Local Wetlands and Riparian Inventories

City of Molalla
Local Wetlands and Riparian Inventories

Prepared for

City of Molalla
Molalla, Oregon

Prepared by

Pacific Habitat Services, Inc.
Wilsonville, Oregon
(503) 570-0800

June 2001

APPROVED WETLANDS INVENTORY
Oregon Department of State Lands

Meets LWI standards
Date 3/04 Approved by J. Morlan

AP OS INVENTORY
State Lands

Meets _____ standards
Date ___ oved by _____

City of Molalla
Local Wetlands and Riparian Inventories

Prepared for

Dean Madison
City of Molalla
PO Box 248
Molalla, Oregon 97038

Prepared by

John van Staveren
Patricia Farrell
Shawn Eisner
Fred Small
Caroline Rim
Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, Oregon 97070
(503) 570-0800
(503) 570-0855 FAX
PHS Project Number: 2250

June 2001

City of Molalla
Local Wetlands and Riparian Inventories

Prepared for

Dean Madison
City of Molalla
PO Box 248
Molalla, Oregon 97038

Prepared by

John van Staveren
Patricia Farrell
Shawn Eisner
Fred Small
Caroline Rim
Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, Oregon 97070
(503) 570-0800
(503) 570-0855 FAX
PHS Project Number: 2250

June 2001

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

TABLES

1.0 INTRODUCTION

The City of Molalla (City), through a Wetland Planning Grant from the Department of Land Conservation and Development (DLCD), hired Pacific Habitat Services, Inc. (PHS) to conduct a Local Wetlands Inventory (LWI) for a 1,780-acre study area within the City's Urban Growth Boundary. The study area is in Clackamas County (Township 5 South, Range 2 East, Sections 4, 5, 6, 7, 8, 9, 16, and 17) and includes portions of Bear and Creamery Creeks. Figure 1 illustrates the location of the study area.

The goal of the study is to address the requirements of Statewide Planning Goal 5 (Natural Resources, Scenic and Historic Areas, and Open Spaces), and Oregon Administrative Rule (OAR) Section 660, Division 23. The objective of Goal 5 is to "protect natural resources and conserve scenic, historic and open space resources for present and future generations." Specifically, the City hired PHS to determine the location and extent of wetlands; assess the quality of the wetlands; and determine which of these wetlands are significant according to the requirements of Goal 5. A Riparian Inventory and Assessment was also funded under the same planning grant and is submitted as part this report.

This report begins by discussing the definitions used in the report and inventory (Section 2), followed by the methodology used to conduct the field work for the LWI, the wetland assessment methodology, and the methodology used to produce the maps for the inventory (Section 3). Cartography for the project is outlined in Section 4; Section 5 outlines staff qualifications of individuals at PHS who worked on the project; Section 6 discusses the study area characteristics, such as the climate, topography, soils and vegetation; Section 7 discusses the Local Wetlands Inventory results, including wetland distribution, acreage, and Cowardin classification, as well as the results of the *Oregon Freshwater Wetland Assessment Methodology*; Section 8 discusses the determination of significant wetlands according to Goal 5; Section 9 discusses the results of the Riparian Assessment; Section 10 provides a project summary; and Section 11 includes references.

There are six appendices to the report. Appendix A contains the wetland characterization sheets for each wetland, organized by wetland code. The characterization sheets note wetland location, tax lots, acreage, Cowardin classification, soil series, wetland vegetation, adjacent upland vegetation, and other notes related to adjacent wetlands or hydrology. This form was completed for each wetland unit, regardless of whether it was an on-site or off-site determination.

Appendix B contains the wetland determination data forms. These forms document the sample points taken for the on-site wetlands. Hydrology, soils, and dominant vegetation are recorded for each sample point in order to determine whether it is wetland or upland.

Appendix C is the *Oregon Freshwater Wetland Assessment Methodology* data and summary for each wetland unit. Each wetland's functions and conditions are assessed according to an established state methodology. The results and rationale are also summarized for each wetland unit. In addition, a determination of significance for each wetland unit is included in Appendix D. Data sheets as well as the questions and answer sheets for the riparian assessment are included in Appendix E. Appendix F contains a non-comprehensive listing of plant species encountered or expected within the project area.

2.0 DEFINITIONS

These terms helped define the methodology used for the City of Molalla Local Wetlands Inventory and may be referred to in this report.

1987 Manual

The Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. (Environmental Laboratory 1987)

This manual is used by the Corps and DSL to document the location of wetlands within the State of Oregon. The 1987 manual provides technical criteria, field indicators, and recommended procedures to be used in determining whether an area is a jurisdictional wetland. Undisturbed areas require three criteria for them to be classified as wetland. These criteria are hydric soils, a dominance of hydrophytic vegetation, and wetland hydrology.

Cowardin Wetland Classification

The classification of wetlands as defined by plants, soils and the frequency of flooding is described in "Classification of wetlands and deepwater habitats of the United States." (Cowardin, et. al. 1979) See Palustrine System.

Goal 5

Goal 5 (OAR 660, Division 23) is intended "to protect natural resources, and conserve scenic and historic areas and open spaces." (DLCD, 1995)

Growing Season

"The portion of the year when soil temperatures at 19.7 inches below the soil surface are higher than biological zero (41° Fahrenheit, 5° Celsius)." (COE, 1987)

The growing season for any given site or location is determined from Natural Resource Conservation Service (NRCS, formerly the U.S. Soil Conservation Service SCS) data and information. The length of the season can be approximated from frost free days, based on air temperature.

Hydric Soils

"Soils which are ponded, flooded, or saturated for long enough during the growing season to develop anaerobic conditions." (USDA, SCS, 1985)

Periodic saturation of soils causes alternation of reduced and oxidized conditions, which leads to the formation of redoximorphic features (gleying and mottling). Mineral hydric soils will be either gleyed or will have bright mottles and/or low matrix chroma. The redoximorphic feature known as gley is a result of greatly reduced soil

conditions, which result in a characteristic grayish, bluish or greenish soil color. The term mottling is used to describe areas of contrasting color within a soil matrix. The soil matrix is the portion of the soil layer that has the predominant color. Soils that have brightly colored mottles and a low matrix chroma are indicative of a fluctuating water table.

Hydric soil indicators include: organic content of greater than 50% by volume, sulfidic material or "rotten egg" smell, and/or presence of redoximorphic features and dark soil matrix, as determined by the use of a Munsell Soil Color Chart. This chart establishes the chroma, value and hue of soils based on comparison with color chips. Mineral hydric soils usually have a matrix chroma of 2 or less in mottled soils, or a matrix chroma of 1 or less in unmottled soils.

Hydrogeomorphic (HGM) Wetland Classification

A method of assessing wetlands using the physical, chemical, and biological functions of wetlands. It is based on the relationship of geomorphic setting, water source, and hydrodynamics. (Brinson, 1993)

Hydrophytic Vegetation

"Plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content." (National Resource Council, 1995)

The U.S. Fish and Wildlife Service, in the *National List of Plant Species that Occur in Wetlands*, has established five basic groups of vegetation based on their frequency of occurrence in wetlands. These categories, referred to as the "wetland indicator status," are as follows: obligate wetland plants (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), and obligate upland (UPL).

Local Wetlands Inventory (LWI)

An inventory of all wetlands greater than 0.5 acres in size within a local jurisdiction using the standards and procedures of OAR 141-86-110 through 141-86-240.

In 1989, the Oregon state legislature authorized DSL to develop a statewide wetlands inventory for planning and regulatory purposes. Accordingly, DSL established Local Wetlands Inventory (LWI) standards and guidelines under ORS 196.674. An approved LWI replaces the National Wetlands Inventory maps and is incorporated into the statewide wetlands inventory.

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 inch = 400 feet (1" = 400'). Wetlands are located using the on-site option where access to property is allowed, or off-site where access is denied. Wetlands can be mapped off-site by using information such as topographic and National Wetlands Inventory maps, aerial photographs, and soils surveys.

The approximate location of wetlands is placed on a parcel-based map. The parcel-based map allows the property owner, the local jurisdiction, and DSL, to know which tax lots may contain wetlands.

The maps and documents produced for the LWI are intended for planning purposes only. Mapped wetland boundaries are accurate to within 25 feet; however, there may be unmapped wetlands that are subject to regulation. In all cases, actual field conditions determine wetland boundaries.

Palustrine System (P--)

"All nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens and all such wetlands that occur in tidal areas where salinity is less than 0.5%. This includes areas traditionally called swamps, marshes, fens, as well as shallow, permanent or intermittent water bodies called ponds." (Cowardin et. al. 1979)

- **Aquatic bed (PAB)**

Wetland and deepwater habitats dominated by plants that grow principally on or below the surface of the water.

- **Emergent Wetland (PEM)**

These wetlands have rooted herbaceous vegetation, which stand erect above the water or ground surface.

- **Emergent Wetland, farmed (PEM)**

These wetlands have rooted herbaceous vegetation; the soil surface has been mechanically or physically altered for the production of crops, but hydrophytes will become reestablished if farming is discontinued.

- **Scrub-shrub Wetland (PSS)**

Wetlands dominated by shrubs and tree saplings that are less than 20 feet high.

- **Forested Wetland (PFO)**

Wetlands dominated by trees that are greater than 20 feet high.

- **Open Water (POW)**

A wetland class consisting of areas of water less than 6.6 feet deep.

- **Open Water, excavated (POWx)**

A wetland class consisting of areas of water less than 6.6 feet deep that lies within a basin or channel excavated by man.

Riparian Area

"The area immediately adjacent to a water resource, which affects or is affected by the water resource. Riparian areas do not include the water resource itself." (DSL, 1998)

Riparian Assessment

"Determining the relative quality of a riparian area by assessing its functions." (DSL, 1998)

An evaluation of the ability of the riparian area to provide water quality, flood management, thermal regulation, and wildlife habitat functions. The methodology generally used to determine the relative quality of riparian areas for purposes of an inventory is *The Urban Riparian Inventory and Assessment Guide.*

Riparian Function

A characteristic action or role provided by riparian areas, such as water quality; flood management; thermal regulation; and wildlife habitat. (DSL, 1998)

Riparian Inventory

An inventory of location and extent of riparian areas within the boundaries of the Local Wetlands Inventory using *"The Urban Riparian Inventory and Assessment Guide."*

Water Resource

"An intermittent or perennial stream, pond, river, lake and including their adjacent wetlands." (DSL, 1998)

Waters of the State

Natural waterways including all tidal and nontidal bays, intermittent streams, constantly flowing streams, lakes, wetlands and other bodies of water in this state, navigable and nonnavigable. Natural waterways are defined as: waterways created naturally by geological and hydrological processes, and waterways that would be natural but for human-caused disturbances (e.g. channelized or culverted streams, impounded waters, partially drained wetlands or ponds created in wetlands). (ORS 196.800-196.990, 1995)

Wetland

"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).

Wetland Assessment

Determining the relative quality of a wetland by assessing its functions and conditions. The methodology generally used to determine the relative quality of wetlands for purposes of an LWI is the Oregon Freshwater Wetland Assessment Methodology. (Roth, et. al. 1996)

Wetland Classification

The classification of wetlands as defined by plants, soils and the frequency of flooding is described in "Classification of wetlands and deepwater habitats of the United States." (Cowardin, et. al. 1979) See Palustrine System.

Wetland Condition

"The integrity of a wetland's physical and biological structure. This determines the ability of the wetland to perform specific functions, as well as its resilience and enhancement opportunities." (Roth et al., 1996)

Wetland Function

"A characteristic action or behavior associated with a wetland that contributes to a larger ecological condition such as wildlife habitat, water quality and/or flood control." (Roth, et. al. 1996)

Wetland Hydrology

"Permanent or periodic inundation or prolonged soil saturation sufficient to create anaerobic conditions in the upper soil profile." (COE, 1987)

Wetlands Regulation

Wetlands in Oregon are regulated by the Division of State Lands (DSL) under the Removal-Fill Law (ORS 196.800-196.990) and by the U.S. Army Corps of Engineers (Corps) through Section 404 of the Clean Water Act.

3.0 PROJECT METHODOLOGY

3.1 Public Involvement

Prior to beginning the inventory, the City of Molalla mailed letters to landowners who had areas of mapped hydric soils, soils with hydric inclusions, National Wetlands Inventory mapped wetlands, or suspected wetland areas on their property. The letter was a notice requesting permission for site access.

Landowners were requested to either grant site access, deny site access, or grant access by appointment. A parcel-based map of the Urban Growth Boundary of Molalla was prepared showing those parcels where access was approved, denied or an appointment was requested. These property boundaries were transferred to an aerial photo base map by PHS staff for use during the inventory.

A public meeting was held on April 4, 2001 to introduce the project to the residents of Molalla. This meeting was held prior to the date required for return of the access request letters to answer any questions affected landowners may have had for representatives of the City of Molalla, PHS, or DSL.

A second public meeting will be held in the summer of 2001, to present the draft results of the wetland inventory to the residents of Molalla.

3.2 Local Wetlands Inventory Methodology

3.2.1 Routine Off-site Determination

Prior to beginning field work, off-site mapping was conducted to determine the approximate location of wetland boundaries based on available information. This information included the USGS topographic quadrangles, the Soil Survey of Clackamas County Area, Oregon (SCS, 1985), the National Wetlands Inventory maps, October 1998 color aerial photographs at a scale of 1" = 400', and 1991 black and white aerial photographs at a scale of 1" = 200'.

If access to land was allowed, the wetland boundaries were verified in the field (see Section 3.2.2). If access was not granted, the boundaries were based on the mapping conducted in the office, and on observation of wetland boundaries from adjacent roads or properties.

3.2.2 Routine On-site Determination

Where property access permission had been granted, on-site observation and inspection of soils, vegetation, and hydrology were made using the Routine On-site method of the 1987 manual. Soil pits were excavated up to a depth of approximately 18-inches in selected locations. The soil profiles were examined for hydric soils and wetland hydrology field indicators. A visual percent-cover estimate of the dominant species of the plant community for a maximum 30-foot radius was conducted at each sampling location. Sampling locations were chosen to document a change in the wetland boundary and a particular plant community visible on an aerial photograph. Data was recorded in the field and transferred to computer-generated wetland delineation data sheets in the office.

Field work for the inventory was conducted between March 2001 and June 2001. No wetland boundaries were staked or flagged in the field.

3.3 Wetland Quality Assessment

3.3.1 The *Oregon Freshwater Wetland Assessment Methodology*

The quality of wetlands in the study area were assessed using the *Oregon Freshwater Wetland, Assessment Methodology* (OFWAM) (Roth et al. 1996). OFWAM was developed by an interagency committee to assess the relative quality of wetlands primarily for planning and educational purposes. Copies of the methodology are available from DSL for a fee. OFWAM does not assign a numeric ranking to the wetlands, but does determine the relative quality of six functions and three conditions for each of the wetlands. A description of each of the functions and conditions is included below.

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 does 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 have fish habitat function intact, impacted or degraded, or lost or not present.

Water Quality: Evaluates the potential of a wetland to reduce the impacts of excess nutrients in storm water runoff on downstream waters. A wetland's water quality function can be assessed by OFWAM as intact, impacted or degraded, or lost or not present.

Hydrologic control: Evaluates the effectiveness of a wetland to reduce downstream flood peaks and store floodwaters. A wetland's hydrologic control functions can be assessed by OFWAM as intact, impacted or degraded, or lost or not present.

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 not be appropriate for educational uses.

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

Wetland Conditions

Sensitivity to Future Impacts: Evaluates the wetlands ability to sustain itself and its ability to recover from future impacts. It is an indication of risk to the wetland because of future changes in the watershed and surrounding land. A wetland can be assessed by OFWAM as sensitive to future impacts, potentially sensitive to future impacts, or not sensitive to future impacts. An undisturbed forested wetland is more sensitive to future impact than a wetland that has already been disturbed, such as agricultural wetland.

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. Wetlands that provide diverse wildlife habitat were not assessed in this section, as per the revised OFWAM. Wetlands are assessed as either high enhancement potential, moderate enhancement potential, or little enhancement potential.

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

3.3.2 Wetlands of Special Interest for Protection

The first filter in OFWAM is to determine whether the wetland is in a management plan, is protected by regulatory rules or statutes, or is uncommon in Oregon. Ten questions are answered for each wetland and a "yes" answer to any of the questions puts the wetland into the "special interest for protection" category. If the wetland falls into this category, it is noted on the wetland characterization sheet.

3.3.3 Field Methodology

During the process of determining the boundaries for the LWI, data were also collected for the process of determining its relative quality. Data collected for this purpose are explained in the Wetland Characterization section of OFWAM. Data collected in the field included the Cowardin classes, the types of disturbance (if any) in the wetland area, the hydrology of the wetland area (e.g. the location of constrictions), the presence of fish, large woody debris, the degree of vegetative cover, and other information necessary to complete the assessment of the wetland in the office.

If the wetland determination was off-site, the OFWAM section and wetland characterization was based on review of the aerial photographs and knowledge of other similar or adjacent wetlands.

3.3.4 Office Assessment

Subsequent to the field work, the data collected for each wetland were used to answer questions for each function and condition. Additional information on the wetlands, the landscape and the general area were gathered in the office. The answers within each function and condition section of the methodology were entered into a computer spreadsheet, which automatically displays the results of the assessment methodology.

Certain criteria were established for the OFWAM assessment prior to beginning. The following is a list of certain standards or assumptions which were used in answering the assessment questions:

Water Quality: None of the streams or waterbodies in the study area are listed as water quality limited on the Oregon Department of Environmental Quality 303(d) list (ODEQ, 1998). This information was used in the following questions in OFWAM: Wildlife, question 7; Fish Habitat, question 4; Water Quality, question 6; and Sensitivity to Future Impacts, question 3.

Fish Habitat: DSL Essential Salmonid Habitat (ESH) maps of both Bear Creek and Creamery Creek identified no anadromous fish in any of the streams that flow through Molalla. However, *Oregon Guideline for Timing of In-water Work to Protect Fish and Wildlife Resources* (Oregon Department of Fish and Wildlife (ODFW), 2000) identifies cutthrout trout (including sea run) as potentially present in Molalla River tributaries, such as Creamery Creek. The *Guidelines* also listed cutthrout trout, rainbow trout and steelhead (winter) as potentially present in tributaries of the Pudding River (Bear Creek). These listed fish were assumed to be potentially present in the creeks of Molalla. This information was used to answer questions in the Fish Habitat, question 6.

Floodplains: The City of Molalla and vicinity is not included on any Federal Emergency Management Agency (FEMA) 100-year floodplain maps. Question 1 in Hydrologic Control was answered using this information.

Land Use: The City provided a zoning map of properties within city limits, for the study area. A discussion with Shane Potter, city planner for the City of Molalla, identified areas outside city limits, but within the UGB, to be zoned primarily RRFF5 (rural residential farm forest 5-acre). Therefore, questions 6 and 7 in Hydrologic Control and question 5 in Sensitivity to Future Impacts were answered based on this information.

Enhancement Potential: The enhancement potential section was not required if the wetland was assessed with "diverse wildlife habitat", as per OFWAM directive. In addition, question 3 was specifically directed towards wetlands whose primary source of hydrology was surface water. If this was not the case, question 3 was not answered.

3.4 Riparian Inventory

3.4.1 Urban Riparian Inventory and Assessment Guide

The *Urban Riparian Inventory and Assessment Guide* (*Riparian Guide*) was used for the Molalla Riparian Inventory. The Riparian Guide depends on a combination of best available knowledge, field observations, and best professional judgment. The methodology is comprised of the riparian inventory and the riparian assessment. The riparian inventory involves gathering and assimilating information pertinent to the project site, developing a base map, and completing the Riparian Characterization Form.

The guide was designed to work in conjunction with the LWI and relies on the same aerial photograph or base map. In addition, coding of the riparian areas is based on hydrologic basins, reflecting the coding system established for the LWI. The inventory portion of the Guide depends on the completion of a Riparian Characterization Form and Riparian Width Determination Form.

A completed Riparian Characterization Form provides information on the physical and biological characteristics of the riparian area, such as vegetation, slope, adjacent land uses, and degree of disturbance. Most of the form was completed on-site, provided access was allowed. However, some portions, such as the mapped soil series, were completed in the office. The questions are answered separately for the riparian areas on both sides of a stream.

The riparian width is measured from the edge of the water resource, typically either the top of a streambank or the outer edge of a wetland, lake, or pond. Riparian areas on both sides of a stream channel are assigned separate widths. Right and left widths are not combined and do not include the channel. The riparian potential width is based on the dominant riparian tree species within 100 feet of the water resource. The height of the dominant tree species at maturity will be used as a distance to define the outer riparian boundary. The height of this tree species at maturity is called the potential tree height (PTH). PTH is used as the potential riparian width because it represents a distance in which a tree can still affect the water resource (e.g. shade, organic material).

Where riparian area trees have been eliminated by land-use activities or natural causes, such as development, land slides, or logging, it may be necessary to extrapolate tree heights from a reference site. The reference site should be similar in character and landscape position and should be located as close as possible to the riparian reach. If a reference site is used, it is noted on the Width Determination Form. If a reference site cannot be located, field observations and reference materials must be used to establish PTH.

Although the riparian width will never exceed the PTH, it may be less than the PTH if impervious surfaces or permanent structures (e.g. buildings or roads) are inventoried within the riparian area. Therefore, on the Riparian Width Determination form, the first width represents the PTH and the second width represents the actual width as determined in the field and during review of aerial photographs.

Completion of the Riparian Width Determination Form also requires drawing a typical cross section through the riparian area.

3.4.2 Riparian Assessment

Riparian areas provide numerous and complex functions that affect both aquatic and terrestrial systems. Many ecological functions of riparian areas are also provided by wetlands, floodplains, and vegetated upland areas.

The Riparian Function Assessment evaluates the ability of the riparian area to provide water quality, flood management, thermal regulation, and wildlife habitat functions. The results indicate whether the functions of each reach are intact, degraded, or severely impacted. The assessment is completed by answering a series of questions. Most of the questions are intended to be answered using data from the Riparian Characterization Form.

Because certain elements or characteristics of a riparian area are more critical to its function, the answers are "weighted." The points are then totaled for each side and for each function. Based on the score, the riparian function will be assessed as high, medium or low. The results of the Riparian Function Assessment for all of the riparian areas within the inventory study area are then transferred to a Riparian Function Assessment Summary Table.

3.4.3 Riparian Functions

Water Quality

Riparian areas can enhance water quality in many ways. Undisturbed, densely vegetated riparian areas trap sediments, inhibit erosion and filter runoff originating from impervious surfaces, lawns, golf courses, etc.

Sedimentation and erosion, although natural processes, are accelerated in urban areas by increased impervious surfaces. Impervious surfaces also inhibit infiltration. Sediment within a riparian area can be from erosion of poorly vegetated uplands, runoff from impervious surfaces, or floods from an adjacent water resource. Sediments often carry nutrients (e.g. phosphates and nitrates) and pollutants (e.g. heavy metals, hydrocarbons) to water resources, altering water chemistry, burying spawning gravels and impacting fish and wildlife habitat. Excessive concentration of nutrients in the water can trigger algal blooms, depleting the water of oxygen required by fish and other aquatic organisms.

The ability of a riparian area to resist erosion is related to slope, soil type, type of vegetation, vegetation cover, landscape position, and degree of human disturbance.

Flood Management

Riparian areas and associated wetlands and floodplains provide a valuable flood management function by reducing the force and volume of floodwaters. Floodwaters flowing into a vegetated flood prone riparian area can be slowed or temporarily stored, reducing peak flows and flooding downstream. Woody vegetation, in particular, resists floodwaters and reduces its velocity. Topographic features, such as swales and depressions, can enhance a riparian area's ability to manage flood flows. Reducing the velocity of floodwaters in the riparian area allows infiltration of water into the soil. Water entering the soil is slowly released into the main channel, delaying its movement downstream.

Thermal Regulation

Water temperature affects the ability of a stream to support viable populations of certain aquatic organisms. Riparian shade, especially forest canopy, moderates temperature within and adjacent to a water resource. Although stream temperatures are important throughout the year, summer temperature is generally more critical for fish species such as salmonids. High water temperatures and sunlight are factors that can promote algal blooms, reducing dissolved oxygen required by anadromous fish and other cold-water dependent organisms.

The aspect or orientation of the water resource and the height of the adjacent riparian vegetation play important roles in how effective riparian vegetation is in providing shade.

Wildlife Habitat

Riparian areas provide valuable habitat for wildlife and influence fish habitat. The highest quality wildlife habitat in urban areas has a variety of plant species and layers, a perennial water source, and some degree of protection or buffering from disturbance.

Riparian areas are particularly important migration corridors between upland and aquatic systems for a wide variety of species. It has been reported that the majority of Oregon's major wildlife species, including amphibians and reptiles, use wetlands or riparian areas during some portion of their life cycle.

4.0 CARTOGRAPHY

Color aerial photographs were obtained for use in the field. These photos are 1998 true color, with a scale of approximately 1 inch = 400 feet. Clear acetate was overlaid and permanently registered on the photographs and preliminary wetland boundaries and data point locations were drawn directly on the acetate in the field. In addition, areas within the project area where permission to enter was denied were drawn on the acetate overlays. The wetland boundaries and approximate affected tax lot boundaries were then transferred into a digital format and inserted into a computer-based map obtained through the City of Molalla from the Clackamas County Department of Information Services – GIS Division.

Additional layers added to the AutoCAD base map included watershed basin boundaries, streams from the USGS, additional geographic names, wetland codes, riparian codes, and sample point locations. A hydrologic basin refers to the drainage area for an individually named stream or creek. There are three hydrologic basins within the study area: Bear Creek, Creamery Creek, and the Molalla River.

A series of 1991 black and white aerial photograph contact prints 1 inch = 200 feet were also used for comparison of certain vegetation and drainage pattern signatures over time.

Each wetland was assigned a code beginning with the three letter watershed designation and a wetland number (e.g. BC-1 for Bear Creek, CC-1 for Creamery Creek and MR-1 for Molalla River). Wetlands that were hydrologically connected but separated by roads or culverts were labeled with a code modifier (e.g. BC-2A, 2B). In addition, wetlands were assigned a code modifier if they differed in character. For instance, if one section of the wetland was agricultural and another section was forested, each section was assigned a code modifier. Agricultural wetlands also received another modifier, a lower case "f' (e.g. CC-2Bf). This was done in order to provide a more accurate acreage of agricultural wetlands within the study area, and to allow a separate OFWAM assessment for each different type of wetland. Tax lots with no access (i.e. off-site determinations) were marked differently on the maps.

In addition to the base map, PHS generated a series of maps including the project boundary (Figure 1), soils (Figure 2), and the National Wetlands Inventory map (Figure 3).

5.0 STAFF QUALIFICATIONS

John van Staveren: President/Natural Resources Division; Senior Scientist; Professional Wetland Scientist

Project Role: Project Manager
Project Responsibility: Contract negotiations, monthly billing
Wetland and riparian inventory field work and assessment
Public presentations
Quality control
Project coordination

John van Staveren has managed over 600 wetlands-related projects, including 12 large-scale wetland inventories; conducted over 750 wetland delineations; testified at numerous public hearings; and provided expert witness testimony. He served as technical advisor to two Citizen Advisory Committees responsible for establishing criteria for the determination of significant wetlands for purposes of Goal 5 and the determination of significant natural resources for purposes of Goal 17.

John van Staveren served on two Oregon Division of State Land's Technical Advisory Committees (TACs) responsible for developing statewide policy on wetlands. These TACs are to establish statewide criteria for determining locally significant wetlands for Goal 5 and to establish a payment option for wetland mitigation. He was a Wetlands Expert team member providing analysis of the OFWAM, and was a reviewer for the latest revision to the methodology.

Patricia Farrell: Wetland Scientist

Project Role: Assistant Project Manager
Project Responsibility: Wetland and riparian inventory field work and assessment
Quality control and editing

Patricia Farrell has a bachelor's degree in biology and a master's in landscape architecture. Patricia has played a major role in eleven Local Wetlands Inventories, conducted Goal 5 and Goal 17 natural resource surveys, conducted riparian inventories, and applied the *Oregon Freshwater Assessment Methodology* to hundreds of wetlands. She has also assisted in the development of local ordinances related to protection of significant Goal 5 natural resources and in the development of the *Urban Riparian Inventory and Assessment Guide.*

Shawn Eisner: Wetland Scientist

Project Role: Wetland Scientist
Project Responsibility: Wetland and riparian inventory field work and assessment
Quality control and editing
Report writing
Data input

Shawn has Bachelor's degrees in Earth and Environmental Sciences. Shawn provides specialized support pertaining to wetland delineations, determinations, and monitoring; stream and natural resource assessments and environmental permit processing. He conducts field work and data collection for Local Wetland Inventories and is involved in report preparation and wetland/riparian assessments.

Fred Small: Wetland Scientist, Botanist

Project Role:	Botanist, Wetland Scientist
Project Responsibility:	Wetland and riparian inventory field work and assessment
	Plant identification and cataloging
	Report writing

Fred Small has a bachelor's degree in biology with strong emphasis in botany. Fred has delineated over 100 wetlands; played a role in several large scale local wetland inventories; conducted rare, threatened, endangered plant surveys for sites in the Oregon Cascades, Willamette Valley, and Oregon Coast.

Caroline Rim: Wetland Scientist, Biologist

Project Role:	Wetland Scientist
Project Responsibility:	Wetland and riparian inventory field work and assessment

Caroline Rim's experience as an environmental consultant includes natural resource site assessments in conjunction with wetland delineations, determinations, designing and monitoring wetland mitigation sites, as well as wildlife habitat assessments and environmental permit processing.

Tom Rodgers: AutoCAD and Arc-Info Specialist

Project Role:	Cartographer
Project Responsibility:	Mapping
	Graphics

Tom Rodgers is a computer graphics specialist, with experience in the production of Local Wetlands Inventories. He is proficient with AutoCAD Map, Arc-View and Arc-Info programs. He has prepared the maps for several LWIs and coordinated with Planning Departments and Council of Governments to ensure that map products and digital information is compatible with local operating systems.

Jane Le Blanc: Technical Editor

Project Role:	Technical Editor
Project Responsibility:	Graphics
	Report editing, formatting and layout
	Data input

Jane Le Blanc is a technical editor and provides permitting support for PHS. Her duties include formatting and editing wetland reports, proposals, and letters as well as data input.

6.0 STUDY AREA CHARACTERISTICS

6.1 Setting

The study area includes the City of Molalla Urban Growth Boundary (UGB). The area is mostly residential/rural residential, with small areas devoted to public facilities (e.g. parks, schools), commercial and agricultural.

6.2 Topography

The City of Molalla is located along the eastern edge of the Willamette Valley, a broad alluvial valley between the Cascade and Coast Ranges. The City of Molalla lies on the watershed boundary between the Pudding River to the west and the Molalla River to the north and east. The southern portion of Molalla drains towards Bear Creek, which flows directly into the Pudding River. The study area also contains Creamery Creek, a northwesterly flowing tributary of Gribble Creek. The northeast corner of Molalla drains north towards a small unnamed tributary that flows directly into the Molalla River.

Elevations range from approximately 440 feet NGVD along Highway 211 on the east end of Molalla to approximately 285 feet NGVD along Bear Creek, at the west end, just south of Toliver Road.

6.3 Hydrology

6.3.1 Hydrologic Features of the Molalla Study Area

The main hydrologic features of the Molalla area are Bear Creek and Creamery Creek. The southern and western portions of the study area are located within the Bear Creek watershed, a perennial tributary of the Pudding River. The northern portion of the study area drains towards Creamery Creek, an intermittent tributary of Gribble Creek, which flows into the Willamette River.

Bear Creek flows towards the west, through the Molalla area, bordered by relatively level floodplain and/or wetland areas. Much of Bear Creek retains a forested riparian buffer, despite increasing pressure by development. The headwater area of Creamery Creek is located east of Molalla. The creek is culverted or ditched through much of the city. The creek daylights west of Creamery Creek Lane, where it flows through a forested and emergent wetland before returning to a ditch through a developing residential area in former agricultural fields and pasture land.

6.3.2 Watershed Designation

The study area was divided into three watersheds: Bear Creek, Creamery Creek and the Molalla River. The watershed boundaries were based on topography, observations of drainage patterns in the field and the City of Molalla *Master Drainage and Preliminary Street Plans* map. The watersheds and their sizes are listed in Table 1 below:

Table 1: Watersheds and Acreages for the Molalla LWI

Watershed	Area (acres)
Bear Creek	1,014.50
Creamery Creek	652.59
Molalla River	112.41
Total Project Acreage	**1,779.50**

6.3.3 Hydrologic Indicators

Direct indicators of hydrology observed during the inventory included soils saturated at or near the surface, inundation, wetland drainage patterns and/or a shallow water table. Indirect indicators included oxidized rhizospheres with living roots, algal mats, and water stained leaves.

6.4 Soils

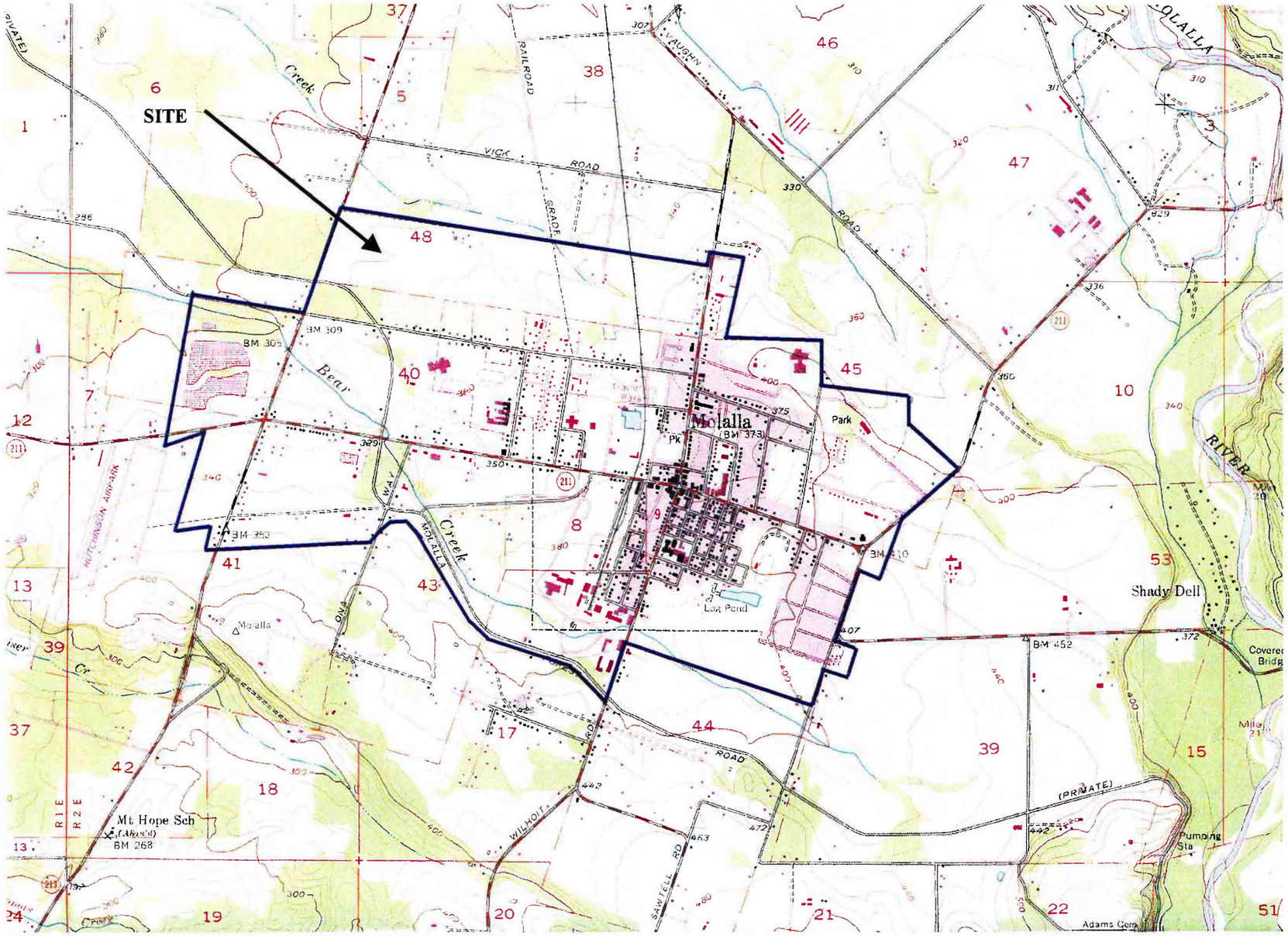
Table 2 lists the soils that have been mapped by the Natural Resources Conservation Service (formerly the Soil Conservation Service) within the study area. Figure 2 is a soils map for the project area.

Table 2. Soil units and their Hydric Soils Status for the Molalla LWI

Soil Series #	Soil Name	Hydric Status
1A	Aloha silt loam, 0 to 3% slopes	Non-Hydric
3	Amity silt loam	Non-Hydric
17	Clackamas silt loam	Non-Hydric
29	Dayton silt loam	Hydric
41	Huberly silt loam	Hydric
79B	Sawtell silt loam, 0 to 8% slopes	Non-Hydric
79C	Sawtell silt loam, 8 to 15% slopes	Non-Hydric
84	Wapato silty clay loam	Hydric

Aloha silt loam is a deep somewhat poorly drained soil. It is found on broad terraces of the Willamette Valley and formed in stratified glaciolacustrine deposits. The slope is 0 to 3 percent. Typically the surface layer is a very dark grayish brown silt loam about 8 inches thick. The upper 27 inches of the subsoil is dark brown, dark grayish brown and yellowish brown silt loam, and the lower 16 inches is dark grayish brown and dark brown loam. The upper 9 inches of the substratum is dark brown loam. Below this are dark grayish brown, stratified very fine sandy loam and silt loam. The lower part of the subsoil and upper part of the substratum in places are slightly brittle and weakly cemented. It is classified as a *fine-silty, mixed, mesic Aquic Xerochrepts.*

Amity silt loam is a deep somewhat poorly drained soil. It is found in slightly concave areas on broad terraces of the Willamette Valley and formed in silty alluvium derived from mixed sources. The slope is 0 to 3 percent. Typically the surface layer is very dark grayish brown silt

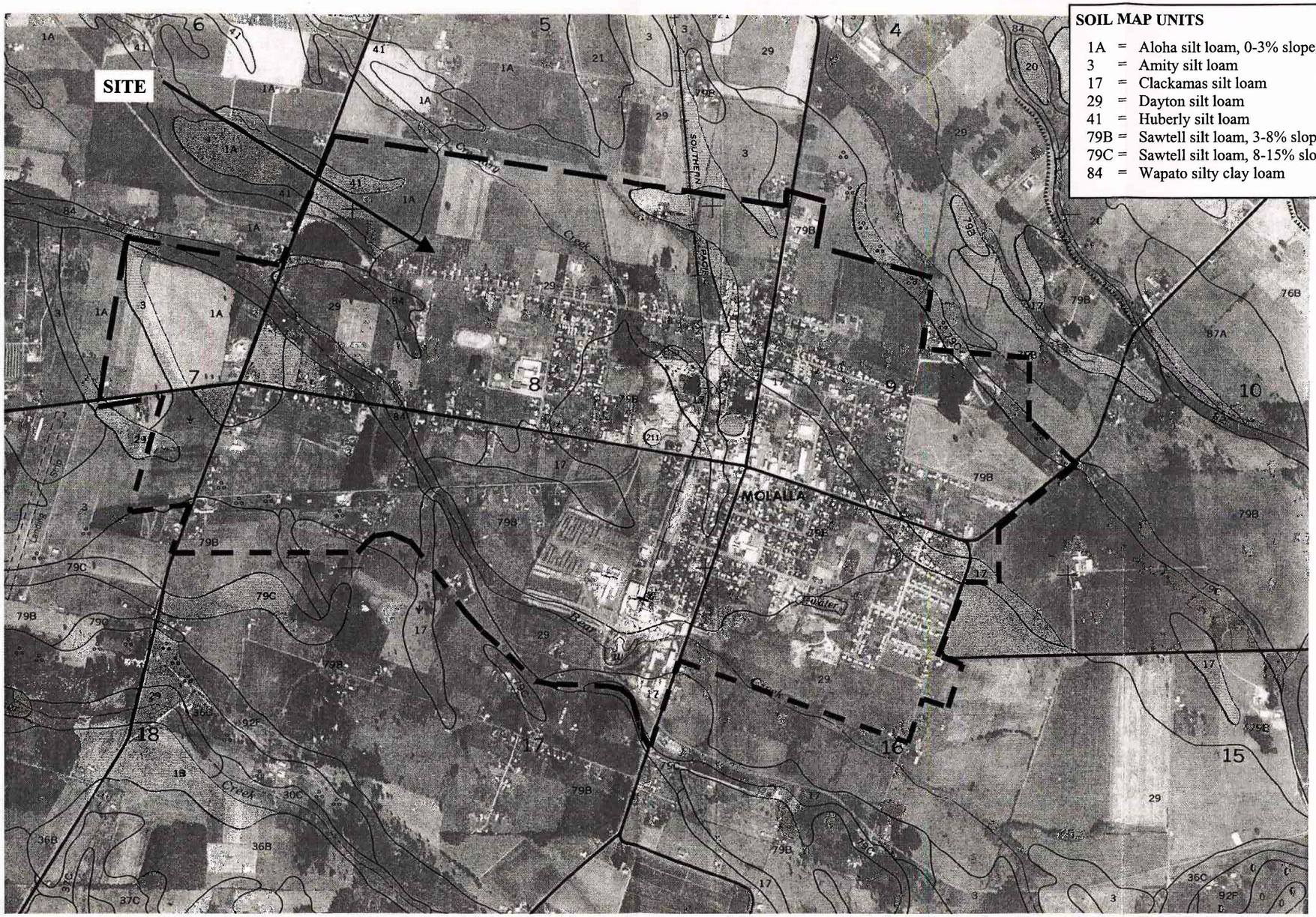


6/28/01

2250

Location and general topography of the City of Molalla (USGS, Molalla, Oregon Quadrangle, 1954, photorevised 1985).

FIGURE
1



SOIL MAP UNITS

1A	=	Aloha silt loam, 0-3% slopes
3	=	Amity silt loam
17	=	Clackamas silt loam
29	=	Dayton silt loam
41	=	Huberly silt loam
79B	=	Sawtell silt loam, 3-8% slopes
79C	=	Sawtell silt loam, 8-15% slopes
84	=	Wapato silty clay loam

6/28/01

2250

Soil Series for the City of Molalla (USDA, SCS, Soil Survey of Clackamas County, Oregon, 1985, Sheet Number 43).

FIGURE 2

loam about 16 inches thick. The subsurface layer is dark gray, faintly mottled silt loam about 6 inches thick. The upper 6 inches of the subsoil is grayish brown, mottled silty clay loam, and the lower 7 inches is light olive brown, mottled silty clay loam. The substratum to a depth of 72 inches or more is olive brown, mottled silt loam. In some areas of similar included soils, the substratum is silty clay loam or silty clay averaging more than 35 percent clay. It is classified as a *fine-silty, mixed, mesic Argiaquic Xeric Argialbolls.*

Clackamas silt loam is a deep somewhat poorly drained soil. It is found on low terraces and is formed in gravelly mixed alluvium. Slope is 0 to 3 percent. Typically the surface layer is a very dark brown silt loam about 7 inches thick. The upper 14 inches of the subsoil is very dark grayish brown and dark grayish brown silty clay loam, and the lower 16 inches is dark grayish brown gravelly silty clay loam. The substratum to a depth of 60 inches or more is variegated, dark brown extremely gravelly silty clay loam. The depth to the extremely gravelly substratum varies from 24 to 36 inches. It is classified as a *fine-loamy, mixed, mesic Typic Argiaquolls.*

Dayton silt loam is a deep, poorly drained soil. It is found on broad terraces and is formed in stratified glaciolacustrine deposits. Slope is 0 to 2 percent. Typically the surface layer is very dark grayish brown and brown silt loam and silty clay loam about 15 inches thick. The subsurface layer is light brownish gray silty clay lam about 6 inches thick. The subsoil is dark grayish brown clay about 24 inches thick. The substratum to a depth of 60 inches or more is dark brown clay. Depth to the clay ranges from 12 to 24 inches. It is classified as a *fine, montmorillonitic, mesic Typic Albaqualfs.*

Huberly silt loam is a deep, poorly drained soil. It is found in swales of valley terraces and it formed in stratified glaciolacustrine deposits. Slope is 0 to 3 percent. Typically the surface layer is very dark gray silt loam about 8 inches thick. The subsoil is 16 inches thick and is grayish brown silt loam. The substratum to a depth of 60 inches or more is a dark grayish brown, gray and brown silt loam hardpan. The depth to the hard pan varies from 20 to 30 inches. It is classified as a *fine-silty, mixed, mesic Typic Fragiaquepts.*

Sawtell silt loam is deep, moderately well drained soil found on terraces. It formed in gravelly old alluvium and is found on 0 to 8 percent slopes. Typically the surface layer is very dark grayish brown silt loam abut 13 inches thick. The upper 7 inches of the subsoil is dark brown gravelly clay loam and the lower 27 inches is mottled, brown very gravelly clay loam. The substratum to a depth of 60 inches or more is yellowish brown very gravelly clay. The surface layer can be gravelly loam in some areas of similar included soils. It is classified as a *loamy-skeletal, mixed, mesic Ultic Argixerolls.*

Wapato silty clay loam is a deep poorly drained soil found in old abandoned river channels and depressions within floodplains. It is formed in silty recent alluvium derived from mixed sources on 0 to 3 percent slopes. Typically, the surface layer is very dark grayish brown mottled silty clay loam about 17 inches thick. The subsoil is dark grayish brown mottled silty clay loam about 31 inches thick. The substratum to a depth of 60 inches grayish brown mottled silty clay loam. The soil is classified as *fine-silty, mixed, mesic Fluvaquentic Endoaquoll.*

A variety of soil types were sampled during field visits to the study area; surface features are described on data sheets in Appendix B. Hydric soil indicators observed during the survey included low chroma soils (both with and without mottling), a hydrogen sulfide odor, and an aquic moisture regime in some locations.

6.5 Vegetation

6.5.1 Overview

Vegetation communities in the mid-Willamette Valley have been shaped by human activities for centuries. Native Americans were known to use fire to aid their hunting and gathering activities by favoring the growth of certain groups of plants. Euro-American settlement in the mid-19th century rapidly changed the composition of plant communities throughout the area, with urban areas, farmland, and other developments coming to dominate the landscape. Areas that now appear to retain natural vegetation have nevertheless been subject to fire suppression, clearing, logging, and grazing activities over the years.

The Willamette Valley now consists of a mosaic of oak woodlands, coniferous forests, grasslands, shrub communities, and riparian forests broken up by development. Climax communities are generally considered to be forest types dominated by Douglas fir (*Pseudotsuga menziesii*) and Oregon white oak (*Quercus garryana*), or by Oregon ash (*Fraxinus latifolia*) in wetter sites. Further discussion of plant communities within the interior valleys of western Oregon can be found in *Natural Vegetation of Oregon and Washington* (Franklin and Dyrness 1973).

6.5.2 Vegetation Communities

Plant communities encountered within the Molalla study area include upland mixed conifer/deciduous forest, riparian forest, agricultural/pastureland, disturbed/urban, and wetland. Wetland communities can be further distinguished as palustrine/open water, palustrine/emergent, palustrine/scrub-shrub, and palustrine/forested, following the Cowardin classification system developed for the US Fish and Wildlife Service (Cowardin, et al. 1979). Each of the above communities is described in the sections below.

Upland Mixed Conifer/Deciduous Forest

This community is present as scattered patches within the study area, due to fragmentation by urbanization, farming, and historic logging and clearing activities. The dominant species in the overstory are Douglas fir, Oregon white oak, and bigleaf maple (*Acer macrophyllum*). Ponderosa pine (*Pinus ponderosa*) is also occasionally present.

Understory shrub and groundcover species vary greatly with the density of the tree canopy. Typical understory shrubs include vine maple (*Acer circinatum*), Indian Plum (*Oemleria cerasiformis*), Oregon grape (*Berberis* spp.), poison oak (*Rhus diversiloba*), salal (*Gaultheria shallon*), snowberry (*Symphoricarpos albus*), and beaked hazelnut (*Corylus cornuta*). Typical herbaceous species include sword fern (*Polystichum munitum*), fringecup (*Tellima grandiflora*), western trillium (*Trillium ovatum*), and shortscale sedge (*Carex deweyana*).

Riparian Forest

Riparian forests are often similar to upland mixed evergreen-deciduous forests. This community borders the creeks or edges of the broad floodplains. Oregon ash, black cottonwood (*Populus trichocarpa*), and bigleaf maple may co-dominate with Oregon white oak and Douglas fir.

Agricultural/Pastureland

Portions of the study area remain in agricultural use and are primarily used for grazing animals (cattle, sheep, or horses) or small coniferous tree plantations. Some fields of mixed grasses are also apparently used for hay production.

Developed-Urban

Plant communities throughout the study area have been influenced by human activities since before the turn of the century, most profoundly in areas undergoing recent development. Businesses, residences, parking lots, roads, parks, and sidewalks all represent unvegetated or landscaped areas. Vegetation is often of horticultural origin or weedy in these areas. Unpaved areas subject to frequent disturbance generally remain as open spaces dominated by weedy grasses and forbs.

Wetland

Wetland areas are generally transitional between upland and truly aquatic areas, which have permanent open water. The wetland may occupy a position where the groundwater table remains at or near the surface for an extended period during the growing season, however, surface inundation may or may not be present. Many of the wetlands in the study area are seasonally saturated or inundated. Vegetation varies depending on the extent of disturbance.

Agricultural wetlands obviously have been influenced by farming or grazing activities, and likely are dominated by grasses and forbs. Wetlands that have not been farmed or logged are usually dominated by Oregon ash and other hydrophytic trees and shrubs.

Palustrine forested wetlands in the area are dominated by Oregon ash, although red alder (*Alnus rubra*), black cottonwood, and western red cedar may also be present. Palustrine scrub/shrub wetlands often include saplings of the above species, along with such shrubs as Douglas' hawthorn (*Crataegus douglasii*), clustered rose (*Rosa pisocarpa*), red osier dogwood (*Cornus stolonifera*), Douglas' spiraea (*Spiraea douglasii*), and willows (*Salix* spp.).

Palustrine emergent wetlands in the Molalla area are commonly dominated by species such as, sedges (*Carex* spp.), rushes (*Juncus* spp.), common camas (*Camassia quamash*), buttercups (*Ranunculus* spp.), and wetland grasses, such as meadow foxtail (*Alopecurus pratensis*), reed canarygrass (*Phalaris arundinacea*) and colonial bentgrass (*Agrostis tenuis*).

6.5.3 Wetland and Upland Indicator Species

Species lists of commonly encountered plants, along with their status as indicators of wetland conditions, have been prepared for all regions of the country by the USFWS (1988). The status of a particular plant, as discussed in Section 2.0, 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 also be present in upland areas. Table 3 summarizes the wetland indicator codes.

Table 3. Wetland Indicator Codes and Status

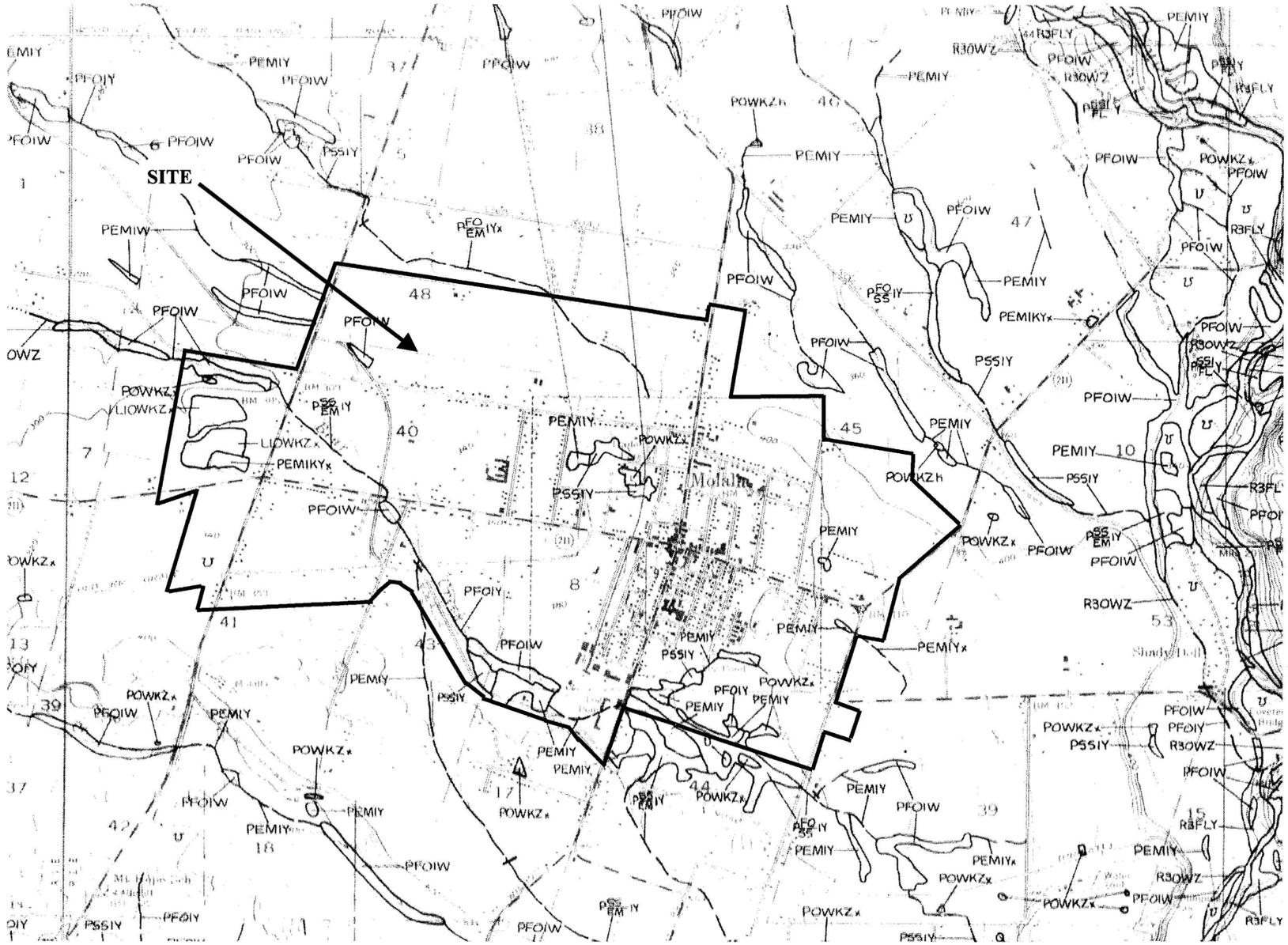
Indicator Code	Status
OBL	Obligate wetland. Estimated to occur almost exclusively in wetlands (>99%)
FACW	Facultative wetland. Estimated to occur 67-99% of the time in wetlands.
FAC	Facultative. Occur equally in wetlands and non-wetlands (34-66%).
FACU	Facultative upland. Usually occur in non-wetlands (67-99%).
UPL	Obligate upland. Estimated to occur almost exclusively in non-wetlands (>99%). If a species is not assigned to one of the four groups described above it is assumed to be obligate upland.
NI	Has not yet received a wetland indicator status, but is probably not obligate upland.

A non-comprehensive listing of plant species encountered or expected within the project area, and their wetland indicator status is included in Appendix F.

7.0 LWI DISCUSSION AND CONCLUSIONS

7.1 U.S. Fish & Wildlife Service National Wetland Inventory

The U.S. Fish and Wildlife Service, as part of the National Wetlands 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 1:58,000) with limited "ground truthing" conducted to confirm the interpretations.



6/28/01

2250

National Wetlands Inventory information for the City of Molalla (USFWS, Molalla, Oregon quadrangle, 1981).

FIGURE
3

7.2 Local Wetlands Inventory Results

7.2.1 Wetland Acreage and Distribution

A total of 64 wetland units were identified during the LWI with a total acreage of 106.76 acres. Of the three watersheds within the study area, Bear Creek has the highest percentage of wetlands within the watershed (82%) and the Molalla River watershed has the smallest percentage (1%). Table 4 summarizes the wetland acreage and distribution in the study area. Figures 4A-4B shows the wetlands for the LWI.

Table 4: Wetland Areas Within Each of the Watersheds for the Molalla LWI

Watershed	Area (acres)	Wetland (acres)	Percent of watershed that is wetland
Bear Creek	1,014.50	85.32	8.4%
Creamery Creek	652.59	20.19	3.1%
Molalla River	112.41	1.25	1.1%
Total Project Acreage	**1,779.50**	**106.76**	

7.2.2 Wetland Classification

Each wetland was classified according to the Cowardin system. Palustrine emergent wetlands (PEM) are the dominant (63%) wetland type in the study area. These wetlands are dominated by herbaceous species, but the natural plant community in many appears to have been altered from a forested system, for the purposes of agriculture or urban development. Palustrine forested (PFO) wetlands were the second most prevalent wetland class (31%), followed by palustrine scrub-shrub (PSS)(5%). Palustrine open water, palustrine open water, excavated and palustrine emergent, farmed combined for the remaining 2%.

Table 5 is a summary of wetland classifications for the Molalla LWI study area. Table 6 (pages 23-24) is a classification table listing each wetland. Appendix A includes a wetland characterization sheet for each inventoried wetland that summarizes the plant communities, hydrology, location, and any general notes about adjacent upland areas.

Table 5. Wetland Classifications found within the Molalla LWI

Wetland Classification	Area (acres)	Percent
Palustrine emergent (PEM)	66.90	63%
Palustrine forested (PFO)	33.17	31%
Palustrine scrub-shrub (PSS)	5.30	5%
Palustrine open water (POW)	.80	1%
Palustrine emergent, farmed (PEMf)	.46	<1%
Palustrine open water, excavated (POWx)	.13	<1%
Total	**106.76**	**100%**

GRAPHIC SCALE

400 0 200 400 800 1600

Scale in Feet

Funding for this project was provided by a grant from the Oregon Department of Land Conservation and Development

LEGEND

Project Boundary		Division of State Lands Determination	
Watershed Boundary		Potentially Jurisdictional Wetland	
Creeks/drainages		Access Denied	No Access
Sample Point	20	Access Allowed	
		Wetland Code	BC-7

THIS MAP IS FOR PLANNING PURPOSES ONLY
WETLAND BOUNDARIES ARE APPROXIMATE
AND SUBJECT TO CHANGE

Information shown on this map is for planning purposes only and wetland information is subject to change. There may be unmapped wetlands subject to regulation and all wetland boundary mapping is approximate. In all cases, actual field conditions determine wetland boundaries. You are advised to contact the Division of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.

DATE: June, 2001

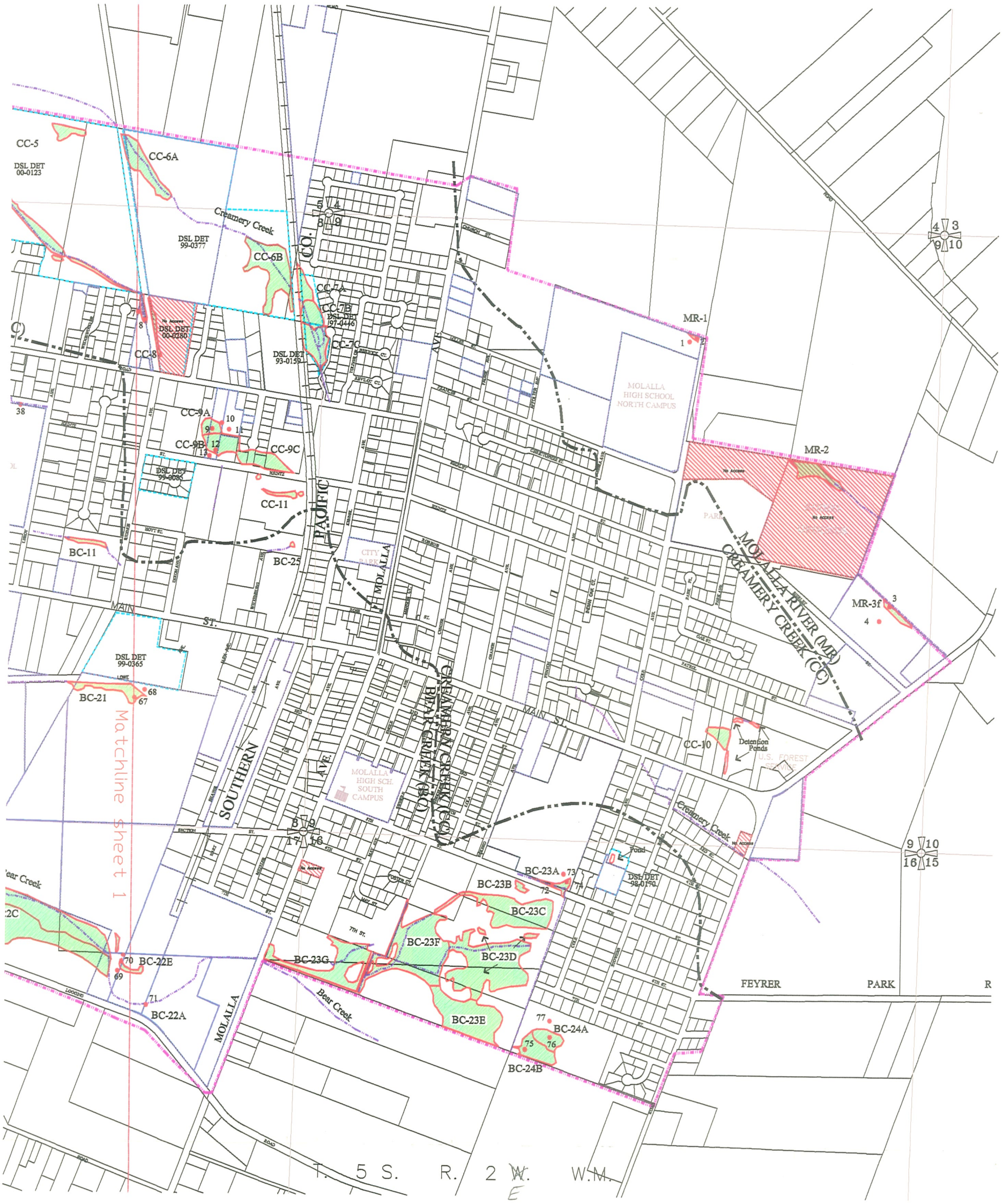
BASE MAP INFO: Supplied by City of Molalla, Clackmas County ISGIS

JOB NO.: 2250

MOLALLA
Local Wetlands Inventory

Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, Oregon 97070
Phone: (503) 570-0800

Figure 4A



N

GRAPHIC SCALE

400 0 200 400 800 1600

Scale in Feet

Funding for this project was provided by a grant from the Oregon Department of Land Conservation and Development

LEGEND

Project Boundary		Division of State Lands Determination	
Watershed Boundary		Potentially Jurisdictional Wetland	
Creeks/drainages		Access Denied	No Access
Sample Point	20	Access Allowed	
		Wetland Code	BC-7

THIS MAP IS FOR PLANNING PURPOSES ONLY
WETLAND BOUNDARIES ARE APPROXIMATE
AND SUBJECT TO CHANGE

Information shown on this map is for planning purposes only and wetland information is subject to change. There may be unmapped wetlands subject to regulation and all wetland boundary mapping is approximate. In all cases, actual field conditions determine wetland boundaries. You are advised to contact the Division of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.

DATE: June, 2001

BASE MAP INFO: Supplied by City of Molalla, Clackmas County ISGIS

JOB NO.: 2250

MOLALLA
Local Wetlands Inventory

Pacific Habitat Services,Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, Oregon 97070
Phone: (503) 570-0800

Figure 4B

Table 6. Cowardin classification of wetlands identified in the Molalla LWI

Wetland Code	USFWS Wetland Classification						Total Acreage
	PFO	PSS	PEM	PEMf	POW	POWx	
MR-1			0.05				0.05
MR-2	0.81		0.09				0.90
MR-3f				0.30			0.30
CC-1		0.61					0.61
CC-2			1.25				1.25
CC-3			0.08				0.08
CC-4			3.06				3.06
CC-5			1.32				1.32
CC-6A	0.40		1.22				1.62
CC-6B	0.72		2.18				2.90
CC-7A	0.63						0.63
CC-7B			0.81				0.81
CC-7C	1.04	0.26					1.30
CC-8			0.26				0.26
CC-9A			0.44				0.44
CC-9B			1.02				1.02
CC-9C			1.15				1.15
CC-10			0.52				0.52
CC-11			0.27				0.27
BC-1A			13.92				13.92
BC-1B	4.00		0.44				4.44
BC-1C	0.25		0.13				0.38
BC-2A	1.05						1.05
BC-2B	0.83						0.83
BC-3A			0.33				0.33
BC-3B			1.01				1.01
BC-4			1.82				1.82
BC-5A		0.40	0.60				1.00
BC-5B			3.68				3.68
BC-6A	1.11		0.24				1.35
BC-6B			0.40				0.40
BC-7			0.24				0.24
BC-8			0.05			0.13	0.18
BC-9			0.15				0.15
BC-10			0.08				0.08
BC-11			0.23				0.23
BC-12A	0.55						0.55
BC-12B			3.34				3.34
BC-13			0.35				0.35

Table 6, continued

Wetland Code	USFWS Wetland Classification						Total Acreage
	PFO	PSS	PEM	PEMf	POW	POWx	
BC-14f				0.16			0.16
BC-15			0.80				0.80
BC-16A			0.96				0.96
BC-16B			0.96				0.96
BC-17A	1.96						1.96
BC-17B			0.14				0.14
BC-18		0.03	0.09				0.12
BC-19	1.45						1.45
BC-20			0.84				0.84
BC-21	0.92						0.92
BC-22A			0.71				0.71
BC-22B	9.84				0.80		10.64
BC-22C			6.19				6.19
BC-22D			1.78				1.78
BC-22E			0.27				0.27
BC-23A	0.25						0.25
BC-23B			0.14				0.14
BC-23C			3.49				3.49
BC-23D			6.77				6.77
BC-23E	1.84	2.00					3.84
BC-23F	3.89	2.00					5.89
BC-23G	0.90		1.92				2.82
BC-24A	0.73						0.73
BC-24B			1.08				1.08
BC-25			0.03				0.03
TOTAL	**33.17**	**5.30**	**66.90**	**0.46**	**0.80**	**0.13**	**106.76**

7.3 *Oregon Freshwater Wetland Assessment Methodology* Results

7.3.1 Wetlands of Special Interest for Protection

Each of the wetlands were assessed according to the ten questions in this section of OFWAM. These questions are regarding the presence of federal or state listed threatened, endangered or sensitive species, existing management plans, conservation plans, protected mitigation areas, critical habitat, wetland reserve areas and the presence of uncommon wetland plant communities in Oregon. These questions were answered "no" for all the wetlands, therefore none of the wetlands in the study area qualify as "wetlands of special interest for protection".

7.3.2 Wetland Quality Assessment

An assessment of the quality for each of the wetlands identified through the inventory was conducted using the *Oregon Freshwater Assessment Methodology* (OFWAM) (Roth et al, April 1996). OFWAM assesses 6 functions and 3 conditions, as described in Section 3.3.1. Appendix C contains all of the results for each of the wetlands assessed by the methodology along with summary sheets of the functions and conditions assessed by the methodology and the rationale for the results.

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 to easily compare the results. Table 7 (page 26) is a key to the numbers assigned to the assessment criteria for each of the functions and conditions. A number 1 was assigned to wetlands receiving the highest function or condition result (e.g. intact, diverse), a number 3 was assigned to the wetlands receiving the lowest result (lost or not present, not appropriate), and a number 2 was assigned to the results which do not fit the other criteria (potential, impacted or degraded). Table 8 (pages 27-28) shows the results of the quality assessment conducted on all of the wetlands identified through the inventory. Some functions or conditions were not applicable to certain wetlands. For instance the methodology states that if a wetland receives an assessment of "diverse wildlife habitat" then the enhancement potential assessment is not applicable. In addition, if there was no likelihood of fish habitat in the wetlands the fish habitat assessment was not applicable.

Table 7. Key to the *Oregon Freshwater Wetland Assessment Methodology* Numerical Ranking

Wildlife Habitat	1. *Wetland provides diverse wildlife habitat* 2. *Wetland provides habitat for some wildlife species* 3. *Wetland does not provide wildlife habitat*
Fish Habitat	1. *Wetland's fish habitat function is intact* 2. *Wetland's fish habitat function is impacted or degraded* 3. *Wetland's fish habitat function is lost or not present*
Water Quality	1. *Wetland's water-quality function is intact* 2. *Wetland's water-quality function is impacted or degraded* 3. *Wetland's water-quality function is lost or not present*
Hydrologic Control	1. *Wetland's hydrologic control function is intact* 2. *Wetland's hydrologic control function is impacted or degraded* 3. *Wetland's hydrologic control function is lost or not present*
Sensitivity to Impact	1. *Wetland is sensitive to future impacts* 2. *Wetland is potentially sensitive to future impacts* 3. *Wetland is not sensitive to future impacts*
Enhancement Potential	1. *Wetland has high enhancement potential* 2. *Wetland has moderate potential for enhancement* 3. *Wetland has little enhancement potential*
Education	1. *Wetland has educational uses* 2. *Wetland has potential for educational use* 3. *Wetland 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 moderately pleasing* 3. *Wetland is not pleasing*

Table 8. ***Oregon Freshwater Wetland Assessment Methodology*** **Numerical Ranking Results for the Molalla Local Wetlands Inventory**

Wetland Code	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Sensitivity to Impact	Enhancement Potential	Education	Recreation	Aesthetic Quality	Size (acres)
MR-1	2	n/a	3	2	2	1	2	3	1	0.05
MR-2	2	2	1	2	2	1	3	3	1	0.90
MR-3f	2	n/a	2	2	2	2	3	3	1	0.30
CC-1	2	n/a	2	1	2	1	3	3	3	0.61
CC-2	2	n/a	2	2	2	1	3	3	3	1.25
CC-3	2	n/a	2	2	2	1	3	3	3	0.08
CC-4	2	2	2	2	2	1	3	3	3	3.06
CC-5	2	n/a	2	2	2	1	3	3	3	1.32
CC-6A	2	2	2	2	2	1	3	3	2	1.62
CC-6B	2	2	2	2	2	1	3	3	2	2.90
CC-7A	2	1	2	2	2	1	3	3	2	0.63
CC-7B	2	2	1	2	2	1	3	3	2	0.81
CC-7C	2	2	1	2	2	1	2	2	1	1.30
CC-8	2	n/a	2	2	2	2	3	3	3	0.26
CC-9A	2	n/a	2	2	2	2	3	3	1	0.44
CC-9B	2	n/a	1	1	2	2	3	3	1	1.02
CC-9C	2	n/a	1	2	2	2	3	3	1	1.15
CC-10	2	n/a	2	2	2	2	3	3	1	0.52
CC-11	2	n/a	2	2	2	2	3	3	3	0.27
BC-1A	2	n/a	2	2	2	1	2	1	3	13.92
BC-1B	1	1	1	2	2	n/a	3	3	1	4.44
BC-1C	1	n/a	2	2	2	n/a	3	3	1	0.38
BC-2A	1	1	2	2	2	n/a	3	3	2	1.05
BC-2B	1	1	2	2	2	n/a	3	3	2	0.83
BC-3A	2	n/a	2	2	2	1	3	3	3	0.33
BC-3B	2	n/a	2	2	2	2	3	3	2	1.01
BC-4	2	n/a	2	2	2	2	3	3	3	1.82
BC-5A	2	n/a	2	2	2	1	3	3	2	1.00
BC-5B	2	n/a	2	2	2	1	3	3	2	3.68
BC-6A	2	n/a	2	1	2	1	2	2	1	1.35
BC-6B	2	n/a	2	2	2	1	2	3	2	0.40

Table 8, continued

Wetland Code	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Sensitivity to Impact	Enhancement Potential	Education	Recreation	Aesthetic Quality	Size (acres)
BC-7	2	n/a	2	2	2	2	2	1	3	0.24
BC-8	2	2	2	2	2	1	2	1	1	0.18
BC-9	2	n/a	2	2	2	2	3	3	1	0.15
BC-10	2	n/a	2	2	2	2	2	1	3	0.08
BC-11	2	n/a	2	2	2	1	3	3	1	0.23
BC-12A	1	n/a	2	1	2	n/a	3	3	2	0.55
BC-12B	2	n/a	2	2	2	1	2	3	3	3.34
BC-13	2	n/a	2	3	2	3	3	3	1	0.35
BC-14f	2	n/a	3	2	2	2	3	3	1	0.16
BC-15	2	n/a	2	2	2	2	2	3	2	0.80
BC-16A	2	n/a	2	2	2	1	3	3	2	0.96
BC-16B	2	n/a	2	2	2	1	3	3	1	0.96
BC-17A	2	1	2	2	2	1	3	3	2	1.96
BC-17B	2	1	1	3	2	2	3	3	1	0.14
BC-18	2	n/a	2	3	2	2	3	3	2	0.12
BC-19	1	1	2	2	2	n/a	3	3	2	1.45
BC-20	2	n/a	2	3	2	3	3	3	1	0.84
BC-21	2	n/a	2	2	2	2	3	3	3	0.92
BC-22A	2	2	2	2	2	2	3	3	3	0.71
BC-22B	1	1	1	1	2	n/a	3	3	1	10.64
BC-22C	2	n/a	2	2	2	1	3	3	1	6.19
BC-22D	2	n/a	2	2	2	1	3	3	1	1.78
BC-22E	2	n/a	2	2	2	2	3	3	3	0.27
BC-23A	2	n/a	2	2	2	1	2	2	2	0.25
BC-23B	2	n/a	3	2	2	3	3	3	3	0.14
BC-23C	2	n/a	2	2	2	1	3	3	3	3.49
BC-23D	2	n/a	2	2	2	1	3	3	3	6.77
BC-23E	2	n/a	2	2	2	1	3	3	3	3.84
BC-23F	2	n/a	2	2	2	1	3	3	3	5.89
BC-23G	2	2	2	2	2	1	3	3	3	2.82
BC-24A	2	n/a	1	2	2	1	2	2	1	0.73
BC-24B	2	n/a	1	2	2	1	2	2	1	1.08
BC-25	2	n/a	3	2	2	3	3	3	1	0.03

In general, the majority (89%) of the wetlands provided wildlife habitat for some species. Diverse wildlife habitat was limited to those wetlands which had a variety of strata (trees, shrubs, herbaceous), and which were adjacent, or connected to, other wetlands or surface water. Due to encroachment by residential development and agriculture, only 7 of the 64 wetlands (11%) met this criterion.

The majority of the wetlands (73%) were not assessed for the fish habitat function due to the lack of perennial surface water or connection to surface water. Of the 17 wetlands which were assessed for fish habitat, 8 (13%) were determined to have intact fish habitat due to perennial surface water, large woody debris, shade, and natural, unmodified channels. The other 9 wetlands (14%) assessed for this function were determined to be impacted or degraded.

The water quality function was assessed as impacted or degraded in many wetlands if the primary source of hydrology was groundwater and the dominant existing land use is open space or agricultural lands. The rationale is that wetlands which are groundwater-driven or surrounded by open space may not play as significant a water quality function as wetlands derived from surface water or surrounded by developed lands. A total of 8 wetlands (13%) were assessed as having their water quality function intact and 4 wetlands (6%) were assessed as having their water quality function lost or not present. The remaining 52 wetlands (81%) had impacted or degraded water quality.

Hydrologic control was generally assessed as impacted or degraded (86%), or lost or not present (4%) due to unrestricted outflow, dominance of emergent vegetation, and surrounding agricultural lands or downstream open space. Five (5) of the 64 wetlands (8%) were assessed with hydrologic control function intact.

Recreational and educational functions were generally considered not appropriate in a majority of the wetlands due to the lack of public access and safety concerns associated with public access and handicap access. In addition, the aesthetic quality of many of the wetlands was impaired by the presence of major roads and their proximity to recent and historically developed areas.

8.0 SIGNIFICANT WETLANDS DETERMINATION

8.1 Locally Significant Wetlands Criteria

On September 1, 1996, the Land Conservation and Development Commission adopted a revised Statewide Planning Goal 5. Goal 5 is the planning goal for natural resources, scenic and historic areas, and open spaces. Its purpose is to "protect natural resources, and conserve scenic and historic areas and open spaces". The goal requires local jurisdictions to inventory the natural resources covered under the goal, determine the significance of these resources, and develop plans to achieve the goal. In other words, local jurisdictions must adopt land use ordinances regulating development in and around significant areas.

Local jurisdictions determining significant wetlands must use the criteria recently adopted by the Oregon Division of State Lands (ORS 197.279(3)(b)). This criteria identifies Locally Significant Wetlands. The significance criteria is divided into three sections, as described in Table 9.

Table 9. Criteria for Determining Goal 5 Locally Significant Wetlands

***Exclusions*: A wetland cannot be designated as significant if the answer to any Of the criteria below is "Yes".**
1 Is this wetland artificially created entirely from upland and: **a.** created for the purpose of controlling, storing, or maintaining storm water **b.** is used for active surface mining or as a log pond **c.** is a ditch without a free and open connection to natural waters of the state **d.** is less than 1 acre and created unintentionally from irrigation or construction **e.** created for the purpose of wastewater treatment, cranberry production, farm watering, sediment settling, cooling industrial water, or a golf hazard **2** Is the wetland or portion of the wetland contaminated by hazardous substances, materials or wastes as per the conditions of ORS 141-86-350 1(b)
***Mandatory Locally Significant Wetland Criteria*: A wetland is locally significant if "Yes" is the answer to any of the criteria below.**
1 Does the wetland provide *diverse wildlife habitat*? **2** Is the wetland's *fish habitat function intact*? **3** Is the wetland's *water quality function intact*? **4** Is the wetland's *hydrologic control function intact*? **5** Is the wetland less than 1/4 mile from a water body listed by DEQ as a water quality limited water body (303(d) list) and is the wetland's *water quality function intact, or impacted or degraded*? **6** Does the wetland contain a rare plant community? **7** Is the wetland inhabited by any species listed federally as threatened or Endangered, or state listed as sensitive, threatened or endangered? **8** Does the wetland have a direct surface water connection to a stream segment Mapped by ODFW as habitat for indigenous anadromous salmonids and is the wetland's *fish habitat function intact, or impacted or degraded*?
***Optional Locally Significant Wetland Criteria*: local governments may Identify a wetland as significant if "Yes" is the answer to the criteria below**
1 Does the wetland represent a locally unique native plant community and Provides *diverse wildlife habitat or habitat for some species* or Has a *intact, or impacted or degraded fish habitat function* or Has a *intact, or impacted or degraded water quality function* or Has a *intact, or impacted or degraded hydrologic control function.* **2** Is the wetland publicly owned and used by a school or organization and Does the wetland provide *educational uses*?

8.2 Applying Significant Wetland Criteria to the LWI Study Area

The locally significant wetlands criteria were applied to the 64 wetlands within the study area. Nineteen (19) wetlands satisfied the criteria for significant wetlands. The results of applying the criteria are included in Appendix D. These are summarized in Table 10:

Table 10. Locally Significant Wetlands in the Molalla LWI

MR-2	BC-1B	BC-17B
CC-1	BC-1C	BC-19
CC-7A	BC-2A	BC-22B
CC-7B	BC-2B	BC-24A
CC-7C	BC-6A	BC-24B
CC-9B	BC-12A	
CC-9C	BC-17A	

Twelve (12) of the 45 wetlands (27%) in the Bear Creek wetlands; 6 of the 16 (38%) Creamery Creek wetlands; and 1 of the 3 (33%) Molalla River wetlands were determined to be significant. The majority of the wetlands which met the criteria for significance were undisturbed areas which contained a variety of plant species and which were hydrologically connected to other wetlands or waters of the state, such as Bear Creek. Although other wetlands within the study area are valuable for some functions, they do not satisfy the mandatory significant wetlands criteria.

9.0 RIPARIAN INVENTORY RESULTS

9.1 Location, Width and Quality of Riparian Areas

The *Urban Riparian Inventory and Assessment Guide* (Riparian Guide) (DSL 1998) was used to identify the width of riparian areas within the project area. The Riparian Guide is a method of determining the width of riparian areas adjacent to wetlands, creeks, and lakes (water resources). The Riparian Guide includes a riparian function assessment, which evaluates the ability of the riparian area to provide water quality, flood management, thermal regulation, and wildlife habitat functions. The results indicate whether the functional integrity of each reach is high, medium, or low. The widths, lengths and acreage of the riparian areas are listed in Table 11 (next page).

9.2 Riparian Acreage and Distribution

Twenty-four (24) riparian assessments were conducted in the project area associated with Bear Creek and Creamery Creek. Each riparian area was assigned a code and a modifier for right or left side, and a watershed code (e.g. R-BC-2L, R-BC-2R). A data sheet was compiled which documents the existing riparian characteristics and establishes the riparian width based on potential tree height (PTH) and actual site conditions (Appendix E). The majority of the assessments were on-site observation. Off-site assessments were based on observation from an off-site vantage point or review of maps and aerial photos.

Potential tree heights were based on Oregon ash (75-foot PTH), the dominant tree in the stream side riparian areas in Molalla. Riparian areas were generally gently sloping and forested or potentially forested. Figures 5A-5B show the location of the riparian assessments, the riparian reaches, and the width of the riparian areas. The following table summarizes the riparian area widths, lengths and potential tree heights.

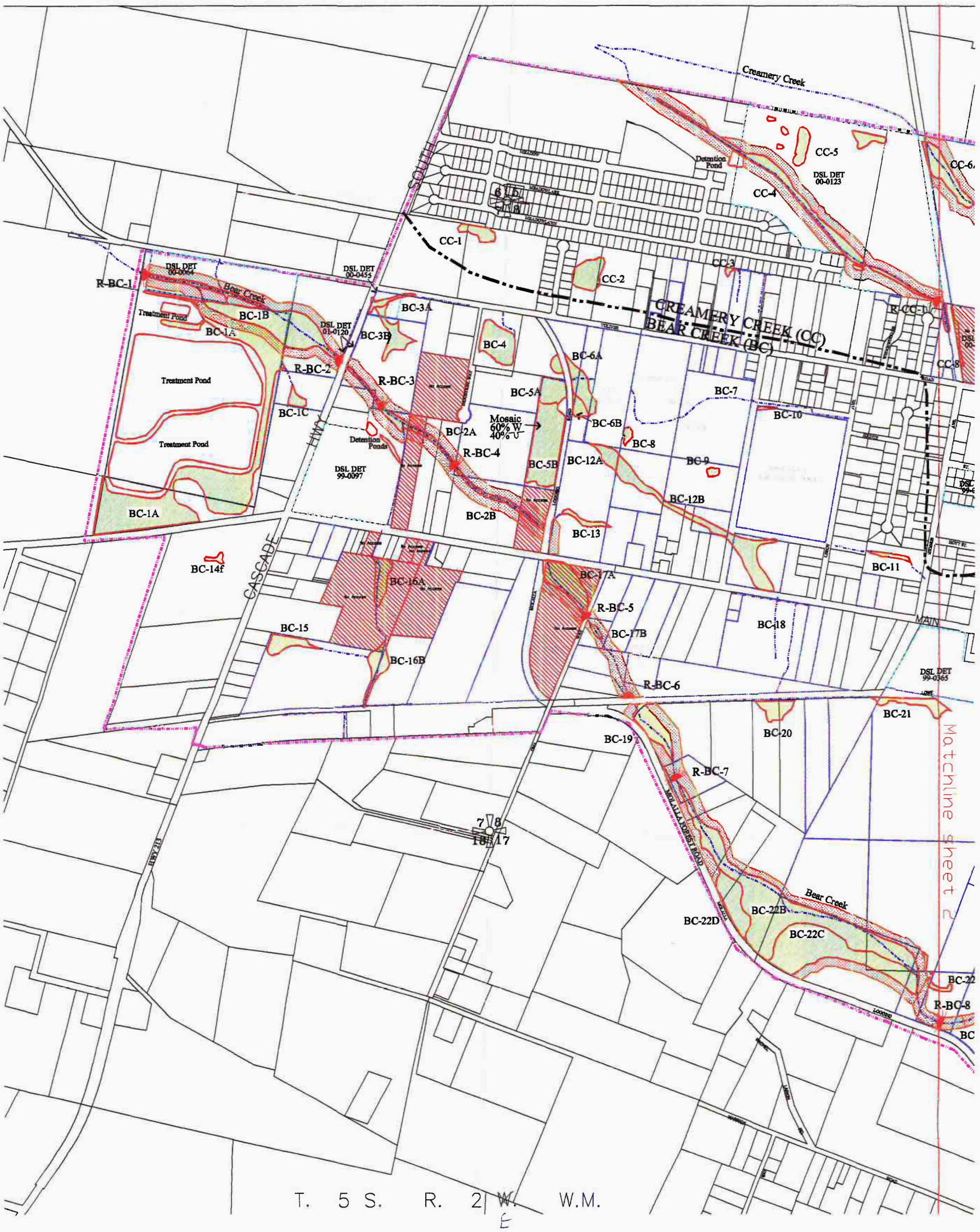
Table 11. Riparian Corridors and Their Widths for the Molalla Riparian Inventory

RIPARIAN AREA CODE	Potential Tree Height (PTH) (ft)	Actual Riparian width (ft)	Riparian Area length (ft)
R-CC-1L	75	10-15	2,900
R-CC-1R	75	10-15	2,900
R-CC-2L	75	20-50	2,000
R-CC-2R	75	20-50	2,000
R-CC-3L	75	75	600
R-CC-3R	75	50-75	600
R-BC-1L	75	75	1,325
R-BC-1R	75	75	1,325
R-BC-2 L	75	25	550
R-BC-2 R	75	25	550
R-BC-3L	75	75	400
R-BC-3R	75	15-50	400
R-BC-4L	75	25-50	800
R-BC-4R	75	75	800
R-BC-5L	75	50-75	1,800
R-BC-5R	75	50-75	1,800
R-BC-6L	75	50	1,325
R-BC-6R	75	75	1,325
R-BC-7L	75	50-75	825
R-BC-7R	75	75	825
R-BC-8L	75	25-75	3,350
R-BC-8R	75	25-75	3,350
R-BC-9L	75	10	350
R-BC-9R	75	10	350

As the table shows, the majority of riparian widths are based on the PTH of Oregon ash. In addition, many existing riparian areas are narrower than the PTH, indicating that development has encroached on many of the areas.

9.3 Riparian Assessment Results

An assessment of four riparian functions, water quality, flood management, thermal regulation, and wildlife habitat, was conducted for each of the riparian areas. The questions and answer sheets for the riparian assessment are included in Appendix E. The riparian functions are described in Section 3.4.3.



LEGEND

Project Boundary		Division of State Lands Determination	
Watershed Boundary		Potentially Jurisdictional Wetland	
Creeks/drainages		Riparian Area	
Riparian Observation Point		Access Allowed	
Riparian Code	R-BC-7	Access Denied	
		Wetland Code	BC-7

Funding for this project was provided by a grant from the Oregon Department of Land Conservation and Development

THIS MAP IS FOR PLANNING PURPOSES ONLY
WETLAND BOUNDARIES ARE APPROXIMATE
AND SUBJECT TO CHANGE

Information shown on this map is for planning purposes only and wetland information is subject to change. There may be unmapped wetlands subject to regulation and all wetland boundary mapping is approximate. In all cases, actual field conditions determine wetland boundaries. You are advised to contact the Division of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.

DATE: June, 2001

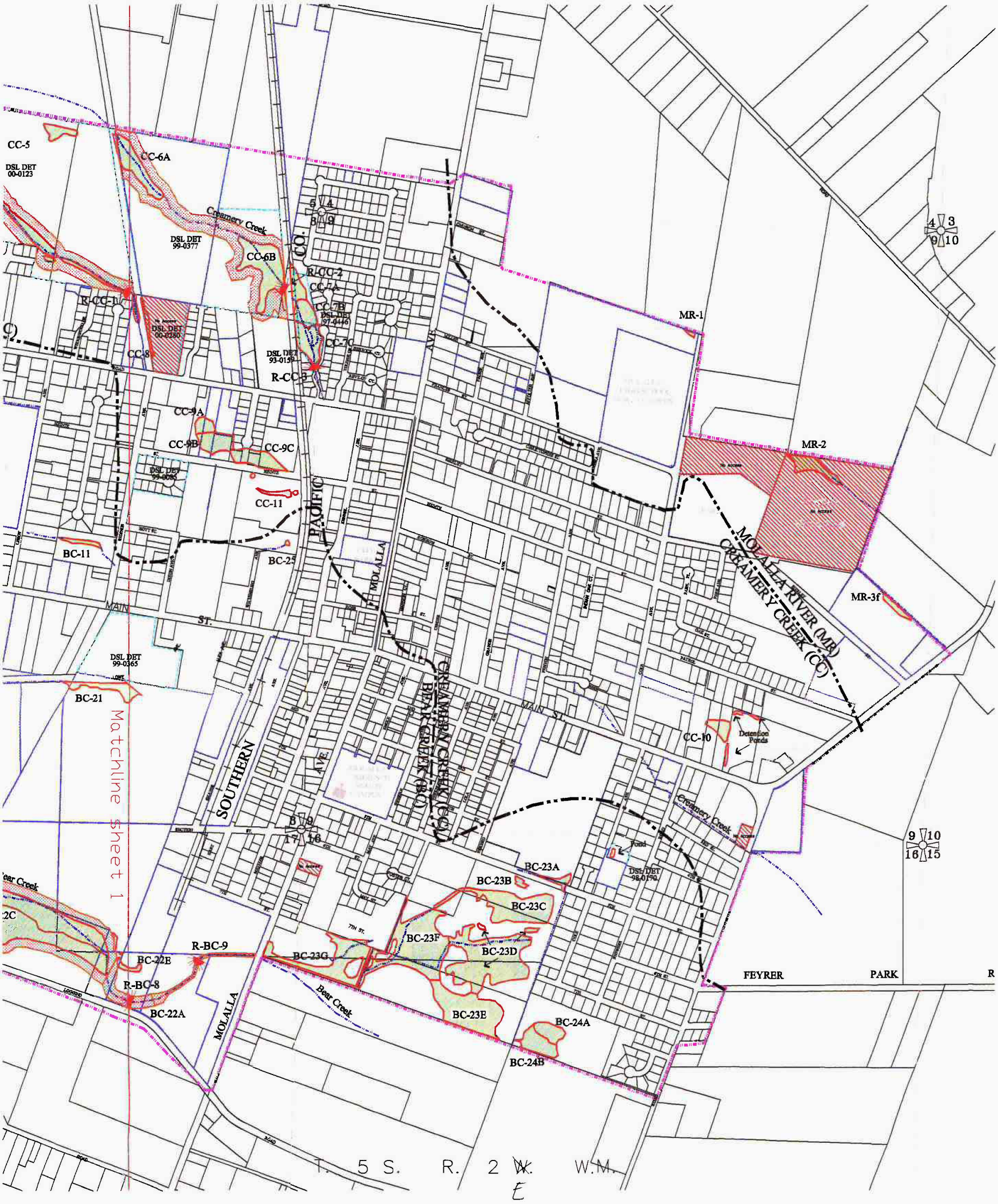
BASE MAP INFO: Supplied by City of Molalla, Clackmas County ISGIS

JOB NO.: 2250

MOLALLA
Riparian Inventory

Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, Oregon 97070
Phone: (503) 570-0800

Figure 5A



LEGEND

Project Boundary		Division of State Lands Determination	
Watershed Boundary		Potentially Jurisdictional Wetland	
Creeks/drainages		Riparian Area	
Riparian Observation Point		Access Allowed	
Riparian Code	R-BC-7	Access Denied	
		Wetland Code	BC-7

GRAPHIC SCALE

400 0 200 400 800 1600

Scale in Feet

Funding for this project was provided by a grant from the Oregon Department of Land Conservation and Development

THIS MAP IS FOR PLANNING PURPOSES ONLY
WETLAND BOUNDARIES ARE APPROXIMATE
AND SUBJECT TO CHANGE

Information shown on this map is for planning purposes only and wetland information is subject to change. There may be unmapped wetlands subject to regulation and all wetland boundary mapping is approximate. In all cases, actual field conditions determine wetland boundaries. You are advised to contact the Division of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.

DATE: June, 2001

BASE MAP INFO: Supplied by City of Molalla, Clackmas County ISGIS

JOB NO.: 2250

MOLALLA
Riparian Inventory

Pacific Habitat Services,Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, Oregon 97070
Phone: (503) 570-0800

Figure 5B

The riparian assessment is completed by answering a series of questions relating to the riparian functions. Each answer is assigned a score that reflects its overall importance to the function. Questions that were answered "a" received a higher score than "c" answers. After the score was totaled for each function, it was assigned a rating of high (H), medium (M), or low (L) according to the results. Table 12 summarizes the results of the riparian functional assessment.

Table 12. Summary of Molalla's Riparian Functional Assessments

Riparian Code	Water Quality	Flood Management	Thermal Regulation	Wildlife Habitat
R-CC-1L	M	L	L	L
R-CC-1R	M	L	L	L
R-CC-2L	M	M	M	M
R-CC-2R	M	M	M	M
R-CC-3L	H	H	M	H
R-CC-3R	M	M	M	M
R-BC-1L	H	M	H	H
R-BC-1R	H	M	H	H
R-BC-2L	H	M	M	M
R-BC-2R	H	M	M	M
R-BC-3L	H	M	H	H
R-BC-3R	H	M	H	M
R-BC-4L	H	M	M	M
R-BC-4R	H	M	M	M
R-BC-5L	H	H	H	H
R-BC-5R	H	H	H	H
R-BC-6L	H	H	H	M
R-BC-6R	H	H	H	H
R-BC-7L	H	H	H	H
R-BC-7R	H	H	H	H
R-BC-8L	H	M	H	H
R-BC-8R	M	M	H	M
R-BC-9L	L	L	M	L
R-BC-9R	L	L	M	L

H = High M = Medium L = Low

The majority of the riparian areas (71%) received a high assessment for at least one of the four functions. The majority (67%) provide a high water quality function due to a dominance of woody trees and shrubs in the riparian areas and low extents of impervious surfaces. Thermal regulation was assessed with a high functional integrity in 50% of the riparian assessment areas, primarily reaches with wide riparian buffers and good tree cover. The flood management function was generally ranked as medium due to historic residential and agricultural encroachment that has eliminated or decreased the functionality of creek-side floodplain areas, thereby limiting the potential for flooding.

Wildlife habitat was usually either medium or high for the riparian areas due to the presence of perennial surface water, well vegetated areas, and lack of impervious surfaces in the vicinity of the resource.

In general the riparian areas of Molalla are in relatively good condition, with the exception of reaches through agricultural fields or pasture areas. In these areas grazing and planting occur right up to the edge of the resource, degrading the riparian zone and its functionality.

10.0 PROJECT SUMMARY

- The City of Molalla hired Pacific Habitat Services, Inc. (PHS) to conduct a Local Wetlands Inventory (LWI) and Riparian Inventory for areas within the City's Urban Growth Boundary.
- The project area is approximately 1,780- acres, including portions of three watersheds; Bear Creek, Creamery Creek and an unnamed tributary of the Molalla River.
- Field work was conducted between March 2001 and June 2001. Each wetland unit was assigned an unique code based on the watershed. A wetland characterization and wetland assessment was completed for each wetland unit. The wetland assessment was based on the *Oregon Freshwater Wetland Assessment Methodology*.
- In addition to the determination and wetland assessment, Locally Significant Wetlands were identified based on Oregon Administrative Rules.
- A total of 64 wetland units were identified in the project area, with a combined acreage of approximately 106.76 acres.
- Most of the wetlands can be classified as palustrine emergent (63%), followed by palustrine forested (31%) and palustrine scrub-shrub (5%). Palustrine open water, palustrine open water, excavated and palustrine emergent, farmed combined for the remaining 2%.
- None of the wetlands met the criteria for "wetlands of special interest for protection".
- Nineteen (19) of the 64 wetlands met the criteria for Locally Significant Wetlands due to diverse wildlife habitat, intact fish habitat, intact water quality function and/or intact hydrologic control function.
- The riparian inventory assessed 24 areas associated with Bear Creek or Creamery Creek.
- Riparian widths in the project area range from 10 to 75 feet, based on actual site conditions and potential tree height.
- Seventy-one percent (71%) of the riparian areas were assessed with at least one function (water quality, flood management, thermal regulation, wildlife habitat) as having high functional integrity.

11.0 REFERENCES

City of Molalla. 1977. *Master Drainage and Preliminary Street Plans.* 1"=500' map.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of wetlands and deepwater habitats of the United States.* U.S. Fish and Wildlife Service, Office of Biological Services, FWS/OBS-79/31. 103 pp.

Environmental Laboratory. *Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1).* (U.S. Army Corps of Engineers, 1987).

Federal Register. 1982, *Title 33: Navigation and Navigable Waters, Chapter 11, Regulatory Programs of the Corps of Engineers,* Vol. 47, No. 138, p31810, US Government Printing Office, Washington, D.C.

Franklin, Jerry F and Dyrness C.T. 1973. *Natural Vegetation of Oregon and Washington.* Pacific Northwest Forest and Range Experiment Station, Forest Service, US Department of Agriculture, Portland, Oregon.

Land Conservation and Development Commission, 1996. *Statewide Planning Goal 5. Amended Administrative Rules OAR 660, DSL 23.*

Oregon Department of Environmental Quality, 1996. *DEQ's 1994/1996 303(d) List of Water Quality Limited Waterbodies & Oregon's Criteria Used for Listing Waterbodies.*

Oregon Department of Fish and Wildlife, 2000. *Oregon Guideline for Timing of In-water Work to Protect Fish and Wildlife Resources.*

Oregon Division of State Lands, 1998. *Urban Riparian Inventory and Assessment Guide.*

Potter, Shane. 2001. City of Molalla, City Planner, personal communication.

Reed, Porter B., Jr. 1988 (May). *National List of plant Species That Occur in Wetlands: Northwest (Region 9).* Prepared by the U.S. Fish and Wildlife Service, St. Petersburg, FL. NERC-88/18.37.

Roth E.M., R.D. Olsen, P.L. Snow, and R.R. Sumner. 1996. *Oregon Freshwater Wetland Assessment Methodology.* Ed. by S.G. McCannell. DSL. Salem, OR.

U.S.D.A., Soil Conservation Service. 1985. *Soil Survey of Clackamas County Area, Oregon.*

U.S.D.A., Soil Conservation Service. 1989. *Oregon Hydric Soils by Counties.*

U.S.F.W.S. *National Wetlands Inventory* map, Molalla, Oregon quadrangle. Color infrared aerial photography in July, 1981; 1:58,000.

U.S. Geological Survey. 1954, Photorevised 1985. *Molalla,* Oregon topographical quadrangle, 1:24,000.

Appendix A

Wetland Characterization Sheets

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	MR-1
Date(s) of field work:	4/25/01	Size (acres):	0.05
Data Sheet Numbers:	MR-1-1, MR-1-2	Cowardin Class(es):	PEM
Investigator(s):	SE,FS	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 9**
Other:	**Molalla High School**
Tax Lots:	**52E09 00600**
Hydrologic basin:	**Molalla River**
Soil -- Mapped series:	**Sawtell silt loam, 3-8% slopes**
Hydrologic Source:	**Groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Fraxinus latifolia		*Festuca arundinacea*
	Rosa pisocarpa		*Agrostis tenuis*
			Juncus tenuis
			Festuca rubra
			Holcus lanatus
			Plantago lanceolata

Comments:

Located in northeast corner of Molalla High School property. Area is on the edge of Urban Growth Boundary. Unable to identify northern boundary due to a fence line between properties. Zoned Public/semi-Public. Adjacent land use is developed (school) and undeveloped riparian forest.

Adjacent Upland Species: Crataegus monogyna, Rhamnus pershiana, Cytisus scoparius, Rubus discolor, Rubus ursinus, Festuca arundinacea, Agrostis tenuis

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	MR-2
Date(s) of field work:	OFF-SITE	Size (acres):	0.90
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM, PFO
Investigator(s):	PF	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 9**
Other:	**North of Molalla Buckaroo Stadium**
Tax Lots:	**52E09 00400, 52E09 00402**
Hydrologic basin:	**Molalla River**
Soil -- Mapped series:	**Sawtell silt loam, 3-15% slopes**
Hydrologic Source:	**Groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Fraxinus latifolia*		
	Salix sp.		

Comments: **Locally Significant Wetland**

OFF-SITE. Analysis included observations from adjacent property, aerial photographs and aerial fly-over. Located north of Molalla Buckaroo Stadium. Area is on the edge of Urban Growth Boundary (UGB). Wetland potentially extends to the north, beyond the UGB. Zoned Public/semi-Public. Adjacent land use is primarily agriculture. Wetland is partially forested and also has small pond.

Adjacent Upland Species: mowed grasses

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	MR-3f
Date(s) of field work:	4/25/01	Size (acres):	0.30
Data Sheet Numbers:	MR-3-3, MR-3-4	Cowardin Class(es):	PEMf
Investigator(s):	SE,FS	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 9**
Other:	**West of Hwy 211, north of Shirley Street (east end of Molalla)**
Tax Lots:	**52E09 00200**
Hydrologic basin:	**Molalla River**
Soil -- Mapped series:	**Sawtell silt loam, 8-15% slopes**
Hydrologic Source:	**Groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Festuca arundinacea
			Alopecurus pratensis
			Holcus lanatus
			Poa pratensis
			Festuca rubra

Comments:

Located in northeast corner of Molalla, north of Shirley Street. Area is on the edge of Urban Growth Boundary. Wetland is located south of an acricultural ditch that drains runoff from Hwy 211, to the west. Zoned Single family residential. Adjacent land use is agriculture fields and pastures.

Adjacent Upland Species: Daucus carota, Alopecurus pratensis, Dactylis glomerata, Festuca arundinacea, Vicia sativa, Geranium robertiaum, Taraxacum officinale

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-1
Date(s) of field work:	OFF-SITE	Size (acres):	0.61
Data Sheet Numbers:	N/A	Cowardin Class(es):	PSS
Investigator(s):	SE/PF	HGM Class(es):	DCNP

Location -- Legal:	T. 5S, R. 2E, Section 7
Other:	North of Toliver Road
Tax Lots:	52E07AA 00501, 02200
Hydrologic basin:	Creamery Creek
Soil -- Mapped series:	Wapato silty clay loam
Hydrologic Source:	Groundwater

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Salix scouleriana*		*Geum macrophyllum*
Populus trichocarpa	*Rosa nutkana*		*Juncus effusus*
	Fraxinus latifolia		*Holcus lanatus*
	Populus trichocarpa		*Phalaris arundinacea*
	Spiraea douglasii		*Carex sp.*

Comments: **Locally Significant Wetland**

OFF-SITE. Located between Oriental and Ventmor Courts, south of Big Meadow Subdivision. Zoned Multi-family residential. Adjacent land use is developing residential.

Adjacent Upland Species: Quercus garryana, Rumex acetosella, Trifolium repens, Daucus carota, Chrysanthemum leucanthemum, Rubus ursinus, Rubus discolor, Crateagus monogyna, Parentucellia viscosa

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-2
Date(s) of field work:	OFF-SITE	Size (acres):	1.25
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	PF/ JVS	HGM Class(es):	DCNP

Location -- Legal:	T. 5S, R. 2E, Section 7
Other:	North of Toliver Road, west of Oriental Court
Tax Lots:	52E07AA 00101, 00200
Hydrologic basin:	Creamery Creek
Soil -- Mapped series:	Dayton silt loam
Hydrologic Source:	Groundwater

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Alopecuris pratensis
			Holcus lanatus
			Carex spp.
			Juncus spp.

Comments:

OFF-SITE. Located north of Toliver Road in undeveloped portion of a residential yard. Mowed grass field. Zoned Single Family Residential. Adjacent land use is developing residential.

Adjacent Upland Species: Festuca arundinacea

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-3
Date(s) of field work:	4/20/01	Size (acres):	0.08
Data Sheet Numbers:	5, 6	Cowardin Class(es):	PEM
Investigator(s):	PF/CR	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**North of Toliver Road.**
Tax Lots:	**52E08BB 00500, 00700**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Populus trichocarpa		*Epilobium watsonii*
			Epilobium sp.
			Juncus ensifolius
			Juncus tenuis
			Agrostis tenuis

Comments:

Located north of Toliver Road. Wetland borders Big Meadow Subdivision, to the north. Shallow swale between rows of recently planted pine trees. There is an excavated drainage ditch along north and east edges. Zoned Single Family Residential. Adjacent land use is developing residential.

Adjacent Upland Species: Pinus contorta, Populus trichocarpa, Epilobium watsonii, Chrysanthemum leucanthemum, Geranium robertiaum, Cardamine oligosperma, Crepis setosa, Taraxacum officinale, Panicum capillare

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-4
Date(s) of field work:	5/1/01 and OFF-SITE	Size (acres):	3.06
Data Sheet Numbers:	CC-4-7, CC-4-08	Cowardin Class(es):	PEM
Investigator(s):	SE/PF	HGM Class(es):	RI

Location -- Legal:	T. 5S, R. 2E, Sections 5 and 8
Other:	In Big Meadow Subdivision.
Tax Lots:	52E05 02201, 02600, 02800, 52E08AB 00500
Hydrologic basin:	Creamery Creek
Soil -- Mapped series:	Dayton silt loam
Hydrologic Source:	Creamery Creek

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
		Solanum dulcamara	*Phalaris arundinacea*
			Galium aparine
			Conium maculatum
			Ranunculus repens

Comments:

OFF-SITE along Creamery Creek. On-site at east end by railroad tracks. Located in Big Meadow Subdivision, extending from old railroad bed northwest along Creamery Creek to the Urban Growth Boundary. DSL determination #00-0123. Zoned Two Family Residential. Adjacent land use is developing residential.

Adjacent Upland Species: Crataegus douglasii, Festuca arundinacea, Cirsium vulgare, Taraxacum officinale, Trifolium pratense, Hypochaeris radicata

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-5
Date(s) of field work:	**OFF-SITE**	Size (acres):	**1.32**
Data Sheet Numbers:	**N/A**	Cowardin Class(es):	**PEM**
Investigator(s):	**SE/FS**	HGM Class(es):	**DCNP**

Location -- Legal:	**T. 5S, R. 2E, Section 5**
Other:	**In Big Meadow Subdivision.**
Tax Lots:	**52E05 02201, 02800**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS

Comments:
OFF-SITE. Located in Big Meadow Subdivision. Series of closed depressional wetlands located primarily south of Creamery Creek and south of the Urban Growth Boundary in agricultural fields. DSL determination #00-0123. Zoned Two Family Residential. Adjacent land use is developing residential.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-6A
Date(s) of field work:	OFF-SITE	Size (acres):	1.62
Data Sheet Numbers:	0	Cowardin Class(es):	PEM/PFO
Investigator(s):	SE/PF	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 5**
Other:	**North of Toliver Road, east of old road bed**
Tax Lots:	**52E05 02200**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Creamery Creek**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Alnus rubra	*Spiraea douglasii*	*Rubus discolor*	*Phalaris arundinacea*
Fraxinus latifolia	*Rosa pisocarpa*		*Ranunculus repens*
	Salix sp.		*Lotus corniculatus*
			Juncus effusus

Comments:

OFF-SITE. Located north of Toliver Road, east of old road bed. Wetland is hydrologically connected to CC-6B, to the south, by a branch of Creamery Creek. The creek is a narrow channel through the middle of the wetland. DSL Determination #99-0377. Zoned Single family residential. Adjacent land use is agriculture (tree farm) and open space.

Adjacent Upland Species: Malus fusca, Crataegus monogyna, Pseudotsuga menziesii, Rubus discolor, Rubus laciniatus, Festuca arundinacea, Holcus lanatus, Crepis capillaris, Agrostis alba, Daucus carota, Dactylis glomerata

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-6B
Date(s) of field work:	OFF-SITE	Size (acres):	2.90
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM/PFO
Investigator(s):	SE/PF	HGM Class(es):	RFT

Location -- Legal:	T. 5S, R. 2E, Section 5
Other:	North of Toliver Road, west of railroad tracks
Tax Lots:	52E05 02000
Hydrologic basin:	Creamery Creek
Soil -- Mapped series:	Dayton silt loam / Sawtell silt loam 3-8% slopes
Hydrologic Source:	Creamery Creek

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Malus fusca*	*Rubus discolor*	*Phalaris arundinacea*
			Ranunculus repens
			Holcus lanatus
			Agrostis alba
			Centaurium erythraea
			Dactylis glomerata
			Festuca arundinacea

Comments:

OFF-SITE. Located north of Toliver Road, west of railroad tracks. Wetland is hydrologically connected to CC-6A, to the north, by a branch of Creamery Creek. Also connected via a culvert under railroad to CC-7A. The creek is a narrow channel through the middle of the wetland. DSL Determination #99-0377. Zoned Exclusive Farm Use. Adjacent land use is agriculture and open space.

Adjacent Upland Species: Quercus garryana, Fraxinus latifolia, Sambucus racemosa, Rubus discolor, Symphoricarpos albus, Agrostis alba, Festuca ovina, Cirsium arvense, Centaurium erythraea, Phleum pratense, Dactylis glomerata, Festuca arundinacea,

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-7A
Date(s) of field work:	OFF-SITE	Size (acres):	0.63
Data Sheet Numbers:	0	Cowardin Class(es):	PFO
Investigator(s):	PF/CR	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 9**
Other:	**North of Toliver Road, east of railroad tracks.**
Tax Lots:	**52E09BB 08445**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Creamery Creek**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Malus fusca*	*Solanum dulcamara*	*Athyrium filix-femina*
	Corylus cornuta		*Ranunculus repens*
			Carex sp.
			Polystichum munitum

Comments: **Locally Significant Wetland**

OFF-SITE. Located north of Toliver Road, between railroad tracks and Hauser Court. Wetland is hydrologically connected to CC-6B, to the west, by a culvert under the railroad tracks and CC-7B, to the south via Creamery Creek. The creek is a narrow channel through the south end of the wetland. DSL Determination #97-0446. Zoned Single family residential. Adjacent land use is urban residential.

Adjacent Upland Species: Pseudotsuga menziesii, Corylus cornuta, Rubus discolor, Polystichum munitum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-7B
Date(s) of field work:	OFF-SITE	Size (acres):	0.81
Data Sheet Numbers:	0	Cowardin Class(es):	PEM
Investigator(s):	PF/CR	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 9**
Other:	**North of Toliver Road, east of railroad tracks.**
Tax Lots:	**52E09BB 08445**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Creamery Creek**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Spiraea douglasii*		*Agrostis alba*
			Carex obnupta
			Glyceria elata
			Phalaris arundinacea
			Trifolium repens

Comments: **Locally Significant Wetland**

OFF-SITE. Located north of Toliver Road, between railroad tracks and Hauser Court. Wetland is hydrologically connected to CC-7A, to the north and CC-7C, to the south via Creamery Creek. The creek is a narrow channel through the middle of the wetland. DSL Determination #97-0446. Zoned Single family residential. Adjacent land use is urban residential.

Adjacent Upland Species: Pseudotsuga menziesii, Corylus cornuta, Rubus discolor, Polystichum munitum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-7C
Date(s) of field work:	OFF-SITE	Size (acres):	1.30
Data Sheet Numbers:	N/A	Cowardin Class(es):	PFO/PSS
Investigator(s):	PF/CR	HGM Class(es):	RFT

Location -- Legal:	T. 5S, R. 2E, Section 9
Other:	West of Creamery Creek Lane
Tax Lots:	52E09BC 01221
Hydrologic basin:	Creamery Creek
Soil -- Mapped series:	Dayton silt loam
Hydrologic Source:	Creamery Creek

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Rosa sp.*	*Rubus discolor*	*Phalaris arundinacea*
Salix scouleriana	*Crataegus douglasii*		*Ranunculus repens*
			Agrostis tenuis

Comments: **Locally Significant Wetland**

OFF-SITE. West of Creamery Creek Lane. Wetland is hydrologically connected to CC-7B, to the north, via Creamery Creek. The creek is a narrow channel through the middle of the wetland. A small pond is located on the east edge of the wetland. DSL Determination #93-0159. Zoned Multi-Family residential. Adjacent land use is urban residential.

Adjacent Upland Species: Corylus cornuta, Rubus discolor, Polystichum munitum, Phalaris arundinacea, Festuca arundinacea, Pteridium aquilinum, Dipsacus sylvestris, Polystichum munitum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-8
Date(s) of field work:	OFF-SITE	Size (acres):	0.26
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	SE/PF	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**North of Toliver Road, east of old railroad bed**
Tax Lots:	**52E08A 01000**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Polygonum persicaria
			Agrostis sp.
			Holcus lanatus
			Barbarea sp.
			Lotus sp.
			Leersia sp.

Comments:

OFF-SITE. Located north of Toliver Road, east of old railroad bed. DSL determination 00-0280. Wetland is hydrologically connected to CC-4, to the west, by a culvert under the old road bed. Wetland is the remnant of a tributary of Creamery Creek that historically flowed across the site. Zoned Multi-family Residential. Adjacent land use is residential.

Adjacent Upland Species: Cirsium arvense, Phleum pratense, Festuca arundinacea, Ranunculus occidentalis, Holcus lanatus

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-9A
Date(s) of field work:	4/20/01	Size (acres):	0.44
Data Sheet Numbers:	9, 10	Cowardin Class(es):	PEM
Investigator(s):	PF/CR	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**South of Toliver Road, north of Heintz and east of Ridings**
Tax Lots:	**5S2E08 05500**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Creamery Creek**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Agrostis stolonifera
			Ranunculus repens
			Agrostis tenuis
			Carex feta
			Trifolium pratense
			Poa annua
			Alopecuris pratensis
			Trifolium repens

Comments:

Grazed wet field in back of residence. Drains south and hydrologically connected to CC-9B and 9C by groundwater and seasonal surface water. Zoned residential. Adjacent land use is residential and heavy industrial.

Adjacent Upland Species: Festuca arundinacea, Plantago major, Trifolium dubium, Taraxacum officinale

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-9B
Date(s) of field work:	4/20/01	Size (acres):	1.02
Data Sheet Numbers:	11, 12, 13	Cowardin Class(es):	PFO
Investigator(s):	PF/CR	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**South of Toliver Road, north of Heintz and east of Ridings**
Tax Lots:	**5S2E08 05500, 05600**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Creamery Creek**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia			*Agrostis stolonifera*
			Ranunculus repens
			Agrostis tenuis
			Carex densa
			Epilobium watsonii
			Camassia quamash
			Lotus corniculatus
			Trifolium repens
			Alopecuris pratensis
			Carex praticola

Comments: **Locally Significant Wetland**

Palustrine forested wetland in back of residence. Seasonally grazed. Small drainage flows from east to west and into drop inlet at edge of residential development on west. Hydrologically connected to CC-9A and 9C by groundwater and seasonal surface water. Zoned residential. Adjacent land use is residential and heavy industrial.

Adjacent Upland Species: Daucus carota, Cirsium arvense, Chrysanthemum leucanthemum, Festuca arundinacea, Taraxacum officinale

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-9C
Date(s) of field work:	4/20/01	Size (acres):	1.15
Data Sheet Numbers:	OFF-SITE	Cowardin Class(es):	PEM
Investigator(s):	PF/CR	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**South of Toliver Road, north of Heintz, at end of Pegasus Court**
Tax Lots:	**5S2E08**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Creamery Creek**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Phalaris arundinacea

Comments: **Locally Significant Wetland**

OFF-SITE. Reed canarygrass dominated wetland at end of new subdivision (Pegasus Court). Drains west and hydrologically connected to CC-9A and 9B by seasonal surface water. Zoned residential. Adjacent land use is residential and heavy industrial.

Adjacent Upland Species: Festuca arundinacea, Rubus discolor

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-10
Date(s) of field work:	OFF-SITE	Size (acres):	0.52
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	PF/SE	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 9**
Other:	**North of Main Street, east of Cole Street**
Tax Lots:	**52E09D 01500, 01600**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Sawtell silt loam, 3-8% slopes**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Crataegus douglasii		*Alopecurus pratensis*
			Carex stipata
			Holcus lanatus
			Rumex crispus
			Agrostis tenuis
			Festuca arundinacea
			Vicia americana
			Trifolium repens

Comments:

OFF-SITE. North of Main Street, east if Cole Street, west of Pheasant Pointe housing. Wetland on two narrow undeveloped lots. Identified on National Wetlands Inventory map. Zoned general commercial. Adjacent land use is residential and commercial.

Adjacent Upland Species: Rubus laciniatus, Festuca arundinacea, Cytisus scoparius, Convolvulus arvensis

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	CC-11
Date(s) of field work:	**OFF-SITE**	Size (acres):	**0.27**
Data Sheet Numbers:	**N/A**	Cowardin Class(es):	**PEM**
Investigator(s):	**PF/SE**	HGM Class(es):	**DCNP**

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**West of railroad tracks, south of Heintz Street**
Tax Lots:	**52E08A 07700**
Hydrologic basin:	**Creamery Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS

Comments:
OFF-SITE. West of railroad tracks, south of Heintz Street. Small remnant pieces of former log pond. Disturbed. Adjacent land use and zoning is heavy industrial.

Adjacent Upland Species:

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-1A
Date(s) of field work:	5/1/01	Size (acres):	13.92
Data Sheet Numbers:	14, 15, 16, 17, 18, 19	Cowardin Class(es):	PEM
Investigator(s):	PF, SE	HGM Class(es):	DCNP

Location -- Legal:	T. 5S, R. 2E, Section 7
Other:	North of Hwy 211, west of Hwy. 213
Tax Lots:	52E07 01201
Hydrologic basin:	Bear Creek
Soil -- Mapped series:	Amity and Aloha silt loam
Hydrologic Source:	Precipitation, groundwater

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Phalaris arundinacea
			Carex stipata
			Juncus effusus
			Poa annua
			Typha latifolia
			Alopecuris geniculatus
			Eleocharis ovata
			Holcus lanatus
			Myosostis discolor
			Trifolium pratense

Comments:

City sewage treatment plant site. Palustrine emergent-wet grazed meadow surrounds the treatment ponds. Hydrologically connected to Bear Creek and BC-1B by groundwater/seasonal surface water. Zoned public. Adjacent land use is agriculture.

Adjacent Upland Species: Cirsium arvense, Dactylus glomerata, Daucus carota, Parentucellia viscosa, Festuca arundinacea, Cerastium arvense

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-1B
Date(s) of field work:	5/1/01	Size (acres):	4.44
Data Sheet Numbers:	20	Cowardin Class(es):	PFO, PEM
Investigator(s):	PF, SE	HGM Class(es):	DCNP, RFT

Location -- Legal:	T. 5S, R. 2E, Section 7
Other:	North of Hwy 211, west of Hwy. 213
Tax Lots:	52E07 01201, 01200; 52E07A 00600
Hydrologic basin:	Bear Creek
Soil -- Mapped series:	Wapato silty clay loam
Hydrologic Source:	Groundwater, surface water

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia			*Phalaris arundinacea*
Populus trichocarpa			*Veratrum californicum*
			Glyceria elata
			Rumex crispus
			Carex deweyana
			Carex feta
			Rorippa curvisiliqua
			Tellima grandiflora

Comments: **Locally Significant Wetland**

On and off-site assessment. Includes DSL Det. #00-0064. Extends partially onto City's sewage treament plant site. Palustrine forested wetland associated with Bear Creek. Drains west and hydrologically connected to Bear Creek and BC-1A by groundwater/seasonal surface water. Zoned public/semi-public and residential. Adjacent land use is agriculture and rural residential.

Adjacent Upland Species: Cirsium arvense, Dactylus glomerata, Daucus carota, Parentucellia viscosa, Festuca arundinacea, Cerastium arvense, Rubus discolor, Crataegus monogyna, Galium aparine, Symphoricarpos albus, Quercus garryana

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-1C
Date(s) of field work:	6/6/01	Size (acres):	0.38
Data Sheet Numbers:	21, 22	Cowardin Class(es):	PFO, PEM
Investigator(s):	PF, SE	HGM Class(es):	DCNP

Location -- Legal:	T. 5S, R. 2E, Section 7
Other:	North of Hwy 211, west of Hwy. 213
Tax Lots:	52E07A 02500, 00600
Hydrologic basin:	Bear Creek
Soil -- Mapped series:	Wapato silty clay loam
Hydrologic Source:	Groundwater, surface water

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Spiraea douglasii*		*Phalaris arundinacea*
	Rhamnus purshiana		*Poa trivialis*
	Fraxinus latifolia		*Juncus tenuis*
			Rumex crispus
			Geum macrophyllum
			Holcus lanatus
			Carex stipata
			Agrostis tenuis

Comments: **Locally Significant Wetland**

On and off-site assessment. Palustrine forested and emergent wetland drains north and hydrologically connected to Bear Creek and BC-1B by groundwater/seasonal surface water. Zoned residential. Adjacent land use is rural residential and industrial/commercial. Small drainage through site. Entire site has hydric soils.

Adjacent Upland Species: Pseudotsuga menziesii, Pinus ponderosa, Symphoricarpos albus, Cynosurus echinatus, Cynosurus cristatus, Rumex acetosella, Rhus diversiloba, Dactylus glomerata, Daucus carota, Parentucellia viscosa, Festuca arundinacea, Crataegus monogyna

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-2A
Date(s) of field work:	4/18/01	Size (acres):	1.05
Data Sheet Numbers:	23,24	Cowardin Class(es):	PFO
Investigator(s):	SE/FS	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Sections 7 and 8**
Other:	**Along the banks of Bear Creek, east of Highway 213**
Tax Lots:	**52E07A 00700, 02100, 02200, 02300**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Wapato silty clay loam**
Hydrologic Source:	**Surface water, precipitation**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia			*Phalaris arundinacea*
			Impatiens noli-tangere
			Conium maculatum
			Cardamine oligosperma
			Alopecurus pratensis

Comments: **Locally Significant Wetland**

In riparian zone north and south of Bear Creek, Highway 213 to east of Safeway. Hydrologically connected upstream to BC-2B, and downstream to BC-1B. To the south, north of Safeway, are detention ponds and a compensatory mitigation site associated with the development of a shopping center (DSL DET #99-0097). Zoned Light Industrial and General Commercial. Adjacent land use is primarily agriculture and residential.

Adjacent Upland Species: Crataegus monogyna, Rubus discolor, Festica arundinacea, Holcus lanatus, Galium aparine, Taraxacum officinale, Cirsium arvense, Lamium purpureum, Vicia sativa, Dactylis glomerata

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-2B
Date(s) of field work:	4/18/01	Size (acres):	0.83
Data Sheet Numbers:	25,26	Cowardin Class(es):	PFO
Investigator(s):	SE/FS	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Sections 7 and 8**
Other:	**Along the banks of Bear Creek, west of Molalla Forest Road.**
Tax Lots:	**52E07A 01803, 01804, 01900, 02000**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Wapato silty clay loam**
Hydrologic Source:	**Surface water, precipitation**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Populus trichocarpa*	*Rubus discolor*	*Phalaris arundinacea*
Populus trichocarpa			

Comments: **Locally Significant Wetland**

In riparian zone parallel to Bear Creek, east of Safeway to Molalla Forest Road. Hydrologically connected upstream to BC-2A, and downstream to BC-17A, by surface water. Zoned residential. Adjacent land use primarily residential open space and a tree farm. Water flowing into the creek from a stormwater outfall near BC-2B-25 included an oily residue. A similar residue was also found in creek sediments.

Adjacent Upland Species: Quercus garryana, Pseudotsuga menziesii, Amalanchier alnifolia, Crataegus monogyna, Populus trichocarpa, Oemlaria cerasiformis, Ilex aquiflolium, Rubus discolor, Festuca arundinacea, Galium aparine, Dactylis glomerata

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-3A
Date(s) of field work:	OFF-SITE	Size (acres):	0.33
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	FS/SE	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 7**
Other:	**Southeast of the corner of Highway 213 and Toliver Road.**
Tax Lots:	**52E07A 00702**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Wapato silty clay loam**
Hydrologic Source:	**Surface water, precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Crataegus monogyna*	*Rubus discolor*	*Phalaris arundinacea*
	Rosa pisocarpa		

Comments:

OFF-SITE. DSL Determination 00-0455. Drainage flowing east to west to a culvert under Highway 213. Hydrologic connection with to BC-3B. Zoned Light Industrial. Adjacent land use is agriculture, residential and light industrial.

Adjacent Upland Species: Quercus garryana, Crataegus monogyna, Lolium perenne, Vicia sp., Parentucellia viscosa, Holcus lanatus, Avena sp., Rubus discolor

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-3B
Date(s) of field work:	4/18/01	Size (acres):	1.01
Data Sheet Numbers:	27, 28	Cowardin Class(es):	PEM
Investigator(s):	FS/SE	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 7**
Other:	**East of Highway 213, north of Bear Creek.**
Tax Lots:	**52E07A 00700, 00702**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Alopecurus pratensis
			Anthoxanthum odoratum
			Festuca arundinacea
			Lotus corniculatus
			Festuca rubra
			Hypochaeris radicata
			Ranunculus repens
			Montia linearis

Comments:

DSL Determination 00-0455 along northern end. Wetland is located on a topographic high, with a hydrologic connection to BC-3A. Zoned Light Industrial. Adjacent land use is agriculture and light industrial.

Adjacent Upland Species: Anthoxanthum odoratum, Hypochaeris radicata, Taraxacum officinale, Rumex acetosella, Trifolium repens

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-4
Date(s) of field work:	OFF-SITE	Size (acres):	1.82
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	PF/SE	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Sections 7 and 8**
Other:	**Southeast of the corner of Toliver Road and Industrial Way**
Tax Lots:	**52E07AA 02300**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam and Wapato silty clay loam**
Hydrologic Source:	**Precipitation**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Populus trichocarpa		*Phalaris arundinacea*
			Carex sp.
			Juncus effusus

Comments:

OFF-SITE. East side of Industrial Way, just south of Toliver Road. Vacant lot in light industrial area. Partially mowed. Includes 2 shallow drainages that flow to a roadside ditch south of Toliver Road. Zoned Light Industrial. Adjacent land use is light industrial. Apparent remnant of historic wetland and associated drainage channel.

Adjacent Upland Species: Rubus discolor, Trifolium pratense

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-5A
Date(s) of field work:	4/18/01	Size (acres):	1.00
Data Sheet Numbers:	29	Cowardin Class(es):	PEM/PSS
Investigator(s):	FS/SE	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**West of Molalla Forest Road, South of Toliver Road**
Tax Lots:	**52E07A 01100**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Rhamnus pershiana*	*Rubus discolor*	*Phalaris arundinacea*
	Crataegus monogyna		*Juncus tenuis*
	Crataegus douglasii		*Holcus lanatus*
			Carex densa
			Festuca arundinacea
			Agrostis tenuis
			Carex sp.

Comments:

West of Molalla Forest Road just south of a drainage ditch that flows from east to west into a culvert under a portion of the light industrial area to the west. Wetland is downslope of BC-5B, a mosaic of wetland and upland, to the south. Zoned Light Industrial. Adjacent land use is residential and light industrial.

Adjacent Upland Species: Quercus garryana, Cytisus scoparius, Crataegus monogyna, Symphoricarpos albus, Hypochaeris radicata, Rubus discolor, Dactylis glomerata, Daucus carota

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-5B
Date(s) of field work:	4/18/01	Size (acres):	3.68
Data Sheet Numbers:	30	Cowardin Class(es):	PEM
Investigator(s):	FS/SE	HGM Class(es):	HS

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**West of Molalla Forest Road, South of Toliver Road**
Tax Lots:	**52E07A 01100**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Rosa pisocarpa		*Phalaris arundinacea*
	Crataegus monogyna		*Juncus tenuis*
	Fraxinus latifolia		*Holcus lanatus*
			Carex densa
			Festuca arundinacea
			Plantago lanceolata

Comments:

West of Molalla Forest Road between Toliver Road and Main Street. Wetland is a mosiac of wetland and upland (60% wet to 40% upland). Very hummocky and poorly drained. Past disturbances appear to have eliminated natural drainage patterns. Zoned Light Industrial. Adjacent land use is residential and light industrial.

Adjacent Upland Species: Pinus ponderosa, Cytisus scoparius, Crataegus monogyna, Rhamnus pershiana, Hypochaeris radicata, Taraxacum officinale, Daucus carota, Centaurium umbellatum, Cirsium vulgare

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-6A
Date(s) of field work:	6/6/01	Size (acres):	1.11
Data Sheet Numbers:	31, 32	Cowardin Class(es):	PFO
Investigator(s):	PF/SE	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**East of Molalla Forest Road, south of Toliver Road**
Tax Lots:	**52E07AA 02700, 02800**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Wapato silty clay loam**
Hydrologic Source:	**Surface water, precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Fraxinus latifolia*	*Rubus discolor*	*Phalaris arundinacea*
		Solanum dulcamara	*Myosotis laxa*
			Holcus lanatus
			Rumex crispus
			Poa trivialis
			Callitriche stagnalis
			Juncus tenuis
			Geum macrophyllum

Comments: **Locally Significant Wetland**

South of Toliver Road between BMX bike park and Molalla Forest Road. Zoned Light Industrial. Adjacent land use is residential and public/semi-public.

Adjacent Upland Species: Pseudotsuga menziesii, Pinus ponderosa, Quercus garryana, Crataegus monogyna, Symphoricarpos albus, Rhus diversiloba, Rubus discolor, Rumex acetosella, Chrysanthemum leucanthemum, Cynosurus echinatus

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-6B
Date(s) of field work:	6/6/01	Size (acres):	0.40
Data Sheet Numbers:	33, 34	Cowardin Class(es):	PEM
Investigator(s):	PF/SE	HGM Class(es):	DNCP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**East of Molalla Forest Road, south of Toliver Road**
Tax Lots:	**52E07AA 02700, 02800**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Wapato silty clay loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Fraxinus latifolia	*Rubus ursinus*	*Carex stipata*
	Crataegus monogyna		*Geum macrophyllum*
			Carex feta
			Festuca arundinacea
			Holcus lanatus

Comments:

South of Toliver Road between City Shop and Molalla Forest Road. Zoned residential. Hydrologically connected to BC-6A, to the north. Adjacent land use is residential, public/semi-public and open space.

Adjacent Upland Species: Crataegus monogyna, Rubus ursinus, Festuca arundinacea, Agrostis tenuis, Chrysanthemum leucanthemum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-7
Date(s) of field work:	4/20/01	Size (acres):	0.24
Data Sheet Numbers:	35, 36, 37, 38	Cowardin Class(es):	PEM
Investigator(s):	PF/CR	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Sections 7, 8**
Other:	**South of Toliver Road, south of elementary school, east of City shops**
Tax Lots:	**52E07AA 02900, 52E08B 01500, 02000, 03000**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Surface water, precipitation**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Crataegus douglasii		*Juncus effusus*
			Carex praticola
			Alopecuris pratensis
			Phalaris arundinacea

Comments:

Narrow drainage along back of elementary school. Flows from east to west, beginning at Leroy Avenue and drains to a culvert at the road to the City Shops site. Hydrologically connected downstream to BC-6A by surface water. Zoned public/ semi-public. Adjacent land use is school properties and residential. Disturbed drainage-channelized and adjacent vegetation removed.

Adjacent Upland Species: Rubus discolor, Hypochaeris radicata, Vicia sativa, Cerastium arvense, Tanacetum vulgare, Taraxacum officinale, Poa pratensis, Trifolium repens, Agrostis tenuis

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-8
Date(s) of field work:	4/20/01	Size (acres):	0.18
Data Sheet Numbers:	39, 40	Cowardin Class(es):	PEM, POWx
Investigator(s):	PF/CR	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**South of Toliver Road, south of elementary school, east of City shops**
Tax Lots:	**52E08B 01500**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Surface water, precipitation**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Typha latifolia
			Glyceria sp.
			Alopecurus pratensis
			Alopecurus geniculatus
			Lotus corniculatus
			Iris pseudacorus
			Agrostis stolonifera

Comments:

Small excavated pond at back of elementary school. Zoned public/ semi-public. Adjacent land use is school property and City shops. No apparent connection to other drainages.

Adjacent Upland Species: Rubus discolor, Hypochaeris radicata, Vicia sativa, Cerastium arvense, Festuca arundinacea, Alopecurus pratensis, Trifolium repens, Agrostis tenuis

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-9
Date(s) of field work:	5/24/01	Size (acres):	0.15
Data Sheet Numbers:	41, 42	Cowardin Class(es):	PEM
Investigator(s):	SE/FS	HGM Class(es):	DNCP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**West of Middle School, south of track.**
Tax Lots:	**52E08B 03100**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Alopecurus pratensis
			Poa trivialis
			Holcus lanatus

Comments:

West of the Middle School, just south of school track. Isolated wetland north of large oak trees. Zoned residential. Adjacent land use is public/semi-public and open space with a tree farm.

Adjacent Upland Species: Quercus garryana, Pseudotsuga menziesii, Rubus discolor, Daucus carota, Festuca arundinacea, Dactylis glomerata, Poa trivialis, Vicia sativa, Galium aparine

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-10
Date(s) of field work:	4/20/01	Size (acres):	0.08
Data Sheet Numbers:	43,44	Cowardin Class(es):	PEM
Investigator(s):	PF/CR	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**South of Toliver Road, north of middle school, west of Leroy Ave**
Tax Lots:	**52E08B 03000**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Agrostis stolonifera
			Carex densa
			Alopecurus pratensis

Comments:

Small shallow area at edge of school field. Evidence of seasonal ponding. Zoned public/ semi-public. Adjacent land use is school property. No apparent connection to other drainages.

Adjacent Upland Species: Rubus discolor, Rubus ursinus, Cytisus scoparius, Vicia tetrasperma, Festuca arundinacea, Holcus lanatus, Galium aparine, Cirsium arvense, Geranium sp.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-11
Date(s) of field work:	OFF-SITE	Size (acres):	0.23
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	PF	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**North of Hwy. 211, between Ridings and Leroy**
Tax Lots:	**52E08AC 03500**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Sawtell silt loam, 0-8% slopes**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Alopecurus pratensis

Comments:

OFF-SITE. Shallow swale through field. Drains west. Possibly hydrologically connected to BC-12C by seasonal surface water. Zoned residential. Adjacent land use is residential.

Adjacent Upland Species: Festuca arundinacea

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-12A
Date(s) of field work:	4/18/01	Size (acres):	0.55
Data Sheet Numbers:	45, 46	Cowardin Class(es):	PFO
Investigator(s):	SE/FS	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**East of Molalla Forest Road, south of City Shops**
Tax Lots:	**52E07A 01600**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Wapato silty clay loam**
Hydrologic Source:	**Surface water, precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Crataegus monogyna*	*Rubus discolor*	*Alopecurus pratensis*
	Rosa pisocarpa		

Comments: **Locally Significant Wetland**

East of Molalla Forest Road, south of City Shop. Hydrologically connected to BC-12B, to the east. A field tile feeds a small drainage through the center of the forested area. The drainage flows under the City Shop into BC-6A. Zoned residential. Adjacent land use is public/semi-public and open space with a tree farm.

Adjacent Upland Species: Quercus garryana, Crataegus monogyna, Amelanchier alnifolia, Rubus discolor, Festuca arundinacea, Agrostis tenuis, Vicia sativa, Geranium robertianum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-12B
Date(s) of field work:	4/25/01, 5/24/01	Size (acres):	3.34
Data Sheet Numbers:	47, 48, 49, 50, 51, 52	Cowardin Class(es):	PEM
Investigator(s):	SE/FS	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**East of Molalla Forest Road, south of Molalla Schools**
Tax Lots:	**52E08B 03100, 03200, 03300, 03900, 04000, 04300**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Alopecurus pratensis
			Phalaris arundinacea
			Poa trivialis
			Festuca arundinacea
			Holcus lanatus
			Juncus effusus
			Agrostis stolonifera
			Veronica americana
			Veronica scutellata
			Veronica serpyllifolia

Comments:

East of Molalla Forest Road, south middle and grade schools. Hydrologically connected to BC-12A, to the west. A field tile drains at least a portion of the west end of this wetland into BC-12A. BC-6A. Zoned residential. Adjacent land use is public/semi-public, agriculture and open space with a tree farm.

Adjacent Upland Species: Quercus garryana, Crataegus douglasii, Cytisus scoparius, Rubus discolor, Festuca arundinacea, Plantago lanceolata, Rumex acetosella, Daucus carota, Holcus lanatus, Trifolium repens, Anthoxanthum odoratum, Camassia quamash, Galium aparine, Lolium multiflorum, Horkelia congesta

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-13
Date(s) of field work:	4/25/01	Size (acres):	0.35
Data Sheet Numbers:	53, 54, 55	Cowardin Class(es):	PEM
Investigator(s):	SE/FS	HGM Class(es):	DO

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**East of Molalla Forest Road, north of Main Street**
Tax Lots:	**52E07A 01600**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Alopecurus pratensis
			Geranium robertianum
			Festuca rubra
			Festuca arundinacea
			Galium aparine

Comments:

East of Molalla Forest Road, north of Main Street. Wetland overflows into a swale and down to Bear Creek just east of Molalla Forest Road. Zoned residential. Adjacent land use is residential and agriculture.

Adjacent Upland Species: Quercus garryana, Crataegus douglasii, Symphoricarpos albus, Holcus lanatus, Dactylis glomerata, Bromus sp., Prunella vulgaris, Galium aparine, Lolium multiflorum, Geranium robertianum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-14f
Date(s) of field work:	OFF-SITE	Size (acres):	0.16
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEMf
Investigator(s):	PF	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 7**
Other:	**South of Hwy 211, west of Hwy. 213**
Tax Lots:	**52E07 01500**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Amity and Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS

Comments:

OFF-SITE. Farmed grass field with small area in middle that may be saturated seaonally. No apparent connection to other wetlands or waters. Zoned residential. Adjacent land use is residential and undeveloped.

Adjacent Upland Species: Lolium or Festuca

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-15
Date(s) of field work:	6/6/01	Size (acres):	0.80
Data Sheet Numbers:	56, 57	Cowardin Class(es):	PEM
Investigator(s):	PF/SE	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 7**
Other:	**East of Highway 213, southwest corner of Molalla**
Tax Lots:	**52E07A 01600**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Amity silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Alopecurus geniculatus
			Holcus lanatus
			Rumex crispus
			Juncus tenuis

Comments:

East of State Highway 213 in the southwest corner of Molalla. There is a shallow drainage feature in the grass field between BC-15 and BC-16B, but they do not appear to be hydrologically connected. Zoned residential. Adjacent land use is light industrial/commercial, residential and agriculture.

Adjacent Upland Species: Lolium mutliflorum, Agrostis tenuis, Festuca arundinacea, Bromus sp., Anthoxanthum odoratum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-16A
Date(s) of field work:	OFF-SITE	Size (acres):	0.96
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	PF	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 7**
Other:	**South of Hwy. 211, east of Hwy 213, west of Bear Creek**
Tax Lots:	**52E07D 01700, 01300**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Amity silt loam**
Hydrologic Source:	**Groundwater, surface water**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Alopecuris pratensis
			Phalaris arundinacea

Comments:

OFF-SITE. Shallow swale through field and forest area. Disturbed. Drains north to culvert under Hwy 211. Appears to have a seasonal drainage. Hydrologically connected to BC-16B and Safeway site by seasonal surface water. Zoned residential. Adjacent land use is residential and undeveloped.

Adjacent Upland Species: Festuca arundinacea, Rubus discolor, Pseudotsuga menziesii

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-16B
Date(s) of field work:	6/6/01	Size (acres):	0.96
Data Sheet Numbers:	58, 59	Cowardin Class(es):	PEM
Investigator(s):	PF/SE	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 7**
Other:	**South of Hwy. 211, east of Hwy 213, southwest of Bear Creek**
Tax Lots:	**52E07D 00702, 01700, 03400**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Amity silt loam**
Hydrologic Source:	**Groundwater, surface water**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Alopecurus pratensis
			Phalaris arundinacea
			Juncus effusus
			Veronica americana
			Juncus tenuis

Comments:

Shallow swale in grass field. A shallow ditch about 8 feet wide flows south to north through the middle of the wetland. Drains north and appears to have a seasonal surface water drainage into to BC-16A. Zoned residential. Adjacent land use is residential and undeveloped.

Adjacent Upland Species: Anthoxanthum odoratum, Trifolium pratense, Rumex acetosella, Chrysanthemum leucanthemum, Hypochaeris radicata, Plantago lanceolata

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-17A
Date(s) of field work:	**OFF-SITE**	Size (acres):	**1.96**
Data Sheet Numbers:	**N/A**	Cowardin Class(es):	**PFO**
Investigator(s):	**PF/SE**	HGM Class(es):	**RFT**

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**West of Ona Road, south of Main Street**
Tax Lots:	**52E07D 00102**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Wapato silty clay loam**
Hydrologic Source:	**Groundwater, surface water**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Fraxinus latifolia*	*Rubus discolor*	*Impatiens sp.*
	Physocarpus capitatus		*Phalaris arundinacea*
	Oemlaria cerasiformis		

Comments: **Locally Significant Wetland**

OFF-SITE. Bear Creek flows through a forested area just south of Main Street, between Molalla Forest Road and Ona Road. Hydrologic connection to BC-17B through a culvert under Ona Road. Zoned residential. Adjacent land use is residential and commercial.

Adjacent Upland Species: Quercus garryana, Symphoricarpos albus, Amelanchier alnifolia, Rubus discolor, Hedera helix, Tellima grandiflora, Polystichum munitum, Galium aparine

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-17B
Date(s) of field work:	5/1/01	Size (acres):	0.14
Data Sheet Numbers:	60, 61	Cowardin Class(es):	PEM
Investigator(s):	PF/SE	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**East of Ona Road, south of Main Street**
Tax Lots:	**52E08C 01700**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Wapato silty clay loam**
Hydrologic Source:	**Groundwater, surface water**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Impatiens sp.
			Phalaris arundinacea

Comments: **Locally Significant Wetland**

East of Ona Road. In-line pond at high flow. At low flow Bear Creek flows through the wetland in multiple channels. Hydrologic connection to BC-17A through a downstream culvert under Ona Road. Zoned residential. Adjacent land use is residential and commercial.

Adjacent Upland Species: Abies sp., Rubus discolor, Festuca arundinacea, Agrostis tenuis, Trifolium repens, Hypochaeris radicata, Cirsium arvense, Vicia sativa, Rumex crispus, Taraxacum officinale

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-18
Date(s) of field work:	4/25/01	Size (acres):	0.12
Data Sheet Numbers:	62, 63	Cowardin Class(es):	PEM, PSS
Investigator(s):	SE/FS	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**South of Main Street**
Tax Lots:	**52E08C 00800**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Clackamas silt loam, Dayton silt loam**
Hydrologic Source:	**Surface water, precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Populus trichocarpa	*Fraxinus latifolia*		*Agrostis stolonifera*
	Populus trichocarpa		*Ranunculus repens*
			Juncus patens
			Juncus tenuis
			Veronica scutellata

Comments:

South of Main Street, south of middle school, North of Lowe Road. There are a series of shallow drainage features 1 to 6 feet wide trending north/south. Only two appear large enough to transport or hold water for any period. These features may be remnant from an agricultural process, as they are parallel to each other. Zoned residential. Adjacent land use is residential and commercial.

Adjacent Upland Species: Cytitus scoparius, Crataegus douglasii, Prunus avium, Malus fusca, Quercus garryana, Crataegus monogyna, Amelanchier alnifolia, Rosa eglanteria, Rubus ursinus, Rubus discolor, Dactylis glomerata, Daucus carota, Prunella vulgaris, Festuca arundinacea, Agrostis tenuis, Vicia sativa

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-19
Date(s) of field work:	OFF-SITE	Size (acres):	1.45
Data Sheet Numbers:	N/A	Cowardin Class(es):	PFO
Investigator(s):	PF/SE	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**South of Lowe Road, east of Molalla Forest Road**
Tax Lots:	**52E08C 03200**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Surface Water, groundwater, precipitation**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Fraxinus latifolia*	*Solanum dulcamara*	*Phalaris arundinacea*
	Acer circinatum	*Rubus discolor*	*Impatiens sp.*
	Salix sp.		
	Oemlaria cerasiformis		

Comments: **Locally Significant Wetland**

OFF-SITE. Located at the southeast corner of Lowe Road and Molalla Forest Road. Bear Creek flows through this forested wetland which is hydrologically connected to BC-22B, a forested wetland upstream, to the east. Zoned residential. Adjacent land use is residential and agriculture.

Adjacent Upland Species: Pseudotsuga menziesii, Symphoricarpos albus, Rubus discolor, Cirsium vulgaris, Vicia sativa, Holcus lanatus

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-20
Date(s) of field work:	OFF-SITE	Size (acres):	0.84
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	SE/FS	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**South of Lowe Road**
Tax Lots:	**52E08C 03600, 52E08C 03700**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Sawtell silt loam, 3-8%**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia			

Comments:

OFF-SITE. South of Lowe Road. A small wet area in a mowed yard and horse pasture. Zoned residential. Adjacent land use is residential and open space.

Adjacent Upland Species: Grazed and mowed grasses.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-21
Date(s) of field work:	6/6/01	Size (acres):	0.92
Data Sheet Numbers:	67, 68	Cowardin Class(es):	PFO
Investigator(s):	PF/SE	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**South of Main Street**
Tax Lots:	**52E08 00100, 52E08C 03800**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Clackamas silt loam**
Hydrologic Source:	**Groundwater, precipitation**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Populus trichocarpa	*Populus trichocarpa*		*Typha latifolia*
Salix lasiandra	*Salix lasiandra*		*Juncus tenuis*
	Crataegus monogyna		*Carex stipata*
			Equisetum arvense
			Lotus corniculatus
			Carex obnupta
			Holcus lanatus

Comments:

South of Main Street. Depressional area appears to collect runoff from surrounding areas. Zoned Heavy Industrial and General Commercial. Adjacent land use is heavy industrial and commercial.

Adjacent Upland Species: Rubus discolor, Anthoxanthum odoratum, Cirsium vulgaris, Vicia sativa, Holcus lanatus, Taraxacum officinale

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-22A
Date(s) of field work:	6/6/01	Size (acres):	0.71
Data Sheet Numbers:	71	Cowardin Class(es):	PEM
Investigator(s):	PF/SE	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 17**
Other:	**North of Molalla Forest Road, west of Molalla Ave., south of Hwy 211**
Tax Lots:	**52E17A 00100, 00101, 00102**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Surface water**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Agrostis stolonifera
			Ranunculus repens
			Carex leporina
			Carex stipata
			Myosotis discolor
			Phalaris arundinacea
			Holcus lanatus
			Equisetum arvense
			Veronica americana
			Lotus corniculatus

Comments:

Bear Creek and associated wetlands in narrow channel through Floragon Forest Products site. Disturbed and channelized, with several culverts under access roads. Hydrologically connected to BC-22B by surface water. Zoned heavy industrial. Adjacent land use is heavy industrial.

Adjacent Upland Species: Rubus discolor, Daucus carota, Cirsium arvense, Chrysanthemum leucanthemum, Festuca arundinacea, Taraxacum officinale, Cytisus scoparius, Crataegus monogyna

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-22B
Date(s) of field work:	5/1/01, 6/6/01	Size (acres):	10.64
Data Sheet Numbers:	64,65, 66	Cowardin Class(es):	PFO, POW
Investigator(s):	PF/SE	HGM Class(es):	RFT

Location -- Legal:	T. 5S, R. 2E, Sections 8, 17
Other:	North of Molalla Forest Road, west of Molalla Ave., south of Hwy 211
Tax Lots:	5S2E08C 03400, 03401; 52E17 00100, 00101; 52E17A 05100, 05190, 05200, 05280
Hydrologic basin:	Bear Creek
Soil -- Mapped series:	Dayton silt loam
Hydrologic Source:	Surface water, groundwater

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Cornus stolonifera*	*Solanum dulcamara*	*Agrostis stolonifera*
Populus trichocarpa	*Salix spp.*		*Ranunculus repens*
	Spiraea douglasii		*Agrostis tenuis*
	Physocarpus capitatus		*Carex densa*
			Epilobium watsonii
			Phalaris arundinacea
			Lotus corniculatus
			Impatiens noli-tangere
			Juncus effusus
			Alopecuris geniculatus

Comments: **Locally Significant Wetland**

Palustrine forested wetland extending from Floragon Forest Products site west. Areas of ponded water, beaver dams, snags. High quality wildlife habitat. Bear Creek flows through this area. Hydrologically connected to BC-22A, 22C, 22D and 19 by surface water. Zoned residential and small area of heavy industrial. Adjacent land use is residential and heavy industrial.

Adjacent Upland Species: Rubus discolor, Daucus carota, Cirsium arvense, Chrysanthemum leucanthemum, Festuca arundinacea, Taraxacum officinale, Heracleum lanatum, Cytisus scoparius, Prunus avium, Populus trichocarpa

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-22C
Date(s) of field work:	OFF-SITE	Size (acres):	3.48
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	PF/SE	HGM Class(es):	VS

Location -- Legal:	**T. 5S, R. 2E, Section 17**
Other:	**North of Molalla Forest Road, west of Molalla Ave., south of Hwy 211**
Tax Lots:	**52E17A 05190**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Ground water, surface water**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Agrostis stolonifera
			Ranunculus repens
			Agrostis tenuis
			Carex densa
			Juncus patens
			Phalaris arundinacea
			Holcus lanatus
			Equisetum arvense
			Juncus effusus

Comments:

OFF-SITE. Palustrine emergent wetland pasture upslope from Bear Creek. Hydrologically connected to BC-22B by groundwater and seasonal surface water. Zoned residential. Adjacent land use is rural residential/pasture.

Adjacent Upland Species: Rubus discolor, Daucus carota, Cirsium arvense, Chrysanthemum leucanthemum, Festuca arundinacea, Taraxacum officinale, Cytisus scoparius, Anthoxanthum odoratum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-22D
Date(s) of field work:	**OFF-SITE**	Size (acres):	**1.78**
Data Sheet Numbers:	**N/A**	Cowardin Class(es):	**PEM**
Investigator(s):	**PF/SE**	HGM Class(es):	**VS**

Location -- Legal:	**T. 5S, R. 2E, Section 17**
Other:	**North of Molalla Forest Road, west of Molalla Ave., south of Hwy 211**
Tax Lots:	**52E17 00100, 00101**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Ground water, surface water**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Agrostis stolonifera
			Ranunculus repens
			Agrostis tenuis
			Carex densa
			Juncus patens
			Phalaris arundinacea
			Holcus lanatus
			Equisetum arvense
			Juncus effusus

Comments:

OFF-SITE. Palustrine emergent wetland pasture upslope from Bear Creek. Hydrologically connected to BC-22B by groundwater and seasonal surface water. Zoned residential. Adjacent land use is rural residential/pasture.

Adjacent Upland Species: Rubus discolor, Daucus carota, Cirsium arvense, Chrysanthemum leucanthemum, Festuca arundinacea, Taraxacum officinale, Cytisus scoparius, Anthoxanthum odoratum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-22E
Date(s) of field work:	6/6/01	Size (acres):	0.27
Data Sheet Numbers:	69, 70	Cowardin Class(es):	PEM
Investigator(s):	PF/SE	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 17**
Other:	**North of Molalla Forest Road, west of Molalla Ave., south of Hwy 211**
Tax Lots:	**52E17A 05280, 05290**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Groundwater, surface water**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Agrostis stolonifera
			Lotus corniculatus
			Typha latifolia
			Eleocharis ovata
			Carex obnupta
			Phalaris arundinacea
			Juncus effusus

Comments:

Several depressions within the Floragon Forest Products site. Receives runoff from wood processing. Most are isolated, but one drains to Bear Creek. Zoned heavy industrial. Adjacent land use is heavy industrial.

Adjacent Upland Species: Rubus discolor, Rubus laciniatus, Vicia sativa, Galium aparine, Acer macrophyllum, Daucus carota, Cirsium arvense, Festuca myuros, Cytisus scoparius

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-23A
Date(s) of field work:	5/1/01, 5/24/01	Size (acres):	0.25
Data Sheet Numbers:	72, 73, 74	Cowardin Class(es):	PFO
Investigator(s):	PF, SE, FS	HGM Class(es):	DCNP

Location -- Legal:	T. 5S, R. 2E, Section 16
Other:	East of Molalla Avenue, south of 5th Street
Tax Lots:	52E09CD 00900
Hydrologic basin:	Bear Creek
Soil -- Mapped series:	Dayton silt loam
Hydrologic Source:	Groundwater, surface water

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Spiraea douglasii*	*Solanum dulcamara*	*Phalaris arundinacea*
Populus trichocarpa	*Fraxinus latifolia*		*Impatiens noli-tangere*
	Populus trichocarpa		*Eleocharis palustris*
	Rosa pisocarpa		*Geum macrophyllum*
	Salix lasiandra		*Juncus effusus*
			Polygonum sp.
			Cicuta douglasii
			Poa trivialis
			Epilobium watsonii
			Festuca rubra

Comments:

Small forested wetland on southeast corner of school track. Extends partially into road easement to south. Shallow ditch along dirt path drains east to main ditch running north/south. Adjacent land use and zoning is public and heavy industrial.

Adjacent Upland Species: Festuca arundinacea, Rubus discolor, Daucus carota, Festuca arundinacea, Galium aparine

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	**BC-23B**
Date(s) of field work:	**OFF-SITE**	Size (acres):	**0.14**
Data Sheet Numbers:	**N/A**	Cowardin Class(es):	**PEM**
Investigator(s):	**PF**	HGM Class(es):	**DCNP**

Location -- Legal:	**T. 5S, R. 2E, Section 16**
Other:	**East of Molalla Avenue, south of 5th Street**
Tax Lots:	**52E16 02700**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Eleocharis ovata
			Typha latifolia
			Echinocloa crus-galli

Comments:

OFF-SITE. Avison mill site. Small remnant piece of former log pond. Disturbed. Adjacent land use and zoning is heavy industrial.

Adjacent Upland Species: Cytisus scoparius, Epilobium paniculatum, Lolium perenne, Daucus carota, Conyza canadensis, Trifolium pratense

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-23C
Date(s) of field work:	**OFF-SITE**	Size (acres):	**3.49**
Data Sheet Numbers:	**N/A**	Cowardin Class(es):	**PEM**
Investigator(s):	**PF**	HGM Class(es):	**DCNP**

Location -- Legal:	**T. 5S, R. 2E, Section 16**
Other:	**East of Molalla Avenue, south of 5th Street**
Tax Lots:	**52E16 02700, 02801**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
			Eleocharis ovata
			Typha latifolia
			Echinocloa crus-galli
			Agrostis alba
			Leersia oryzoides
			Lemna minor
			Veronica americana
			Equisetum arvense
			Epilobium watsonii
			Alisma plantago-aquatica

Comments:

OFF-SITE. Avison mill site. Remnant piece of former log pond. Disturbed. Drains southwest and hydrologically connected to BC-23F by seasonal surface water. Adjacent land use and zoning is heavy industrial.

Adjacent Upland Species: Cytisus scoparius, Daucus carota, Trifolium pratense, Conyza canadensis, Epilobium paniculatum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-23D
Date(s) of field work:	OFF-SITE	Size (acres):	6.77
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	PF	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 16**
Other:	**East of Molalla Avenue, south of 5th Street**
Tax Lots:	**52E16 02801**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Spiraea douglasii		*Bidens frondosa*
	Populus trichocarpa		*Holcus lanatus*
			Echinocloa crus-galli
			Gnaphalium palustre
			Agrostis tenuis
			Agrostis stolonifera
			Eleocharis ovata
		HERBS	*Equisetum arvense*
		Juncus effusus	*Juncus tenuis*
		Polygonum hydropiperoides	*Lotus corniculatus*

Comments:

OFF-SITE. Avison mill site. Disturbed area within old mill site. Drains southwest and hydrologically connected to BC-23F by seasonal surface water in ditch. Adjacent land use and zoning is heavy industrial.

Adjacent Upland Species: Cytisus scoparius, Daucus carota, Rubus discolor, Hypochaeris radicata, Lactuca serriola, Cirsium arvense, Chrysanthemum leucanthemum, Cirsium vulgare, Hypericum perforatum, Panicum capillare

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-23E
Date(s) of field work:	OFF-SITE	Size (acres):	3.84
Data Sheet Numbers:	N/A	Cowardin Class(es):	PFO/PSS
Investigator(s):	PF	HGM Class(es):	DCNP

Location -- Legal:	T. 5S, R. 2E, Section 16
Other:	East of Molalla Avenue, south of 5th Street
Tax Lots:	52E16 02891, 02990
Hydrologic basin:	Bear Creek
Soil -- Mapped series:	Dayton silt loam
Hydrologic Source:	Groundwater

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Spiraea douglasii*		*Phalaris arundinacea*
	Populus trichocarpa		*Holcus lanatus*
	Fraxinus latifolia		*Carex feta*
	Crataegus douglasii		*Juncus effusus*
	Rosa pisocarpa		*Agrostis tenuis*
			Agrostis stolonifera
			Veronica scutellata
			Deschampsia cespitosa

Comments:

OFF-SITE. Avison mill site. Disturbed area within old mill site. Partially forested shallow depressional area in southeast corner of property. Extends outside the UGB to south. Adjacent land use and zoning is heavy industrial.

Adjacent Upland Species: Cytisus scoparius, Anthoxanthum odoratum, Aira sp., Leontodon nudicaulis, Centaurium umbellatum, Daucus carota, Rubus discolor, Hypochaeris radicata, Lactuca serriola, Cirsium arvense, Chrysanthemum leucanthemum, Cirsium vulgare, Hypericum perforatum, Amelanchier alnifolia

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-23F
Date(s) of field work:	OFF-SITE	Size (acres):	5.89
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM/PSS
Investigator(s):	PF	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 16**
Other:	**East of Molalla Avenue, south of 5th Street**
Tax Lots:	**52E16 02801, 02891, 02900, 02990**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Spiraea douglasii		*Phalaris arundinacea*
	Salix sp.		*Holcus lanatus*
			Lotus corniculatus
			Rumex crispus
			Agrostis tenuis
			Epilobium watsonii

Comments:

OFF-SITE. Avison mill site. Disturbed area within old mill site. Several ditches convey seasonal surface water/groundwater to southwest and Bear Creek. Level to hummocky ground with numerous shallow depressions Adjacent land use and zoning is heavy industrial.

Adjacent Upland Species: Cytisus scoparius, Anthoxanthum odoratum, Rubus discolor, Hypochaeris radicata, Cirsium arvense, Chrysanthemum leucanthemum, Hypericum perforatum

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-23G
Date(s) of field work:	OFF-SITE	Size (acres):	2.82
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM/PFO
Investigator(s):	PF	HGM Class(es):	DCNP

Location -- Legal:	T. 5S, R. 2E, Section 16
Other:	East of Molalla Avenue, south of 5th Street
Tax Lots:	52E16 02900, 02990
Hydrologic basin:	Bear Creek
Soil -- Mapped series:	Dayton silt loam
Hydrologic Source:	Groundwater, surface water

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Spiraea douglasii		*Phalaris arundinacea*
	Salix sp.		*Holcus lanatus*
			Lotus corniculatus
			Dipsacus sylvestris
			Agrostis tenuis
			Rumex crispus

Comments:

OFF-SITE. Avison mill site. Disturbed area within old mill site. Several ditches convey seasonal surface water/groundwater to southwest and Bear Creek. Extends to south out of UGB. Includes a portion of Bear Creek and associated riparian area. Adjacent land use and zoning is heavy industrial.

Adjacent Upland Species: Cytisus scoparius, Rubus discolor, Cirsium arvense, Cirsium vulgare, Daucus carota, Trifolium pratense, Chrysanthemum leucanthemum, Hypochaeris radicata

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-24A
Date(s) of field work:	5/24/01	Size (acres):	0.73
Data Sheet Numbers:	76, 77	Cowardin Class(es):	PFO
Investigator(s):	SE/FS	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 16**
Other:	**South of East 7th Street, west of Mathias Court**
Tax Lots:	**52E16 02406**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Surface water, precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
Fraxinus latifolia	*Fraxinus latifolia*	*Rubus discolor*	*Phalaris arundinacea*
Salix sitchensis	*Salix sitchensis*		*Carex stipata*
Populus tremula	*Salix scouleriana*		*Vicia americana*
Salix scouleriana			*Festuca arundinacea*

Comments: **Locally Significant Wetland**

South of East 7th Street, west of Mathias Court and Mathias Road. This forested wetland is hydrologically connected to BC-24B, a palustrine emergent meadow with some open water areas, to the south. Zoned residential. Adjacent land use is residential and open space.

Adjacent Upland Species: Fraxinus latifolia, Cytisus scoparius, Amelanchier alnifolia, Rosa eglanteria, Rubus discolor, Festuca arundinacea, Anthoxanthum odoratum, Daucus carota, Chrysanthemum leucanthemum, Festuca rubra

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-24B
Date(s) of field work:	5/24/01	Size (acres):	1.08
Data Sheet Numbers:	75	Cowardin Class(es):	PEM
Investigator(s):	SE/FS	HGM Class(es):	RFT

Location -- Legal:	**T. 5S, R. 2E, Section 16**
Other:	**South of East 7th Street, west of Mathias Court**
Tax Lots:	**52E16 02406**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Surface water, precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS
	Fraxinus latifolia		*Juncus effusus*
			Carex stipata
			Eleocharis palustris
			Veronica americana
			Carex pellita
			Veronica scutellata
			Carex feta
			Typha latifolia
			Scirpus microcarpus
			Carex pachystachya

Comments: **Locally Significant Wetland**

South of East 7th Street, west of Mathias Court and Mathias Road. This palustrine emergent meadow with some open water areas is hydrologically connected to BC-24A, a forested wetland to the north. Zoned residential. Adjacent land use is residential and open space.

Adjacent Upland Species: Fraxinus latifolia, Cytisus scoparius, Amelanchier alnifolia, Rosa eglanteria, Rubus discolor, Festuca arundinacea, Anthoxanthum odoratum, Daucus carota, Chrysanthemum leucanthemum, Festuca rubra

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization Sheet

Project Name: Molalla LWI

		Wetland Code:	BC-25
Date(s) of field work:	OFF-SITE	Size (acres):	0.03
Data Sheet Numbers:	N/A	Cowardin Class(es):	PEM
Investigator(s):	SE/PF	HGM Class(es):	DCNP

Location -- Legal:	**T. 5S, R. 2E, Section 8**
Other:	**West of railroad tracks, south of Heintz Street**
Tax Lots:	**52E08A 07600**
Hydrologic basin:	**Bear Creek**
Soil -- Mapped series:	**Dayton silt loam**
Hydrologic Source:	**Precipitation, groundwater**

Dominant Wetland Vegetation

TREES	SHRUBS	VINES	HERBS

Comments:
OFF-SITE. West of railroad tracks, south of Heintz Street. Small remnant piece of former palustrine scrub-shrub wetland. Disturbed. Zoning is heavy industrial. Adjacent land use is heavy industrial and residential.

Adjacent Upland Species:

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	POW = palustrine open water
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
HS = Headwater Slope	VS = Valley Slope		

Wetland Characterization -- Field For

Field Forms

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-25

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	C	Q-47	C
1	A	1	C	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A			Q-38	C	Q-49	B
3	A	3	C	Q	A	Q-39	–	Q-50	B
4	C	4	C	Q-30	–	Q-40	A	Asthetics	
5	A	Q-22	B	Q-31	–	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	C	Q-32	–			Q-51	N/A
Q-17	C	Q-24	C	Lakes and Ponds		Q	A	Q-52	B
Q-18	B	Q-25	N/A			Q-41	C	Q-53	B
Q-19	B	Q-26	C	Q	A	Q-42	B	Q-54	B
Q-20		Q-27	B	Q-33	–	Q-43	B	Q-55	A
1	A	Q-28	C	Q-34	–	Q-44	C	Q-56	A
2	A			Q-35	–	Q-45	B	Q-57	A
3	A					Q-46	C	Q-58	C
4	C								
5	A								

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-24B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	A	Q-47	C
1	C	1	✓	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	✓	Q-30	—	Q-39	A	Q-50	B
4	A	4	✓	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	B	Q	A	Q-41	B	Q-52	A
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	B	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	—	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	B	Q-57	B
3	A							Q-58	A
4	C								
5	A								

#43 Wetland is connected to BC-24A and is surrounded by open space.

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-241B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	A	Q-47	C
1	C	1	—	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	—	Q-30	—	Q-39	A	Q-50	B
4	A	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	B	Q	A	Q-41	B	Q-52	A
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	B	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	—	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	B	Q-57	B
3	A							Q-58	A
4	C								
5	A								

#43 Wetland is connected to BC-24A and is surrounded by open space.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-24A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	C	1	✓	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	✓			Q-38	C	Q-49	B
3	A	3	✓	Q	A	Q-39	—	Q-50	B
4	B	4	A	Q-30	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	—	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	A	Q-32	—			Q-51	N/A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A	Q-52	A
Q-18	B	Q-25	N/A			Q-41	B	Q-53	A
Q-19	B	Q-26	B	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	—	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	—	Q-44	B	Q-56	A
2	A			Q-35	—	Q-45	B	Q-57	B
3	A					Q-46	B	Q-58	A
4	C								
5	A								

#43 Wetland is connected to BC-24B and is adjacent to open space all around.

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-236

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	C	1	/	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A			Q-38	C	Q-49	B
3	A	3	/	Q	A	Q-39	–	Q-50	B
4	A	4	D	Q-30	A	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	B	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Q-32	C			Q-51	N/A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A	Q-52	C
Q-18	A	Q-25	N/A			Q-41	C	Q-53	C
Q-19	B	Q-26	B	Q	A	Q-42	B	Q-54	C
Q-20		Q-27	A	Q-33	B	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	C	Q-44	C	Q-56	A
2	A			Q-35	A	Q-45	B	Q-57	A
3	A					Q-46	C	Q-58	C
4	C								
5	A								

#43 Wetland is connected to Bear Creek and associated riparian area. Wetland is surrounded on all sides by open space.

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-23F

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	C	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	B	Q	A	Q-38	C	Q-49	B
3	A	3	C	Q-30	—	Q-39	—	Q-50	B
4	B	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	A	Q-24	C	Q	A	Q-41	C	Q-52	C
Q-18	A	Q-25	N/A	Q-33	—	Q-42	B	Q-53	C
Q-19	B	Q-26	C	Q-34	—	Q-43	A	Q-54	C
Q-20		Q-27	A	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#43 Surrounded on all sides by open space. Hydrologically connected to Bear Creek by seasonal surface water conveyed by ditches.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-23E

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	C	Q-47	C
1	C	1	–	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	/	Q	A	Q-38	C	Q-49	B
3	A	3	A	Q-30	–	Q-39	–	Q-50	B
4	A	4	D	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	A	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	B	Q	A	Q-41	C	Q-52	C
Q-18	B	Q-25	N/A	Q-33	–	Q-42	B	Q-53	C
Q-19	B	Q-26	C	Q-34	–	Q-43	A	Q-54	C
Q-20		Q-27	B	Q-35	–	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#43 Wetland is surrounded on all sides by open space. Large swath of trees ~ 350' south of UGB (wetland extends past UGB).

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-23D

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	C	Q-47	C
1	C	1	–	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	–	Q-30	–	Q-39	–	Q-50	B
4	B	4	–	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	A	Q-24	B	Q	A	Q-41	C	Q-52	C
Q-18	B	Q-25	N/A	Q-33	–	Q-42	B	Q-53	C
Q-19	B	Q-26	C	Q-34	–	Q-43	A	Q-54	C
Q-20		Q-27	A	Q-35	–	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#13 Wetland is hydrologically connected to BC-23F by seasonal surface water in ditch

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-23C

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	C	1	/	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A			Q-38	C	Q-49	B
3	A	3	/	Q	A	Q-39	—	Q-50	B
4	B	4	/	Q-30	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	—	Public Access to Wetland Site			
Q-16	1	Q-23	C	Q-32	—			Q	A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-18	B	Q-25	N/A			Q-41	C	Q-52	C
Q-19	B	Q-26	C	Q	A	Q-42	B	Q-53	C
Q-20		Q-27	A	Q-33	—	Q-43	A	Q-54	C
1	A	Q-28	C	Q-34	—	Q-44	C	Q-55	A
2	A			Q-35	—	Q-45	B	Q-56	A
3	A					Q-46	C	Q-57	A
4	C							Q-58	C
5	A								

#43 Wetland is part of a mosaic within an open space and is hydrologically connected to BC-23f by seasonal surface water.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-23B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	C	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A			Q-38	C	Q-49	B
3	A	3	—	Q	A	Q-39	—	Q-50	B
4	B	4	—	Q-30	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-31	—	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Q-32	—			Q-51	N/A
Q-17	C	Q-24	C	Lakes and Ponds		Q	A	Q-52	C
Q-18	B	Q-25	N/A			Q-41	C	Q-53	C
Q-19	B	Q-26	C	Q	A	Q-42	B	Q-54	C
Q-20		Q-27	B	Q-33	—	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	—	Q-44	C	Q-56	A
2	A			Q-35	—	Q-45	B	Q-57	A
3	A					Q-46	C	Q-58	C
4	C								
5	A								

#13 Wetland is surrounded on all sides by field containing associated wetlands.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-23A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	B	1	—	Streams connected to the Wetland		Q-37	C	Q-48	B
2	A	2	—	Q	A	Q-38	C	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	C	4	A	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	A	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	B	Q-52	B
Q-18	A	Q-25	N/A	Q-33	—	Q-42	A	Q-53	B
Q-19	B	Q-26	B	Q-34	—	Q-43	A	Q-54	B
Q-20		Q-27	A	Q-35	—	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	A	Q-56	A
2	A					Q-46	B	Q-57	B
3	A							Q-58	C
4	C								
5	A								

#43 Southern wetland boundary abuts an open lot containing a mosaic of wetlands.

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC - 22E

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	—	Q-39	—	Q-50	B
4	C	4	/	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	-	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	C
Q-18	A	Q-25	N/A	Q-33	-	Q-42	C	Q-53	C
Q-19	B	Q-26	C	Q-34	-	Q-43	B	Q-54	C
Q-20		Q-27	A	Q-35	-	Q-44	C	Q-55	B
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	C	Q-57	B
3	A							Q-58	(
4	C								
5	A								

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-22D

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	-	Q-36	C	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	A			Q-38	C	Q-49	B
3	A	3	/	Q	A	Q-39	-	Q-50	B
4	A	4	/	Q-30	-	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	-	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Q-32	-			Q-51	N/A
Q-17	B	Q-24	B	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	A	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	-	Q-43	A	Q-55	B
1	A	Q-28	C	Q-34	-	Q-44	B	Q-56	B
2	A			Q-35	-	Q-45	B	Q-57	A
3	A					Q-46	C	Q-58	B
4	C								
5	A								

#43 Hydrologically connected to BC-22B. Across Molalla Forest Rd. is tree farm.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-22C

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	—	Q-39	—	Q-50	B
4	B	4	/	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	B	Q	A	Q-41	C	Q-52	B
Q-18	A	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	A	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	—	Q-44	B	Q-55	B
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	C	Q-57	A
3	A							Q-58	B
4	C								
5	A								

#13 Hydrologically connected to BC-22B and BC-22A. To the South is an open space (large lot with one house in the southern portion).

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-22B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	B	1	C	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	/	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	A	Q-39	C	Q-50	B
4	B	4	A	Q-31	A	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	A	Public Access to Wetland Site		Q	A
Q-16	/	Q-23	A	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	A	Q-24	A	Q	A	Q-41	C	Q-52	B
Q-18	A	Q-25	N/A	Q-33	A	Q-42	A	Q-53	A
Q-19	B	Q-26	A	Q-34	A	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	A	Q-44	B	Q-55	B
1	A	Q-28	B			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	C
3	A							Q-58	A
4	C								
5	A								

43 Associated wetlands (PEM; BC-22C & BC-22D) surround wetland on southeast and southwest sides. Northwest side of wetland adjacent to open space.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-22A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	B	1	–	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A			Q-38	C	Q-49	B
3	A	3	–	Q	A	Q-39	A	Q-50	B
4	C	4	–	Q-30	C	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	C	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	B	Q-32	C			Q-51	N/A
Q-17	C	Q-24	C	Lakes and Ponds		Q	A	Q-52	C
Q-18	A	Q-25	N/A			Q-41	C	Q-53	C
Q-19	B	Q-26	C	Q	A	Q-42	C	Q-54	C
Q-20		Q-27	A	Q-33	C	Q-43	A	Q-55	B
1	A	Q-28	C	Q-34	C	Q-44	C	Q-56	B
2	A			Q-35	C	Q-45	B	Q-57	B
3	A					Q-46	C	Q-58	C
4	C								
5	A								

#43 Wetland is a stretch of Bear Creek in a narrow channel, and is connected to BC-22B by surface water.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-21

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	A	1	✓	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	✓			Q-38	C	Q-49	B
3	A	3	✓	Q	A	Q-39	—	Q-50	B
4	C	4	A	Q-30	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	—	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	A	Q-32	—			Q-51	N/A
Q-17	B	Q-24	B	Lakes and Ponds		Q	A	Q-52	C
Q-18	B	Q-25	N/A			Q-41	C	Q-53	C
Q-19	B	Q-26	C	Q	A	Q-42	B	Q-54	C
Q-20		Q-27	B	Q-33	—	Q-43	B	Q-55	A
1	A	Q-28	C	Q-34	—	Q-44	C	Q-56	B
2	A			Q-35	—	Q-45	B	Q-57	B
3	A					Q-46	C	Q-58	B
4	C								
5	A								

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-20

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	B	Q-47	C
1	C	1	✓	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	✓	Q-30	–	Q-39	–	Q-50	B
4	B	4	✓	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	C	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	–	Q-42	B	Q-53	B
Q-19	B	Q-26	C	Q-34	–	Q-43	A	Q-54	B
Q-20		Q-27	B	Q-35	–	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#43 Wetland is adjacent to forested area (across Lowe Rd.), and connected on east & west to drainage ditches.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-19

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	/			Q-38	C	Q-49	B
3	A	3	/	Q	A	Q-39	—	Q-50	B
4	A	4	A	Q-30	B	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	A	Public Access to Wetland Site			
Q-16		Q-23	A	Q-32	B			Q	A
Q-17	B	Q-24	B	Lakes and Ponds		Q	A	Q-51	N/A
Q-18	A	Q-25	N/A			Q-41	C	Q-52	A
Q-19	B	Q-26	A	Q	A	Q-42	A	Q-53	A
Q-20		Q-27	A	Q-33	A	Q-43	A	Q-54	A
1	A	Q-28	C	Q-34	B	Q-44	C	Q-55	A
2	A			Q-35	B	Q-45	B	Q-56	A
3	A					Q-46	C	Q-57	B
4	C							Q-58	B
5	A								

#43 Wetland is bordered on the east by forested area, and on the west by open space / agricultural land. Upstream, wetland is connected to BC-22B, a forested wetland.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC - 18

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	A	Q-47	C
1	B	1	—	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	C	Q	A	Q-38	C	Q-49	B
3	A	3	B	Q-30	—	Q-39	A	Q-50	B
4	B	4	/	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	B	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	B	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	C	Q-57	C
3	A							Q-58	B
4	C								
5	A								

#43 Wetland appears to be remnant agricultural feature (e.g. irrigation ditch) and is surrounded by shrubby open area.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-173

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	C/	1	/	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	A	Q-39	A	Q-50	B
4	B	4	/	Q-31	C	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	B	Public Access to Wetland Site		Q	A
Q-16		Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	A	Q-25	N/A	Q-33	C	Q-42	A	Q-53	B
Q-19	B	Q-26	B	Q-34	B	Q-43	A	Q-54	B
Q-20		Q-27	A	Q-35	A	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	B
4	C								
5	A								

#43 Northern tip of wetland hydrologically connects to BC-17A, and just touches the forested area that surrounds BC-17A.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC - 17A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	B	1	✓	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	✓			Q-38	C	Q-49	B
3	A	3	✓	Q	A	Q-39	A	Q-50	B
4	B	4	A	Q-30	A	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	A	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	A	Q-32	B			Q-51	N/A
Q-17	B	Q-24	B	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	B	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	A	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	B	Q-44	B	Q-56	B
2	A			Q-35	A	Q-45	B	Q-57	C
3	A					Q-46	C	Q-58	B
4	C								
5	A								

#43 - Surrounded by (& located within) forested area. Wetland has hydrologic connection to BC-17B through culvert.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-16B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	A	Q-47	C
1	A	1	✓	Streams connected to the Wetland		Q-37	B	Q-48	C
2	C	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	✓	Q-30	–	Q-39	A	Q-50	B
4	A	4	✓	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	2	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	A	Q-25	N/A	Q-33	–	Q-42	B	Q-53	A
Q-19	A	Q-26	C	Q-34	–	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	–	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#43 Wetland is hydrologically connected to BC-16A. Wetland is in the middle of agricultural areas.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-16A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	A	Q-47	C
1	A	1	/	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	–	Q-39	A	Q-50	B
4	B	4	/	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	A	Q-25	N/A	Q-33	–	Q-42	A	Q-53	A
Q-19	B	Q-26	C	Q-34	–	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	–	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	B
3	A							Q-58	C
4	C								
5	A								

#43 Wetland is connected hydrologically to BC-16B by seasonal surface water. Wetland runs through forest & field areas.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-15

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	A	1	/	Streams connected to the Wetland		Q-37	A	Q-48	C
2	B	2	A			Q-38	A	Q-49	B
3	A	3	/	Q	A	Q-39	—	Q-50	B
4	B	4	/	Q-30	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-31	—	Public Access to Wetland Site		Q	A
Q-16	2	Q-23	C	Q-32	—			Q-51	N/A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A		
Q-18	B	Q-25	N/A			Q-41	B	Q-52	A
Q-19	B	Q-26	C	Q	A	Q-42	B	Q-53	A
Q-20		Q-27	B	Q-33	—	Q-43	A	Q-54	A
1	A	Q-28	C	Q-34	—	Q-44	C	Q-55	A
2	A			Q-35	—	Q-45	B	Q-56	A
3	A					Q-46	C	Q-57	B
4	C							Q-58	C
5	A								

#43 Wetland is surrounded by open space (mowed field) on south and east.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-14f

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	B	Q-48	C
2	C	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	—	Q-39	—	Q-50	B
4	A	4	/	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	2	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	B
Q-19	B	Q-26	C	Q-34	—	Q-43	A	Q-54	B
Q-20		Q-27	B	Q-35	—	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	C					Q-46	C	Q-57	A
3	A							Q-58	C
4	A								
5	A								

#43 Isolated wetland in the center of an agricultural field.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-13

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	A	Q-48	C
2	B	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	—	Q-39	—	Q-50	B
4	B	4	✓	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	A
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	C	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	B	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#13 Surrounded on south by open space / oak woodland on north by agricultural field.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-12B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	B	1	~	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	A	Q-49	B
3	A	3	~	Q-30	—	Q-39	—	Q-50	B
4	B	4	~	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	B	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	A	Q	A	Q-41	B	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	B	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	B	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	C	Q-57	C
3	A							Q-58	C
4	B								
5	B								

#43 Wetland is drained to west, connecting it to wetland BC-12A. Adjacent lands are primarily open space.

#20 Public / semi-public

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC - 12A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	A	Q-47	C
1	B	1	✓	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	✓			Q-38	A	Q-49	B
3	A	3	✓	Q	A	Q-39	–	Q-50	B
4	B	4	A	Q-30	–	Q-40	A	Asthetics	
5	A	Q-22	B	Q-31	–	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	A	Q-32	–			Q-51	N/A
Q-17	B	Q-24	B	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	A	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	–	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	–	Q-44	C	Q-56	A
2	A			Q-35	–	Q-45	B	Q-57	B
3	A					Q-46	C	Q-58	B
4	B								
5	B								

#43 Wetland is a small drainage that flows through a forested area from east (wetland BC-12B) to west (to wetland BC-6A).

#20 Public / semi-public

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC - 11

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	C	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	–	Q-39	–	Q-50	B
4	C	4	/	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	C	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	–	Q-42	A	Q-53	A
Q-19	B	Q-26	A	Q-34	–	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	–	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#43 Wetland is a shallow swale that runs through a field. Field is adjacent to (surrounded by) residential development area.

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC - 10

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	C	1	✓	Streams connected to the Wetland		Q-37	A	Q-48	A
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	✓	Q-30	—	Q-39	—	Q-50	B
4	A	4	✓	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	I	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	B	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	C
Q-19	B	Q-26	C	Q-34	—	Q-43	A	Q-54	C
Q-20		Q-27	B	Q-35	—	Q-44	A	Q-55	A
1	A	Q-28	C			Q-45	A	Q-56	A
2	A					Q-46	A	Q-57	A
3	A							Q-58	C
4	B								
5	B								

#13 - Adjacent to school property (open grounds). Surrounded on all sides by open space.

#20 Public / semi-public

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC - 9

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	B	Q-47	C
1	C	1	/	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A	Q	A	Q-38	A	Q-49	B
3	A	3	/	Q-30	–	Q-39	–	Q-50	B
4	A	4	/	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	–	Q-42	A	Q-53	A
Q-19	B	Q-26	C	Q-34	–	Q-43	A	Q-54	A
Q-20		Q-27	B	Q-35	–	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	A								
5	C								

#43 Surrounded on all sides by open space

#20 Public / semi-public

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-8

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	B	Q-36	C	Q-47	C
1	A	1	B	Streams connected to the Wetland		Q-37	A	Q-48	A
2	B	2	A			Q-38	B	Q-49	B
3	A	3	/	Q	A	Q-39	—	Q-50	B
4	B	4	/	Q-30	A	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	C	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	B	Q-32	B			Q-51	N/A
Q-17	C	Q-24	B	Lakes and Ponds		Q	A	Q-52	B
Q-18	B	Q-25	N/A			Q-41	B	Q-53	A
Q-19	B	Q-26	B	Q	A	Q-42	B	Q-54	A
Q-20		Q-27	B	Q-33	C	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	B	Q-44	A	Q-56	A
2	A			Q-35	A	Q-45	B	Q-57	A
3	A					Q-46	A	Q-58	B
4	A								
5	C								

#43 Surrounded on north, east and south by open space (elementary school grounds). West abuts developed area.

#20 Public / Semi-public

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-7

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	-	Q-36	A	Q-47	C
1	A	1	✓	Streams connected to the Wetland		Q-37	A	Q-48	B
2	C	2	A			Q-38	C	Q-49	B
3	A	3	✓	Q	A	Q-39	C	Q-50	B
4	B	4	✓	Q-30	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-31	—	Public Access to Wetland Site			
Q-16	4	Q-23	B	Q-32	-			Q	A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-18	A	Q-25	N/A			Q-41	B	Q-52	B
Q-19	B	Q-26	C	Q	A	Q-42	A	Q-53	B
Q-20		Q-27	A	Q-33	-	Q-43	A	Q-54	B
1	A	Q-28	C	Q-34	-	Q-44	A	Q-55	A
2	A			Q-35	-	Q-45	A	Q-56	A
3	A					Q-46	A	Q-57	C
4	B							Q-58	C
5	B								

Wetland is a ditch
#43 surrounded on either side by agricultural land (on south) and residential open space (on north).

#20 (B) Public / semi-public

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-6B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	—	Q-39	—	Q-50	B
4	B	4	/	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	-	Public Access to Wetland Site		Q	A
Q-16	B	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	C	Q	A	Q-41	B	Q-52	C
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	B	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	B	Q-35	-	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	B	Q-57	A
3	A							Q-58	B
4	B								
5	B								

#13. Adjacent to wetland BC-6A to the north, open space / unused lots to east and south (but industrial area on the southeast corner).

#20 (5) Public / semi-public

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-6A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	A	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	A	Q-48	C
2	B	2	C			Q-38	C	Q-49	B
3	A	3	/	Q	A	Q-39	A	Q-50	B
4	B	4	A	Q-30	–	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	–	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	A	Q-32	–			Q-51	N/A
Q-17	B	Q-24	A	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	B	Q-53	A
Q-19	B	Q-26	A	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	–	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	–	Q-44	C	Q-56	A
2	A			Q-35	–	Q-45	B	Q-57	B
3	A					Q-46	B	Q-58	A
4	B								
5	B								

#43 - Surrounded to NE by Douglas-fir / Ponderosa pine forest, bordered to south by wetland BC-6B.

20(5) Public / semi-public

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-5B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	B	1	✓	Streams connected to the Wetland		Q-37	A	Q-48	C
2	B	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	B	4	✓	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	2	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	A	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	B	Q-34	—	Q-43		Q-54	A
Q-20		Q-27	B	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	C	Q-57	B
3	A							Q-58	B
4	C								
5	A								

#43 Surrounded on the south by open space, the north by wetland BC-5A, and the east and (almost entirely) to the west by agricultural land.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-5A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	B	1	—	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	C	Q	A	Q-38	C	Q-49	B
3	A	3	B	Q-30	—	Q-39	—	Q-50	B
4	B	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	B	Q	A	Q-41	C	Q-52	C
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	B	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	B	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	C	Q-57	A
3	A							Q-58	B
4	C								
5	A								

#43 Adjacent to wetland BC-5B on the south. Otherwise surrounded by industrial developments & Molalla Forest Road.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-4

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	A	1	/	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	C	4	/	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	C
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	B
Q-19	B	Q-26	C	Q-34	—	Q-43	B	Q-54	B
Q-20		Q-27	A	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-3B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	B	Q-47	C
1	B	1	–	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	/	Q-30	–	Q-39	–	Q-50	B
4	B	4	/	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	–	Q-42	A	Q-53	A
Q-19	B	Q-26	C	Q-34	–	Q-43	A	Q-54	A
Q-20		Q-27	B	Q-35	–	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	B	Q-57	B
3	A							Q-58	C
4	C								
5	A								

#43 Adjacent to agricultural land on east and south.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-3A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	A	Q-47	C
1	B	1	–	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	–	Q-30	–	Q-39	A	Q-50	B
4	B	4	–	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	C	Q-25	N/A	Q-33	–	Q-42	A	Q-53	C
Q-19	A	Q-26	B	Q-34	–	Q-43	B	Q-54	C
Q-20		Q-27	A	Q-35	–	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC - 2B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	B	1	/	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	/			Q-38	C	Q-49	B
3	B	3	A	Q	A	Q-39	—	Q-50	B
4	A	4	/	Q-30	A	Q-40	A	Asthetics	
5	A	Q-22	B	Q-31	B	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	A	Q-32	C			Q-51	N/A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	A	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	B	Q-43	A	Q-55	A
1	A	Q-28	B	Q-34	C	Q-44	C	Q-56	A
2	A			Q-35	A	Q-45	B	Q-57	C
3	A					Q-46	C	Q-58	B
4	C								
5	A								

#43 - Within riparian forest that extends ~ 100 feet on north & south. Wetland ends on east due to Molalla Forest Road. West end of wetland abuts residential open space.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-24

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	A	1	✓	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	✓			Q-38	C	Q-49	B
3	A	3	✓	Q	A	Q-39	—	Q-50	B
4	C	4	A	Q-30	B	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	A	Public Access to Wetland Site		Q	A
Q-16	2	Q-23	A	Q-32	B			Q-51	N/A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	A	Q	A	Q-42	B	Q-54	A
Q-20		Q-27	A	Q-33	A	Q-43	A	Q-55	A
1	A	Q-28	B	Q-34	B	Q-44	C	Q-56	B
2	A			Q-35	B	Q-45	B	Q-57	B
3	A					Q-46	C	Q-58	B
4	C								
5	A								

#43 - Surrounded by riparian forest on north and south.

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-1C

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	A	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	C			Q-38	C	Q-49	B
3	A	3	—	Q	A	Q-39	—	Q-50	B
4	C	4	B	Q-30	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	—	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	A	Q-32	—			Q-51	N/A
Q-17	B	Q-24	B	Lakes and Ponds		Q	A	Q-52	A
Q-18	B	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	A	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	—	Q-43	A	Q-55	B
1	A	Q-28	C	Q-34	—	Q-44	A	Q-56	B
2	A			Q-35	—	Q-45	B	Q-57	A
3	A					Q-46	B	Q-58	B
4	B								
5	B								

#43 Hydrologically connected to wetland BC-1B and Bear Creek. Forested area to west separates wetland from BC-1B.

#20(5) Zoned public / semi public (adjacent to city water treatment ponds)

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-1B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	A	1	/	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	C	Q	A	Q-38	C	Q-49	B
3	B	3	/	Q-30	A	Q-39	—	Q-50	B
4	B	4	A	Q-31	A	Q-40	B	Asthetics	
5	A	Q-22	A	Q-32	C	Public Access to Wetland Site		Q	A
Q-16	3	Q-23	A	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	A	Q	A	Q-41	C	Q-52	A
Q-18	A	Q-25	N/A	Q-33	A	Q-42	B	Q-53	A
Q-19	B	Q-26	A	Q-34	C	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	A	Q-44	B	Q-55	B
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	B
3	A							Q-58	A
4	A								
5	C								

#43 Mostly surrounded by agricultural land. Wetland ends in southeast due to Cascade Highway.

#20 Land is zoned public / semi public

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: BC-1A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	B	1	—	Streams connected to the Wetland		Q-37	C	Q-48	A
2	B	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	A	4	—	Q-31	—	Q-40	A	Asthetics	
5	C	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	5	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	A	Q-24	C	Q	A	Q-41	B	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	C
Q-19	B	Q-26	C	Q-34	—	Q-43	A	Q-54	C
Q-20		Q-27	B	Q-35	—	Q-44	B	Q-55	C
1	A	Q-28	A			Q-45	A	Q-56	B
2	A					Q-46	B	Q-57	C
3	A							Q-58	C
4	A								
5	C								

#15 (#16) Open sewage treatment ponds (City Sewage treatment plant site).

#43 Adjacent to Bear Creek's riparian forest on north side and agricultural land to south and southwest. Majority of wetland surrounds city sewage treatment ponds.

#20 - Land is zoned public/semi public

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-11

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	A	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A	Q	A	Q-38	A	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	C	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	C			Q	A	Q-51	N/A
Q-17	C	Q-24	C	Lakes and Ponds		Q-41	C	Q-52	C
Q-18	B	Q-25	N/A	Q	A	Q-42	B	Q-53	C
Q-19	B	Q-26	C	Q-33	—	Q-43	B	Q-54	C
Q-20		Q-27	B	Q-34	—	Q-44	C	Q-55	A
1	A	Q-28	C	Q-35	—	Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	B
3	A							Q-58	C
4	C								
5	A								

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-10

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	A	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A	Q	A	Q-38	A	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	C	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	C	Q-34	—	Q-43	B	Q-54	A
Q-20		Q-27	B	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	A	Q-56	B
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-9C

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	A	Q-47	C
1	B	1	—	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	C	3	—	Q-30	—	Q-39	C	Q-50	B
4	A	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	C	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	B	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	A	Q-25	N/A	Q-33	—	Q-42	C	Q-53	A
Q-19	B	Q-26	B	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	—	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	B	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#43 Connected to wetland CC-9B on NW tip. Otherwise completely surrounded by developed areas.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-9B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	A	Q-47	B
1	A	1	—	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	—			Q-38	C	Q-49	A
3	A	3	—	Q	A	Q-39	C	Q-50	A
4	C	4	A	Q-30	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	—	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	A	Q-32	—			Q-51	N/A
Q-17	C	Q-24	B	Lakes and Ponds		Q	A	Q-52	A
Q-18	A	Q-25	N/A			Q-41	C	Q-53	C
Q-19	B	Q-26	B	Q	A	Q-42	C	Q-54	C
Q-20		Q-27	A	Q-33	—	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	—	Q-44	B	Q-56	A
2	A			Q-35	—	Q-45	B	Q-57	A
3	A					Q-46	B	Q-58	B
4	C								
5	A								

#43 Wetland is bordered by wetlands CC-9A on north and CC-9C to the south. Otherwise surrounded by residential developments.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-9A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	–	Q-36	C	Q-47	C
1	A	1	–	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	–	Q-30	–	Q-39	–	Q-50	B
4	C	4	–	Q-31	–	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	–	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	B	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	–	Q-42	B	Q-53	A
Q-19	B	Q-26	C	Q-34	–	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	–	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	B
4	C								
5	A								

#43 Connected to wetland CC-9B on south. Otherwise completely surrounded by residential areas.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-8

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	B	Q-47	C
1	B	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	B	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	4	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	C
Q-18	A	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	C	Q-34	—	Q-43	B	Q-54	A
Q-20		Q-27	A	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	B
2	B					Q-46	C	Q-57	A
3	A							Q-58	C
4	B								
5	A								

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-7C

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	B
1	B	1	–	Streams connected to the Wetland		Q-37	A	Q-48	A
2	A	2	–			Q-38	C	Q-49	A
3	A	3	C	Q	A	Q-39	A	Q-50	A
4	B	4	A	Q-30	B	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	C	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	A	Q-32	B			Q-51	N/A
Q-17	B	Q-24	B	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	A	Q-53	A
Q-19	B	Q-26	C	Q	A	Q-42	B	Q-54	A
Q-20		Q-27	A	Q-33	C	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	B	Q-44	B	Q-56	A
2	B			Q-35	B	Q-45	B	Q-57	B
3	A					Q-46	B	Q-58	A
4	B								
5	A								

#43 Wetland is bordered to north by wetland CC-7B. East & south sides adjacent to residential area. West edge abuts railroad.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-7B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	B	1	-	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A			Q-38	C	Q-49	B
3	A	3	-	Q	A	Q-39	A	Q-50	B
4	B	4	-	Q-30	A	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	C	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	B	Q-32	C			Q-51	N/A
Q-17	B	Q-24	A	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	C	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	C	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	C	Q-44	C	Q-56	A
2	B			Q-35	A	Q-45	B	Q-57	B
3	A					Q-46	C	Q-58	B
4	B								
5	A								

#43 Adjacent wetlands CC-7A to north and CC-7C to south contiguous with this wetland. Otherwise surrounded on east by residential subdivision and on the west by railroad tracks.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-7A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	B	1	–	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	–			Q-38	B	Q-49	B
3	A	3	–	Q	A	Q-39	A	Q-50	B
4	B	4	A	Q-30	A	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	B	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	A	Q-32	B			Q-51	N/A
Q-17	B	Q-24	B	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	C	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	B	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	B	Q-44	C	Q-56	A
2	B			Q-35	A	Q-45	B	Q-57	C
3	A					Q-46	C	Q-58	B
4	B								
5	A								

#43 Adjacent wetland (CC-7B) to south - all other sides of wetland are bordered by developments or railroad tracks.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-6B

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	C	1	-	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	B			Q-38	C	Q-49	B
3	A	3	-	Q	A	Q-39	A	Q-50	B
4	B	4	C	Q-30	B	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	C	Public Access to Wetland Site		Q	A
Q-16	1	Q-23	C	Q-32	C			Q-51	N/A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A	Q-52	A
Q-18	A	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	B	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	C	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	C	Q-44	C	Q-56	A
2	C			Q-35	B	Q-45	B	Q-57	B
3	A					Q-46	C	Q-58	B
4	A								
5	A								

#43 Open space with scattered oak and ash trees surrounds wetland on all sides except east (east side boundary is railroad tracks).

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-6A

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	B	1	-	Streams connected to the Wetland		Q-37	B	Q-48	C
2	C	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	-	Q-30	B	Q-39	A	Q-50	B
4	A	4	C	Q-31	C	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	C	Public Access to Wetland Site		Q	A
Q-16	2	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	C	Q	A	Q-41	C	Q-52	A
Q-18	A	Q-25	N/A	Q-33	C	Q-42	A	Q-53	A
Q-19	B	Q-26	B	Q-34	C	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	B	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	B
3	A							Q-58	B
4	C								
5	A								

#43 Wetland connected to adjacent wetland (CC-6B) by branch of Creamery Creek. Also, wetland is surrounded by a tree farm on the southwest side and open space on northeast side.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-5

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	A	1	—	Streams connected to the Wetland		Q-37	A	Q-48	C
2	A	2	A	Q	A	Q-38	A	Q-49	B
3	C	3	—	Q-30	—	Q-39	A	Q-50	B
4	A	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	3	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	C	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	B	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	C
3	A							Q-58	C
4	C								
5	A								

#43 Wetland surrounded by agricultural land.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-4

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	A	Q-36	A	Q-47	C
1	A	1	–	Streams connected to the Wetland		Q-37	B	Q-48	C
2	B	2	A			Q-38	A	Q-49	B
3	A	3	–	Q	A	Q-39	A	Q-50	B
4	B	4	–	Q-30	B	Q-40	A	Asthetics	
5	A	Q-22	B	Q-31	C	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	C	Q-32	C			Q-51	N/A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A	Q-52	B
Q-18	A	Q-25	N/A			Q-41	C	Q-53	A
Q-19	B	Q-26	C	Q	A	Q-42	A	Q-54	A
Q-20		Q-27	A	Q-33	C	Q-43	A	Q-55	A
1	A	Q-28	C	Q-34	C	Q-44	C	Q-56	A
2	A			Q-35	B	Q-45	B	Q-57	C
3	A					Q-46	C	Q-58	C
4	C								
5	A								

#43 - Land on NE side of swale agricultural (SW side residential subdivisions).

Wetland Characterization -- Field For

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-3

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	A	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A	Q	A	Q-38	A	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	B	4	—	Q-31	—	Q-40	A	Asthetics	
5	B	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	5	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	B	Q-24	C	Q	A	Q-41	C	Q-52	C
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	A	Q-34	—	Q-43	B	Q-54	A
Q-20		Q-27	B	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#15 (&#16) Undeveloped lots in residential subdivision.

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-2

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	A
1	A	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	A	Q	A	Q-38	C	Q-49	A
3	A	3	—	Q-30	—	Q-39	—	Q-50	C
4	C	4	—	Q-31	—	Q-40	A	Asthetics	
5	B	Q-22	B	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	C			Q	A	Q-51	N/A
Q-17	B	Q-24	C	Lakes and Ponds		Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q	A	Q-42	A	Q-53	C
Q-19	B	Q-26	B	Q-33	—	Q-43	B	Q-54	C
Q-20		Q-27	B	Q-34	—	Q-44	C	Q-55	A
1	A	Q-28	C	Q-35	—	Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	C								
5	A								

#15 - Undeveloped lots adjacent to residential areas

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: CC-1

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	A	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	A	2	—			Q-38	A	Q-49	B
3	A	3	A	Q	A	Q-39	—	Q-50	B
4	C	4	—	Q-30	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-31	—	Public Access to Wetland Site			
Q-16	4	Q-23	A	Q-32	—			Q	A
Q-17	C	Q-24	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-18	B	Q-25	N/A			Q-41	C	Q-52	C
Q-19	B	Q-26	B	Q	A	Q-42	A	Q-53	A
Q-20		Q-27	B	Q-33	—	Q-43	B	Q-54	A
1	A	Q-28	C	Q-34	—	Q-44	C	Q-55	A
2	A			Q-35	—	Q-45	A	Q-56	A
3	A					Q-46	C	Q-57	B
4	C							Q-58	C
5	A								

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: MR-3F

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	A	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	C	2	A	Q	A	Q-38	C	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	B	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	B	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	2	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	C	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	C	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	A	Q-35	—	Q-44	C	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	C	Q-57	A
3	A							Q-58	C
4	A								
5	C								

#43 Agricultural land surrounds wetland on all sides.

20 Zoned public / semi-public

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: MR-2

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	B	Q-36	A	Q-47	C
1	A	1	–	Streams connected to the Wetland		Q-37	A	Q-48	B
2	C	2	A			Q-38	C	Q-49	B
3	A	3	–	Q	A	Q-39	A	Q-50	B
4	A	4	C	Q-30	C	Q-40	A	Asthetics	
5	A	Q-22	B	Q-31	B	Public Access to Wetland Site			
Q-16	2	Q-23	A	Q-32	A			Q	A
Q-17	B	Q-24	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-18	A	Q-25	N/A			Q-41	C	Q-52	B
Q-19	B	Q-26	C	Q	A	Q-42	A	Q-53	A
Q-20		Q-27	A	Q-33	B	Q-43	A	Q-54	A
1	A	Q-28	C	Q-34	A	Q-44	B	Q-55	A
2	A			Q-35	C	Q-45	B	Q-56	A
3	A					Q-46	B	Q-57	A
4	A							Q-58	B
5	C								

#13. Wetland is surrounded on all sides by what appears to be agricultural land (but zoned public / semi public)

#20 Zoned public / semi-public (rodeo grounds)

Wetland Characterization -- Field For PHS

Project Name: Molalla Local Wetland Inventory

Wetland Code: MR-1

Watershed Setting: (Questions 1-14) See Attached Table

Wetland Structure and Relation to Surrounding Landscape		Wetland Habitat		Fisheries Habitat		Wetland Hydrology		Recreation	
Q	A	Q	A	Q	A	Q	A	Q	A
Q-15		Q-21		Q-29	—	Q-36	C	Q-47	C
1	A	1	—	Streams connected to the Wetland		Q-37	B	Q-48	C
2	C	2	A	Q	A	Q-38	A	Q-49	B
3	A	3	—	Q-30	—	Q-39	—	Q-50	B
4	B	4	—	Q-31	—	Q-40	A	Asthetics	
5	A	Q-22	A	Q-32	—	Public Access to Wetland Site		Q	A
Q-16	A	Q-23	C	Lakes and Ponds		Q	A	Q-51	N/A
Q-17	C	Q-24	C	Q	A	Q-41	B	Q-52	B
Q-18	B	Q-25	N/A	Q-33	—	Q-42	A	Q-53	A
Q-19	B	Q-26	A	Q-34	—	Q-43	A	Q-54	A
Q-20		Q-27	B	Q-35	—	Q-44	B	Q-55	A
1	A	Q-28	C			Q-45	B	Q-56	A
2	A					Q-46	B	Q-57	A
3	A							Q-58	C
4	A								
5	C								

#13 To north of wetland is parcel of undeveloped riparian forest (~400x200')

#20 Zoned public/semi-public (on high school grounds)

WETLAND CHARACTERIZATION- WATERSHED SETTING

QUESTIONS 1-14*

OFWAM

Name of Drainage Basin: Middle Willamette

Watershed Name	Square Miles	Average Slope	Stream Flow Modified	Active Irrigation or Diking Upstream	Dominant Land Use (Upstream)	Streams/Water Quality Limited	Non-Point Sources	Fisheries	S/T/E Fish Species	Wildlife Species	S/T/E Plant or Wildlife Species	Natural Corridor /Fish & Wildlife	Landscape Features/ Both Ends Corridor
Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Q.7	Q.8	Q.9	Q.10	Q.11	Q.12	Q.13	Q.14
Bear Creek	1.58	1-3%	A. tributaries modified	No	Agriculture	B. none	A. no data	A, B	No	A. migratory birds C. Nesting birds	C. unknown	B. natural areas are fragmented but movement is possible for fish and wildlife	C. both ends are developed (extensive agricultural lands)
Creamery Creek	1.02	1-3%	B. main stem modified	No	Agriculture	B. none	A. no data	A, B	No	B. migratory birds C. Nesting birds	C. unknown	C. habitat and fragmented with barriers for fish and wildlife	C. both ends are developed (extensive agricultural lands)
Molalla River	0.18	1-3%	N/A – outside assessment area	No	Agriculture	B. none	A. no data	N/A – outside assessment area	N/A – outside assessment area	C. migratory birds C. Nesting birds	C. unknown	B. natural areas are fragmented but movement is possible for wildlife Fish – N/A	C. both ends are developed (extensive agricultural lands)

* Except for questions that specifically request information beyond the assessment area, all questions were assessed for those portions of the watershed located within the City of Molalla Urban Growth Boundary.