4		Q-4	C	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5		Q-5	A	Q-5	C	Q-5	B	Q-5	C
Q-6	B	Q-6		Q-6	C	Q-6	C			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	C										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	B
Q-2	A	Q-2	C	Q-2	B
Q-3	B	Q-3	C	Q-3	B
Q-4	B	Q-4	B	Q-4	A
Q-5	C	Q-5	A	Q-5	B
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	Not Applicable
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland does not provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has educational uses
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be potentially pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/30/95 & 6/1/95	Investigator(s):	FS/DC/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	Mt. Scott Creek east of 129th, S. and e. of Scott Lane, and S. of King Road		
Wetland Code:	MS-5		
Wetland Type(s):	PFO1Y, PSSiY		
Approximate Area (acres):	4.50		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	A	Q-1	A	Q-1	A	Q-1	A	Q-1	C	Q-1	C
Q-2	A	Q-2	B	Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3	B	Q-3	B	Q-3	A	Q-3	A	Q-3	A
Q-4	A	Q-4	A	Q-4	A	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5	C	Q-5	A	Q-5	C	Q-5	A	Q-5	A
Q-6	A	Q-6	A	Q-6	C	Q-6	C			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	A										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	C
Q-2	A	Q-2	B	Q-2	A
Q-3	A	Q-3	C	Q-3	A
Q-4	A	Q-4	A	Q-4	A
Q-5	C	Q-5	A	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides diverse habitat for wildlife
Fish Habitat	Wetland contributes to fish habitat
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland has some potential for enhancement
Education	Wetland has educational uses
Recreation	Wetland has the potential to provide recreational activities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/17/95	Investigator(s):	FS/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	West side of 129th, south of intersection of King Road and 129th		
Wetland Code:	MS-6		
Wetland Type(s):	PEM		
Approximate Area (acres):	0.28		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	A	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3		Q-3	A	Q-3	C	Q-3	A	Q-3	B
Q-4	C	Q-4		Q-4	B	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5		Q-5	A	Q-5	C	Q-5	B	Q-5	C
Q-6	B	Q-6		Q-6	C	Q-6	B			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	C										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	C
Q-2	C	Q-2	C	Q-2	B
Q-3	B	Q-3	C	Q-3	B
Q-4	A	Q-4	B	Q-4	A
Q-5	C	Q-5	A	Q-5	A
Q-6	A	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	Not applicable
Water Quality	Wetland provides water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland site is not appropriate for educational use
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be potentially pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/19/1995	Investigator(s):	DC/FS/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	Between Fire Station and City Hall, N of SE King Road		
Wetland Code:	MS-8		
Wetland Type(s):	PEM		
Approximate Area (acres):	0.1		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	A	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	C	Q-2	C	Q-2	C	Q-2	A
Q-3	C	Q-3		Q-3	A	Q-3	C	Q-3	A	Q-3	B
Q-4	C	Q-4		Q-4	C	Q-4	A	Q-4	A	Q-4	A
Q-5	A	Q-5		Q-5	A	Q-5	C	Q-5	B	Q-5	C
Q-6	B	Q-6		Q-6	C	Q-6	A			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	C										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	B	Q-1	A	Q-1	B
Q-2	A	Q-2	C	Q-2	A
Q-3	B	Q-3	A	Q-3	B
Q-4	C	Q-4	B	Q-4	A
Q-5	A	Q-5	B	Q-5	A
Q-6	A	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	N/A
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland does not provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has potential for educational use
Recreation	Wetland provides recreational opportunities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/30/95	Investigator(s):	FS/DC/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	West of 132nd Avenue, North of King Road		
Wetland Code:	MS-9		
Wetland Type(s):	PEM		
Approximate Area (acres):	0.01		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1	C	Q-1	A	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2	C	Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3	C	Q-3	A	Q-3	C	Q-3	A	Q-3	B
Q-4	C	Q-4	A	Q-4	B	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5	C	Q-5	A	Q-5	C	Q-5	B	Q-5	B
Q-6	B	Q-6	C	Q-6	C	Q-6	A			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	B										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	B
Q-2	B	Q-2	C	Q-2	B
Q-3	B	Q-3	C	Q-3	B
Q-4	C	Q-4	B	Q-4	A
Q-5	C	Q-5	A	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	Wetland potentially contributes to fish habitat
Water Quality	Wetland provides water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has potential for educational use
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be potentially pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/19/95	Investigator(s):	FS/DC/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	NE corner of intersection of 132nd Avenue and SE King Road		
Wetland Code:	MS-10		
Wetland Type(s):	PEM		
Approximate Area (acres):	1.80		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	B	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3		Q-3	A	Q-3	B	Q-3	C	Q-3	B
Q-4	C	Q-4		Q-4	B	Q-4	B	Q-4	A	Q-4	A
Q-5	B	Q-5		Q-5	C	Q-5	C	Q-5	B	Q-5	A
Q-6	B	Q-6		Q-6	C	Q-6	A			Q-6	B
Q-7	A					Q-7	A				
Q-8	A										
Q-9A											
Q-9B	C										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	B	Q-1	A	Q-1	B
Q-2	A	Q-2	C	Q-2	A
Q-3	B	Q-3	B	Q-3	B
Q-4	B	Q-4	B	Q-4	A
Q-5	A	Q-5	A	Q-5	A
Q-6	A	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	Not Applicable
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has potential for educational use
Recreation	Wetland has the potential to provide recreational activities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/10/95	Investigator(s):	FS/DC
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	Mt. Scott Creek N. of King Road to H.V. Park & inc. int. trib E. of 132nd Ave.		
Wetland Code:	MS-11		
Wetland Type(s):	PEM1Y, POWKZh, PFO1Y		
Approximate Area (acres):	1.80		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	A	Q-1	B	Q-1	A	Q-1	A	Q-1	C	Q-1	C
Q-2	B	Q-2	B	Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3	B	Q-3	B	Q-3	A	Q-3	B	Q-3	A
Q-4	A	Q-4	A	Q-4	A	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5	B	Q-5	B	Q-5	C	Q-5	B	Q-5	A
Q-6	A	Q-6	A	Q-6	C	Q-6	B			Q-6	B
Q-7	A					Q-7	A				
Q-8	A										
Q-9A											
Q-9B	A										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	A	Q-1	C
Q-2	A	Q-2	A	Q-2	A
Q-3	A	Q-3	A	Q-3	A
Q-4	A	Q-4	A	Q-4	A
Q-5	A	Q-5	A	Q-5	A
Q-6	A	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides diverse habitat for wildlife
Fish Habitat	Wetland potentially contributes to fish habitat
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland has some potential for enhancement
Education	Wetland has educational uses
Recreation	Wetland provides recreational opportunities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/10/1995	Investigator(s):	DC/FS
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	W Side of 132nd Avenue, N of Geneva Way		
Wetland Code:	MS-12		
Wetland Type(s):	PEM		
Approximate Area (acres):	0.34		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	A	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	B	Q-2	B	Q-2	C	Q-2	A
Q-3	C	Q-3		Q-3	A	Q-3	C	Q-3	A	Q-3	B
Q-4	C	Q-4		Q-4	C	Q-4	A	Q-4	A	Q-4	A
Q-5	A	Q-5		Q-5	A	Q-5	C	Q-5	B	Q-5	A
Q-6	B	Q-6		Q-6	C	Q-6	A			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	A										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	A	Q-1	B
Q-2	A	Q-2	C	Q-2	A
Q-3	B	Q-3	C	Q-3	A
Q-4	A	Q-4	B	Q-4	A
Q-5	A	Q-5	B	Q-5	A
Q-6	A	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	N/A
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has educational uses
Recreation	Wetland has the potential to provide recreational activities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/19/95 (Offsite)	Investigator(s):	FS/DC/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	West of Happy Valley Park, S. of Ridgecrest Road, E. of 132nd Avenue		
Wetland Code:	MS-13		
Wetland Type(s):	PEM		
Approximate Area (acres):	2.75		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	B	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	A	Q-2	A	Q-2	C	Q-2	B
Q-3	C	Q-3		Q-3	A	Q-3	A	Q-3	B	Q-3	B
Q-4	C	Q-4		Q-4	A	Q-4	B	Q-4	A	Q-4	A
Q-5	B	Q-5		Q-5	B	Q-5	C	Q-5	B	Q-5	A
Q-6	B	Q-6		Q-6	C	Q-6	C			Q-6	B
Q-7	A					Q-7	B				
Q-8	A										
Q-9A											
Q-9B	C										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	C	Q-1	C	Q-1	B
Q-2	A	Q-2	C	Q-2	A
Q-3	B	Q-3	C	Q-3	B
Q-4	B	Q-4	B	Q-4	A
Q-5	C	Q-5	A	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	Not Applicable
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland has some potential for enhancement
Education	Wetland site is not appropriate for educational use
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	1/19, 5/19/1995	Investigator(s):	DC/FS/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	N edge of Grade School, N side of SE King Road, east of city park		
Wetland Code:	MS-14		
Wetland Type(s):	PEM, PSS		
Approximate Area (acres):	23.5		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	A	Q-1	B	Q-1	A	Q-1	A	Q-1	C	Q-1	A
Q-2	B	Q-2	B	Q-2	A	Q-2	A	Q-2	A	Q-2	A
Q-3	A	Q-3	B	Q-3	A	Q-3	A	Q-3	A	Q-3	A
Q-4	C	Q-4	A	Q-4	A	Q-4	A	Q-4	A	Q-4	B
Q-5	A	Q-5	C	Q-5	A	Q-5	C	Q-5	B	Q-5	A
Q-6	A	Q-6	C	Q-6	A	Q-6	C			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	B										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	B	Q-1	A	Q-1	A
Q-2	B	Q-2	C	Q-2	A
Q-3	A	Q-3	A	Q-3	A
Q-4	A	Q-4	A	Q-4	A
Q-5	A	Q-5	B	Q-5	A
Q-6	A	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides diverse habitat for wildlife
Fish Habitat	Wetland contributes to fish habitat
Water Quality	Wetland provides water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has potential for educational use
Recreation	Wetland provides recreational opportunities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/3/1995 and 5/30/1995	Investigator(s):	DC/FS/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	W of Highland Road (145th), N of Callahan		
Wetland Code:	MS-16		
Wetland Type(s):	PEM		
Approximate Area (acres):	0.34		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	A	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	C	Q-2	C	Q-2	C	Q-2	A
Q-3	B	Q-3		Q-3	A	Q-3	C	Q-3	B	Q-3	B
Q-4	C	Q-4		Q-4	C	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5		Q-5	B	Q-5	C	Q-5	B	Q-5	A
Q-6	B	Q-6		Q-6	C	Q-6	B			Q-6	B
Q-7	A					Q-7	A				
Q-8	A										
Q-9A											
Q-9B	A										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	A	Q-1	B
Q-2	A	Q-2	C	Q-2	A
Q-3	B	Q-3	C	Q-3	A
Q-4	A	Q-4	B	Q-4	A
Q-5	A	Q-5	B	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	N/A
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland does not provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has educational uses
Recreation	Wetland has the potential to provide recreational activities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	6/8/95	Investigator(s):	DC/JF
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	East of 122nd Avenue, south of SE Eisert Court		
Wetland Code:	MS-17		
Wetland Type(s):	PEM		
Approximate Area (acres):	0.30		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	C	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3		Q-3	A	Q-3	B	Q-3	A	Q-3	B
Q-4	C	Q-4		Q-4	B	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5		Q-5	A	Q-5	C	Q-5	B	Q-5	B
Q-6	A	Q-6		Q-6	C	Q-6	C			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	C										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	B
Q-2	B	Q-2	C	Q-2	A
Q-3	B	Q-3	C	Q-3	B
Q-4	B	Q-4	B	Q-4	A
Q-5	C	Q-5	A	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	Not Applicable
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has potential for educational use
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	3/18/1997	Investigator(s):	DC
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	E Side of 129th Avenue, S of Lazy Hawk Ranch development		
Wetland Code:	MS-22		
Wetland Type(s):	PEM		
Approximate Area (acres):	0.13		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1		Q-1	C	Q-1	B	Q-1	C	Q-1	A
Q-2	C	Q-2		Q-2	C	Q-2	B	Q-2	C	Q-2	B
Q-3	C	Q-3		Q-3	A	Q-3	C	Q-3	A	Q-3	B
Q-4	C	Q-4		Q-4	C	Q-4	A	Q-4	A	Q-4	A
Q-5	A	Q-5		Q-5	A	Q-5	C	Q-5	B	Q-5	B
Q-6	B	Q-6		Q-6	A	Q-6	A			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	A										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	B
Q-2	B	Q-2	C	Q-2	B
Q-3	B	Q-3	C	Q-3	B
Q-4	B	Q-4	B	Q-4	B
Q-5	C	Q-5	B	Q-5	C
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	N/A
Water Quality	Wetland has the potential to provide water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland has some potential for enhancement
Education	Wetland has potential for educational use
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be potentially pleasing

OREGON FRESHWATER WETLAND ASSESSMENT METHODOLOGY

Date:	5/17/95	Investigator(s):	JF/FS
Project Name:	HAPPY VALLEY LOCAL WETLANDS INVENTORY		
Wetland Location:	North of Tyler Road, East of City View Drive		
Wetland Code:	PH-1		
Wetland Type(s):	PSS		
Approximate Area (acres):	0.14		

Wildlife Habitat		Fish Habitat		Water Quality		Hydrologic Control		Sensitivity to Impact		Enhancement Potential	
Q	A	Q	A	Q	A	Q	A	Q	A	Q	A
Q-1	B	Q-1	A	Q-1	A	Q-1	B	Q-1	C	Q-1	A
Q-2	A	Q-2	C	Q-2	A	Q-2	A	Q-2	C	Q-2	A
Q-3	C	Q-3	C	Q-3	A	Q-3	B	Q-3	A	Q-3	B
Q-4	C	Q-4	A	Q-4	B	Q-4	B	Q-4	A	Q-4	A
Q-5	A	Q-5	C	Q-5	A	Q-5	A	Q-5	A	Q-5	B
Q-6	B	Q-6	C	Q-6	C	Q-6	C			Q-6	B
Q-7	A					Q-7	A				
Q-8	B										
Q-9A											
Q-9B	A										

Education		Recreation		Aesthetic Quality	
Q	A	Q	A	Q	A
Q-1	A	Q-1	C	Q-1	B
Q-2	A	Q-2	C	Q-2	A
Q-3	B	Q-3	C	Q-3	B
Q-4	B	Q-4	B	Q-4	A
Q-5	C	Q-5	A	Q-5	A
Q-6	B	Q-6	B		

RESULTS:

Wildlife Habitat	Wetland provides habitat for some wildlife species
Fish Habitat	Wetland potentially contributes to fish habitat
Water Quality	Wetland provides water-quality benefits
Hydrologic Control	Wetland has the potential to provide hydrologic control
Sensitivity to Impact	Wetland is potentially sensitive to secondary effects
Enhancement Potential	Wetland can be enhanced
Education	Wetland has educational uses
Recreation	Wetland is not appropriate for or does not provide recreational opportunities
Aesthetic Quality	Wetland is considered to be pleasing