



Natural Resources Inventory

EXHIBIT 4

W&H Pacific, October 2003

Natural Resources Inventory for:

Sustainable Fairview Site

Prepared for

Sustainable Fairview Associates

October 22, 2003

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I INTRODUCTION AND PURPOSE OF REPORT

This report presents results of a natural resources inventory on the Sustainable Fairview Site (the former Fairview Training Center), located in Salem, Oregon. The project area is bounded on the north by Strong Road, on the east by Reed Road SE, on the south by Battle Creek Road, and on the west by Pringle Road SE. See Figure 1, Vicinity Map for the project area location. The site investigation took place on October 3, 2003.

The purpose of this report is to provide a natural resources factual base for the Fairview Plan, a master plan for the Sustainable Fairview site. Sustainable Fairview Associates are currently developing the Fairview Plan as required by the City of Salem Fairview Mixed-Use (FMU) zone (Salem Revised Code Chapter 143C). Part of the purpose of the FMU zone is to:

“Preserve, to the greatest extent possible, the existing natural areas and open space, that may not otherwise be protected through conventional development”. (Ch. 143C.010 (h))

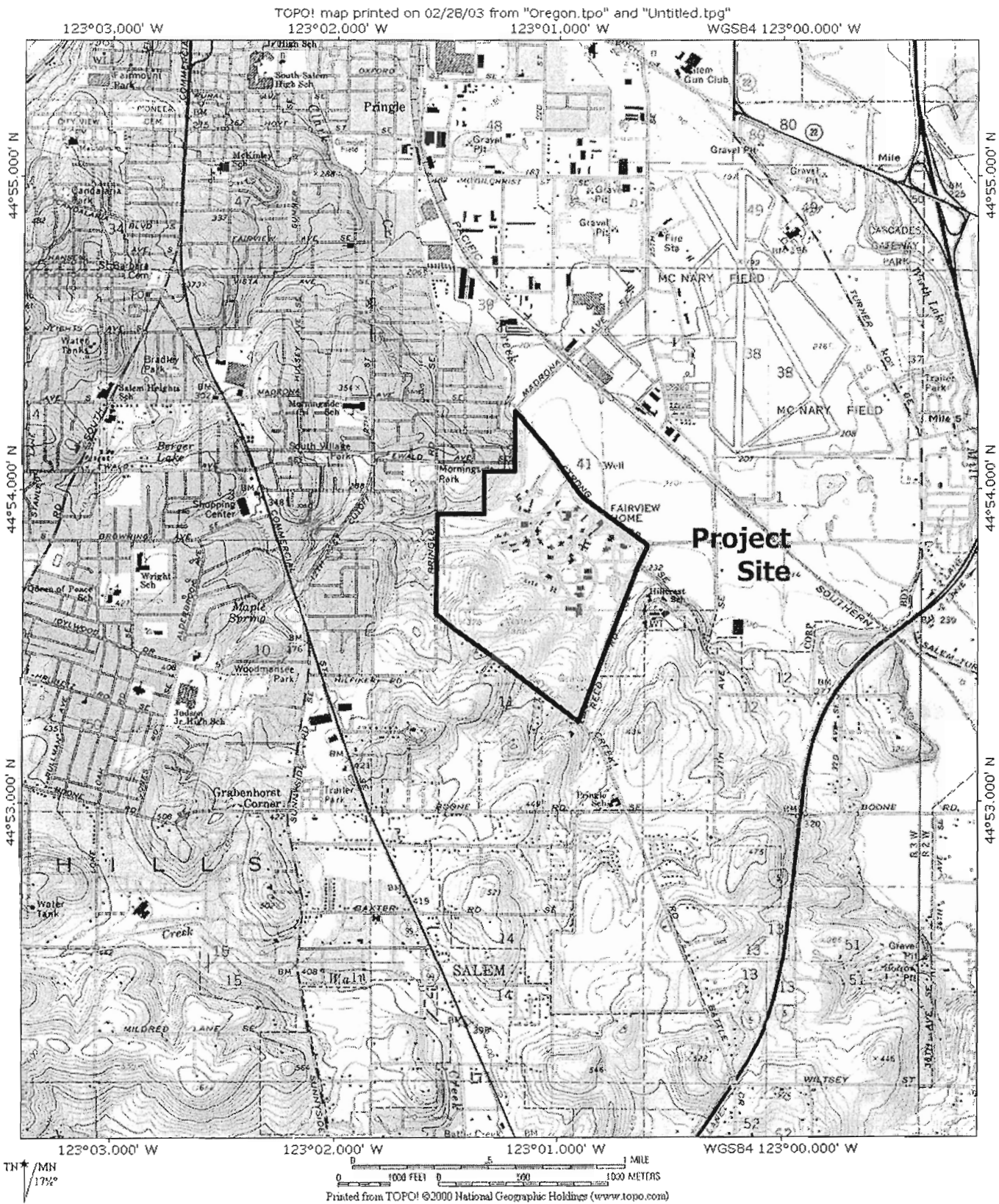
Among the requirements of the Fairview plan is an overall open space plan “identifying an integrated network of open spaces for the purpose of preserving and enhancing identified natural drainage patterns, significant trees and vegetation, and wetlands on the site, accommodating significant topographical features, and providing opportunities for active and passive recreation.” (Ch. 143C.080 (b)(2))

The Fairview Plan includes a site analysis, which includes an “inventory and delineation of existing natural resources, including, but not limited to wetlands, as identified on the Local Wetlands Inventory, perennial and intermittent streams, and significant tree stands or groves, including any provisions for the preservation or conservation of these resources with attention given to the Natural Resource Guidelines in 143C.160.” This report provides the inventory and delineation of natural resources required for the Fairview Plan.

The Natural Resources Guidelines state that the Fairview Plan shall identify how existing natural resources shall be protected through compliance with SRC Chapter 68, Preservation of Trees and Vegetation, and SRC Chapter 126, Wetlands. The Fairview Plan “shall consider all of the following:

- 1) The preservation of the natural drainage patterns of the site;
- 2) The existence and use of native plant species, where appropriate;
- 3) The integrity of mature stands of trees that are in good health;
- 4) The significant wildlife habitat.
- 5) The minimization of the amount of impervious surfaces near all waterways.”

These code requirements provide the basis for this report.



Source: Topo! Oregon, 2000. National Geographic Holdings, Inc. Based on the 1986 USGS Salem West quadrangle map.



VICINITY MAP

Sustainable Fairview Site
Sustainable Fairview Associates
Marion County, Oregon

Figure
1

II WETLANDS AND HYDROLOGY

A wetland delineation report, *Delineation of Wetlands and Other Waters of the United States for Sustainable Fairview Site*, has been prepared for the site, dated March 28, 2003. It has been filed with the Oregon Division of State Lands (DSL) for their review and “Jurisdictional Determination”, but has not yet been filed with the U.S. Army Corps of Engineers (Corps). The report identifies 14 areas of “potential jurisdictional wetland” or “other waters” totaling 6.68 acres, as shown on Figure 2, Wetland Map. Wetlands and waters on the site include Pringle Creek and associated wetlands, two drainages in the southern part of the site which include small streams and associated wetlands, and various other emergent wetlands. In our judgment, certain of these areas, though they meet wetland criteria, may not be regulated by either the Corps of Engineers or Division of State Lands, or both. This may be due to their being artificially created in an upland location, or “isolated” from “waters of the U.S.” (i.e. streams), or being in some other exempt category. Please refer to the wetland delineation report for discussion of jurisdictional issues.

SRC Chapter 126, Wetlands, sets forth standards for a Local Wetlands Inventory (LWI) and criteria for designating certain wetlands as “**locally significant wetlands**” (LSW). Revisions to Ch. 126 are currently proposed for adoption by the City Council. These revisions, if approved, will adopt the existing LWI (prepared in 1999). The revisions will also adopt a process for the City to add LSWs to the inventory if they meet the specified criteria. The inventory is to be updated as additional wetlands are identified, for instance by wetland delineation reports for proposed development sites, upon concurrence by the DSL. See Appendix B for the text of the proposed revisions to Chapter 126.

Currently, only two wetland areas within the Fairview site are mapped as “LSW”: Pringle Creek and a small wetland on the western boundary that is associated with the creek. These areas are identified in the wetland delineation report as Area 4 (Pringle Creek) and Area 9. See the wetland delineation report for photographs of the wetland areas on the site.

The following is a summary description of wetlands and streams identified in the report, which provides additional information on vegetation, soils and hydrology. These descriptions do not classify additional wetlands as “LSW”. This may be determined by the City, upon adoption of the above amendments to Chapter 126 using the adopted criteria.

Area 1 is located in a drainage in the southeastern part of the site and consists of a stream channel and three “slope” wetlands. The drainage begins at a culvert under Battle Creek Road. Stormwater from the adjacent residential area enters the drainage through the culvert. The wetlands are located in areas of shallow aquifer discharge (seeps), and provide base flow in the stream. The upper seep wetland is dominated by black cottonwood (*Populus trichocarpa*), willow (*Salix spp.*), and native herbaceous species. The smaller seep wetlands downstream are dominated by non-native grasses and native herbaceous species such as soft rush (*Juncus effusus*). The stream passes through a culvert and ends in a low-lying basin near Reed Road. Water from this wetland appears to drain under Reed Road into a fork of Pringle Creek. No culvert could be located. Area 6 is associated with this drainage. This appears to be a former

farm pond impoundment into which the stream once flowed. The stream now flows beneath it through a culvert. Only the lowest part of this former impoundment is now wetland.

The seeps remain saturated at or just below the surface most of the year. The downstream seep was still discharging water to the stream at the time of the October 3 site investigation, after a dry summer.

Area 2 is located in a drainage that extends into the site from the southern boundary at Battle Creek Road. It consists of a stream channel and three wetlands. Stormwater from the adjacent residential area passes through a culvert under Battle Creek Road. The upper wetland appears to be a “slope” wetland like those in Area 1. The lower wetlands appear to have formed in shallow basins, with water feeding into them from the stream and wetland above. This lower wetland drains into a culvert and enters the drainage system beneath the Fairview building complex.

Area 3 is a short segment of a fork of Pringle Creek located in the southeastern corner of the site.

Area 4 consists of the channel of the mainstem of Pringle Creek and adjacent “slope” wetlands. (Note that the LWI does not show the adjacent wetlands.) The area is currently undergoing riparian restoration by Oregon Watersheds. This group has carried out bank stabilization, removal of invasive non-native species, such as Himalayan blackberry (*Rubus procerus*), and planting of native trees and shrubs. Woody structures have also been placed in the stream channel. The adjacent wetland areas contribute ground water to the creek and help maintain baseflow. Wetland Area 10 is associated with Pringle Creek. It consists of a shallow basin in an adjacent “old field”. It may also contribute to flow in Pringle Creek. Wetland Area 11 consists of a stormwater detention facility parallel to Pringle Creek. This broad, linear basin was excavated to receive overbank flows from the creek. Technically, it meets wetland criteria.

Area 5 consists of a shallow basin in an “old field” where a tile drain system has failed. This area is seasonally saturated. Precipitation in the drainage to the south infiltrates into the soil and is conveyed by the tile drain system. The system appears to be broken or blocked, creating Area 5. The tile drain system then carries the water to the east to a field inlet that connects to the drainage system under the Fairview building complex.

Area 7 is a flat grassy area below a zone of local shallow aquifer discharge near the eastern boundary. A shallow drainage ditch carries water to a culvert that leads to a roadside ditch along Reed Road. The existence of a connection to the fork of Pringle Creek across Reed Road could not be verified.

Area 8 and 9 are small “slope” wetlands located along the property boundary in areas of shallow aquifer discharge. . They are south of Pringle Creek on the opposite side of school playing fields, and have no surface connection, nor any apparent direct subsurface connection to the creek. Area 9 is, however, classified as “LSW” in the City’s LWI.

Area 12 is a small pond near the main entrance that is reported to have been constructed as a visual amenity. It also receives stormwater, and in effect performs a stormwater detention

function.

Area 13 is a small localized area of seasonal saturation in a constructed drainage swale. Area 14 is a small wetland next to a building that appears to have developed as a result of leakage from within the building.

III STREAMS AND RIPARIAN VEGETATION

The Sustainable Fairview site contains reaches of four streams. All are within the Pringle Creek drainage basin. (See Figure 3, Natural Resources Inventory Map)

The mainstem of Pringle Creek flows through the northern part of the site. It drains an extensive basin within the developed part of the city to the west. Pringle Creek is a perennial, fish-bearing stream. Although this reach of the Pringle Creek has not been surveyed, cutthroat trout, a salmonid, have been found downstream, and also in the upper reaches of other branches. They are likely to be present therefore, in the reach on the project site (phone conversation between Phil Quarterman and Wayne Hunt, District Fish Biologist, ODFW, 10/23/03). Lower reaches of the creek beyond the site are known to support fall Chinook salmon, an anadromous species. This population was introduced in the 1970's, but continues to maintain a spawning run in the fall. Juvenile steelhead and probably also juvenile Chinook, have been found in the lower mainstem of Pringle Creek. Pacific lamprey, also an anadromous fish, have been found in this reach. Resident fish species include sculpin and shiners.

The small reach of stream in the southeastern corner of the site is a tributary of the West Fork of Middle Fork Pringle Creek. It may also provide potential habitat for cutthroat trout, though this cannot be confirmed.

The stream in the southeastern part of the site (Area 1 in the wetland delineation report) is perennial at least in its lower reach downstream from the lowest "slope" wetland. The stream was still flowing in this reach at the October 3 site investigation. The upstream reach has intermittent flow, estimated to extend from approximately November 1 to early summer. It is not fish-bearing, as it has no surface connection to the Pringle Creek system.

The stream further to the northwest (Area 2) has intermittent flow for most of its length. However, flow is apparently perennial within part of the lower wetland. We observed flow through a small channel and at the culvert within the lower wetland at the October 3 site investigation. The channel is not fish-bearing. There is no surface connection to the Pringle Creek system.

SRC Chapter 68: Preservation of Trees and Vegetation, states:

- "No trees or intact riparian corridor vegetation shall be removed within the riparian corridor of a fish-bearing waterway," and

- “No trees shall be removed within the riparian corridor of a non fish-bearing waterway” (Ch. 68.050).

The code provides for exceptions and variances under certain circumstances. See Appendix C for the text of SRC Chapter 68.

“**Tree**” is defined in the code as “any living, standing, woody plant, having a trunk eight inches or more in diameter or 25 inches or more in circumference, measured at a point four feet above grade at the base of the trunk.” The “**riparian corridor**” is measured 50 feet horizontally from the top of bank on each side of a waterway with less than 1,000 cubic feet per second average annual flow. Where a “**significant wetland**” lies within the riparian corridor, the corridor includes all of the wetland, and is measured from the outer wetland boundary. (This latter provision will become operational upon City Council adoption of the LWI).

“**Fish-bearing waterway**” is defined as a waterway that supports salmonid fish species. These waterways are shown on an official city map. Fish-bearing waterways include reaches upstream of those that have been studied, to the first natural or non-removable fish passage barrier.

“**Intact riparian corridor vegetation**” is defined as “(V)egetation that is characterized by a diverse, multi-layered assemblage of native trees and a vigorous, dense understory of native plants” that provides any of a number of water quality, flood control, or wildlife habitat benefits.

Riparian corridors on both fish-bearing and non fish-bearing streams, including those associated with “significant” wetlands, are shown on Figure 3. Also shown are areas of trees and “intact riparian corridor vegetation” that are protected by SRC Chapter 68, or will become protected upon adoption of the LWI.

The riparian corridor along the mainstem of Pringle Creek includes three wetlands that could potentially become classified as “significant”. These wetlands are not shown currently on the LWI map. As Pringle Creek runs along the western property line, part of the riparian corridor includes some adjacent developed residential areas.

Vegetation in the riparian corridor includes a variety of tree species, including Douglas fir (*Pseudotsuga menziesii*), Oregon white oak (*Quercus garryana*), black cottonwood, red alder (*Alnus rubra*), Ponderosa pine (*Pinus ponderosa*), and Oregon ash (*Fraxinus latifolia*), ranging in size from small saplings to mature individuals. Worthy of special note is a large (24 inch diameter) old Pacific yew (*Taxus brevifolia*) on the east bank of the stream. Also prevalent are willow, both Piper willow (*Salix piperi*), a shrub species, and Pacific red willow (*S. lasiandra*), which may reach tree size). Alder, cottonwood, ash, and willow are the most prevalent along the stream bank and in adjacent wetlands.

The understory consists of a mixture of tree saplings, native shrubs (willow and red osier dogwood (*Cornus sericea*) are the dominant native species), and dense Himalayan blackberry. Recent riparian restoration efforts by Oregon Watersheds, in conjunction with Oregon

Department of Administrative Services, have focused on fish habitat improvements, control of blackberry and replacement by native shrub and tree plantings along the southern part of the riparian corridor within the Fairview site (see Photos 1-3). Blackberry is still very prevalent in the untreated part of the corridor. Given the dominance of blackberry, it is questionable that the untreated part meets the definition of “intact riparian corridor vegetation”. The goal of the restoration work is to return the riparian corridor to this condition.

The short reach of the tributary of the West Fork of East Fork Pringle Creek in the southeastern corner of the site has a riparian corridor consisting of black cottonwood, willow, Pacific ninebark (*Physocarpus capitatus*), and Himalayan blackberry. The main creek is shown as a fish bearing stream. It is unknown whether fish passage exists through the culvert under Reed Road. For the purposes of this report, we assume there is no fish-passage barrier. There is sufficiently diverse native plant cover for the riparian corridor to be considered “intact riparian corridor vegetation”.

The two non fish-bearing streams are shown on Figure 3. The larger of the two streams is shown as part of Wetland Area 1 (see Figure 2 and Photo 4). The smaller is part of Wetland Area 2. The non-fish bearing streams generally lack trees within their riparian corridors. The only stand of trees of sufficient diameter to be protected under SRC Chapter 68 is a group of mature black cottonwood in the uppermost seep wetland along the larger of the two streams.

The riparian corridors of these two streams are dominated mostly by dense Himalayan blackberry thickets. There are also openings dominated by non-native grasses. The wetland areas adjacent to the streams are dominated by a mixture of non-native grasses and native wetland herbaceous species. The upper reach of Area 1 passes through an overgrown orchard where the fruit trees remain, though now invaded by blackberry.

The wetlands along these two non fish-bearing streams are classified as “non-significant” in the LWI. These wetlands could potentially become classified as “significant” wetlands under the proposed revisions to SRC Chapter 68. For the purposes of this report, the riparian corridor includes both the streams and the adjacent wetlands.

IV SIGNIFICANT TREE STANDS AND NATIVE PLANT SPECIES

The Fairview site contains a number of significant tree stands, shown on Figure 3, Natural Resources Inventory Map. See Appendix A for a table summarizing the 16 tree stands that were identified, and their characteristics. “Significant tree stand” is not a defined term in City code. For the purposes of this inventory, the term is defined as a group of six or more standing live native trees 12 inches or more diameter at breast height (dbh). SRC Chapter 68 does include a definition of “**significant tree**” for individual trees rather than stands, which includes Heritage trees (as defined in SRC Chapter 86.010) and “rare, threatened, or endangered” trees.

SRC Ch. 68 regulates the removal of trees on parcels of 20,000 square feet or more (SRC 680.040). It also requires submittal of a Tree Conservation Plan in conjunction with a building permit or other types of development proposal, such as a planned unit development, on

properties with trees protected by the code. The criteria for “non-discretionary approval” include preservation of all “significant trees”, as defined, and trees within riparian corridors, plus at least 25% of the existing trees on the property (SRC Ch. 68.075). There are a number of exceptions, including removal of “hazard trees”.

The dominant native tree species in these stands are Douglas fir and Oregon white oak. In certain stands grand fir (*Abies grandis*) is also a dominant species. These native tree stands may be representative of pre-European settlement tree stands at least in their dominant tree and shrub species. The herbaceous layer has been much more heavily altered, and their historic composition is now not precisely known. Except perhaps for the largest trees, these trees are probably not old enough to date from the pre-European settlement era (approximately pre-1840), given the favorable growing conditions and relatively rapid growth rate for these species on this site, compared to higher elevations.

There are no known “rare, threatened, or endangered” tree species or Heritage Trees on the site.

Stand Number 5 in the southwestern corner of the site is the largest in area and the shrub layer is less disturbed than in many other stands. Part of the stand includes an area of former residences. It consists mainly of Douglas fir and Oregon white oak, with trees up to 48 in. dbh (see Photo 5). It has a diverse understory of native shrubs. There has been significant invasion, however, by Himalayan blackberry and English ivy (*Hedera helix*).

Most of the stands in the developed part of the site have retained some large trees (mainly Douglas fir, Oregon white oak and grand fir), but the understory is maintained as open grass, or has become invaded by Himalayan blackberry or English ivy. Trees exceed 30 in. dbh in several stands, including one very large individual, a 72-in. diameter Douglas fir. One notable stand (Number 13) of large Douglas fir and Oregon white oak is located along the Strong Road frontage (see Photo 6).

Stands Number 9, 10 and 12 lie within the riparian corridor of Pringle Creek. Stand Number 4 lies within the riparian corridor of the southern non-fish bearing stream. (See discussion above).

Introduced trees have been planted within several of the stands. They include trees native to other regions of the Western United States: Port Orford cedar (*Chamaecyparis lawsoniana*), giant sequoia (*Sequoiadendron gigantea*), and grey pine (*Pinus sabiniana*), and European trees, such as Scots pine (*Pinus sylvestris*). The ponderosa pine seen in several stands may be examples of the native Willamette Valley ecotype, or may have been planted to non-native stock. Some ponderosa pine on site appears to have been planted, as they form rows. Certain stands of Douglas fir also appear to have been planted.

Two stands (Numbers 8 and 14) contain snags, apparently due to relatively recent mortality, the cause of which has not been determined.

A list of the primary native plant species on site is found in Appendix E. This list is not intended to be comprehensive. As outlined above, except in certain tree stands, the native shrub

community is not well represented, and has been invaded by species such as Himalayan blackberry or converted to open grass. Over significant areas of the undeveloped portion of the site, outside of tree groves, the plant community is dominated by introduced grasses, remnants of old fruit and nut orchards, or Himalayan blackberry thickets. Native trees and shrubs are beginning to regenerate, however, particularly within open grasslands and where the old orchard trees are sparser. Many young individuals of Douglas fir, Oregon white oak, black hawthorn (*Crataegus douglasii*), and Indian plum (*Oemleria cerasiformis*), in particular are becoming well established in a mixed sapling-shrub-grass habitat type.

V SIGNIFICANT WILDLIFE HABITAT

The term “significant wildlife habitat” is not specifically defined in City code. For the purposes of this inventory report, “significant wildlife habitat” includes significant tree stands, streams and riparian corridors already discussed above. “Significant wildlife habitat” also includes corridors between these resources that provide cover, feeding, resting, nesting, and breeding habitat for wildlife species known to be present on the site. In this broader sense, the entire undeveloped portion of the site can be considered significant habitat for certain wildlife species. This is due in large part to the absence of direct human influence and disturbance and the extensive area (more than 60% of the approximately 275 acres on the site). Additional native trees stands are located to the east of the site across Reed Road. Together with the areas to the east, the site provides a broad corridor for wildlife movement.

A list of animal and birds species observed on or near the site is provided in Appendix F.

The southern and western portions of the site are largely undeveloped, except for the former residential cluster within Tree Stand Number 5. There are also undeveloped areas of old fields in the northern portion of the site. The undeveloped area can be classified into six major habitat types:

- Significant tree stands
- Streams and riparian corridors
- Open grasslands and old fields
- Blackberry thickets
- Old orchards
- Mixed sapling/shrub/grassland/orchards.

These general habitat types form a complex mosaic across the undeveloped portion of the site. They are shown on Figure 3.

Open grasslands and old fields are gradually being invaded by blackberry and shrubs and trees such as hawthorn (black and English) and Douglas fir, but retain a predominantly open character (see Photo 8). Grasses and other herbaceous species are almost exclusively non-native and include tall fescue (*Festuca arundinacea*), bentgrasses (*Agrostis spp.*), orchardgrass (*Dactylis*

glomerata), and Queen Anne's lace (*Daucus carota*). They support a population of small rodents, such as field mice and shrews, and provide valuable hunting habitat for raptors such as red-tailed hawk (*Buteo jamaicensis*) and coyote (*Canis latrans*). We observed both species in this area, and abundant coyote scat.

The blackberry thickets have invaded large upland areas that were probably formerly grasslands, and much of the old orchard area (see Photo 9). They have also invaded much of the riparian corridor of the two small non fish-bearing streams. While blackberry eliminates most native species and reduces structural diversity by out-competing trees, it does provide dense cover that is utilized by black-tailed deer (*Odocoileus hemionus spp. columbianus*) and small mammals such as raccoon (*Procyon lotor*). The fruit is also utilized by these species, and many birds. We observed numerous deer trails through the blackberry thickets. There is reported to be a substantial deer population utilizing the site (pers. conversation with Sam Hall, Sustainable Fairview Associates, 10/3/03).

The old orchards consist of apple, pear, cherry and nut trees. They have been invaded by Himalayan blackberry and Scots broom (*Cytisus scoparius*). There has also been regeneration of native trees such as Douglas fir and bigleaf maple (*Acer macrophyllum*). Together, these species have formed a dense matrix of vegetation that provides cover for a variety of species; deer, coyote, raccoon, striped skunk (*Mephitis mephitis*), and a large number of songbird species. The fruit is also utilized by these species.

In the southwestern corner of the site, near Tree Stand Number 5, lies a more diverse hilly area of mixed saplings, shrubs and grassland with sparser orchard trees. Oregon white oak and Douglas fir have begun to regenerate within this more open area to form a savanna-like stand (see Photo 10). Shrubs regenerating in this area include red elderberry (*Sambucus racemosa*), Indian plum, black hawthorn, English hawthorn (*Crataegus monogyna*), and English holly (*Ilex aquifolium*). While Himalayan blackberry and Scots broom have invaded this area, they are not as dense as in the old orchard area.

APPENDIX A

**SIGNIFICANT TREE STANDS ON THE
SITE**

Stand Number *	Tree Species	Notes
1	Oregon white oak	Up to 24 in. dbh. Near wetland. Grass, blackberry understory
2	Oregon white oak, one ponderosa pine	Up to 24 in. dbh. Near wetland. Grass, blackberry understory
3	Oregon white oak, bigleaf maple, Douglas fir, black cottonwood	Young trees, some >12 in. dbh. Old quarry.
4	Black cottonwood	>36 in. dbh. In riparian corridor of intermittent stream. Some willow, other shrubs.
5	Oregon white oak, Douglas fir, ponderosa pine, madrone	Largest tree stand on site. Trees up to 48 in. dbh. Diverse native understory of black hawthorn, serviceberry, Nootka rose, Indian plum, snowberry, Oregon grape, poison oak vines. Some ornamental trees. Significant invasion by Himalayan blackberry and English ivy in places.
6	Red alder	Up to 12 in. dbh. Dense shrub and Himalayan blackberry understory. Seep area.
7	Douglas fir, grand fir	Up to 48 in. dbh. Open grass understory
8	Douglas fir, grand fir, ponderosa pine, walnut (introduced)	Up to 40 in. dbh, average 18 in. dbh. Mostly open grass understory. A few snags (recent mortality), potential cavity nester habitat. Pine appears to have been planted in row.
9	Douglas fir, ponderosa pine, Scots pine (introduced)	Up to 36 in. dbh. Open grass understory. In riparian corridor of Pringle Creek.
10	Black cottonwood, red alder, Oregon white oak, Oregon ash, ponderosa pine, Pacific yew	In riparian corridor of Pringle Creek. Mostly smaller trees. Yew is 24 in. dbh. Also some mature ash and oak. Many saplings of alder. Shrubs include willow, black hawthorn. Dense Himalayan blackberry in middle and northern part. Currently being restored.

11	Douglas fir, bigleaf maple, Oregon white oak black walnut, Scots pine, grey pine (last three introduced)	Mostly <18 in. dbh. Dense Himalayan blackberry understory, or open grasses.
12	Douglas fir	12-15 in. dbh. Open grass understory
13	Douglas fir, Oregon white oak, Oregon ash, catalpa (ornamental)	Stand of mature fir and oak along Strong Road frontage, up to 50 in. dbh, one individual fir about 72 in. dbh. Open grass understory.
14	Douglas fir, Oregon white oak, giant sequoia (ornamental)	Up to 36 in. dbh. Mostly 12-24 in. dbh range. Dense English ivy or open grass understory. Recent Douglas fir snags.
15	Douglas fir, grand fir, Oregon white oak, Port Orford cedar (ornamental)	Up to 36 in. dbh. Open grass understory. Three oak in separate cluster. Some Port Orford cedar mortality nearby, due to root rot.
16	Oregon white oak	Up to 36 in. dbh. In three clusters. Himalayan blackberry or open grass understory.

* See Figure 3 for location of tree stands.

APPENDIX B

**SRC CHAPTER 126: WETLANDS
(PROPOSED REVISION)**

Section 1. SRC 126.010. Intent and Purpose. The intent and purpose of this ordinance is to identify those wetlands within the City of Salem which are significant and non-significant, and to establish the foundation for a wetlands protection program that will provide for the long-term protection of wetlands within the City of Salem, by:

- (a) Implementing the goals and policies of Salem's Comprehensive Land Use Plan;
- (b) Satisfying the wetland protection requirements of Statewide Planning Goal 5;
- (c) Protecting and restoring Salem's City Park wetland areas, thereby protecting and restoring the hydrologic and ecologic functions these areas provide for the community;
- (d) Protecting fish and wildlife habitat;
- (e) Enhancing and protecting water quality and natural hydrology, controlling erosion and sedimentation, and reducing the effects of flooding;
- (f) Protecting and restoring the natural beauty and distinctive character of Salem's wetlands as community assets;
- (g) Enhancing the value of properties near wetlands by utilizing the wetland as a visual amenity; and
- (h) Providing for coordination among local, state, and federal agencies regarding development activities near wetlands.

Section 2. SRC 126.020. Definitions. As used in this chapter, except where the context otherwise clearly requires:

- (a) "Best Available Information" means information used in making the classification of a wetland as Locally Significant, including, but not limited to the Salem-Keizer Local Wetland Inventory, ~~aerial photos taken in 2000~~; most recent aerial photos that are available to the City of Salem prior to time of classification; Oregon Natural Heritage Program data; Department of Environmental Quality data for streams listed under the Clean Water Act (CWA, 33 U.S.C. 1250, *et seq.*, at 1313 (d)) Section 303(d); Geographic Information System (GIS) data from the City of Salem, including, but not limited to location of city parks, local waterways, tax lot data and property ownership, fish-bearing streams, FEMA and floodplain data; and any other data or information from a trustworthy source which may be verified by observation, investigation, or research, or which is considered authoritative by professionals in the scientific community.
- (b) "Director" means the Community Development Director for the City of Salem or the Director's designee.
- (c) "Indigenous Salmonids" means members of the family Salmonidae which are listed as

sensitive, threatened or endangered by a federal or state authority, including Chum, Sockeye, Chinook and Coho salmon, and Steelhead and Cutthroat trout.

(d) "Inhabited by" means the plant species grows on the site or the animal species uses the site for rearing, feeding, or breeding, or as a migration or dispersal corridor. As used in this definition, "inhabited by" does not include the incidental presence on the site by an animal species.

(e) "Land Use Action" means any development activity under the City of Salem zoning code, any subdivision or partition under SRC Chapter 63, or any amendment to the City of Salem Comprehensive Plan under SRC Chapter 64.

~~(e)~~ (f) "Locally Significant Wetland" means a wetland which provides functions or exhibits characteristics that are pertinent to planning decisions, including planning decisions within the UGB, and which has been determined to be significant under the criteria listed in OAR 141-086-0350.

~~(f)~~ (g) "Local Wetlands Inventory" means that systematic survey of an area to identifying, classifying and mapping the approximate boundaries of wetlands within the Salem-Keizer Urban Growth Boundary, and that includes the supporting documentation required by OAR 141-86-180, and which is designated the "Salem-Keizer Local Wetland Inventory, 1999, as amended," and adopted by the City of Salem pursuant to SRC 126.025.

~~(g)~~ (h) "Native Plant Community" means a recognized assemblage of plant species indigenous to Oregon, as identified in the "Classification and Catalog of Native Wetland Plant Communities in Oregon," published by the Oregon Natural Heritage Program.

~~(h)~~ "Non-significant Wetland" means those wetlands that are part of the Salem-Keizer Local Wetlands Inventory which were not identified as Locally Significant Wetlands using the OFWAM process.

(i) "Oregon Freshwater Wetland Assessment Methodology (OFWAM)" means a wetland function and quality assessment methodology developed by the Oregon Division of State Lands. Local governments are required to use OFWAM, or an equivalent methodology that is approved in writing by the Director of the Oregon Division of State Lands, to assess wetland functions and determine significance.

(j) "Rare Plant Communities" means plants which are uncommon, unique or relictual in Oregon, as determined by the number of occurrences and threats according to Oregon Natural Heritage Program criteria. Listings of wetland communities in Oregon which meet this standard for rarity may be found in "Oregon Freshwater Wetland Assessment Methodology," Appendix G (1996), published by the Oregon Division of State Lands, and the Classification and Catalog of Native Wetland Plant Communities in Oregon, published by the Oregon Natural Heritage Program.

(k) "Regulatory delineation" means a delineation of the boundary of a wetland that is approved by the Oregon Division of State Lands (DSL) according to OAR 141-90-005 et seq.

~~(k)~~ (m) "UGB" means the City of Salem-Keizer Urban Growth Boundary.

~~(j)~~ (n) "Wetland" means an area inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and which, under normal circumstances, does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

(o) "Wetland protection area" means a locally significant wetland lying within parks owned or otherwise within and managed by the City of Salem, and subject to the provisions of this chapter.

Section 3. SRC 126.025. Adoption of Local Wetlands Inventory and Locally Significant Wetlands Map.

(a) That certain document entitled the "Salem-Keizer Local Wetlands Inventory, 1999, as amended" (LWI) is hereby adopted as part of this Chapter, as if fully set forth herein. A certified copy of the LWI, along with any amendments thereto, shall be kept on file in the office of the City Recorder.

(b) That certain map designated the "Salem Locally Significant Wetlands Map," is hereby adopted as part of this Chapter, as if fully set forth herein. A certified copy of the Salem Locally Significant Wetlands Map, and amendments thereto, shall be kept on file in the office of the City Recorder.

(c) The Director shall compile, index and publish all adopted amendments as part of the LWI and the Locally Significant Wetlands Map, and shall, as practicable, represent the LWI and Locally Significant Wetlands Maps, and any amendments thereto, on the City's GIS coverage.

Section 4. SRC 126.030. Locally Significant Wetlands; Criteria for Identification.

(a) Using the Local Wetlands Inventory, a functional and quality assessment of all inventoried wetlands within the City and the UGB, and the best available information, the Director shall identify local wetlands as all Locally Significant Wetlands or ~~Non-Significant~~.

~~(a)~~ (b) A wetland shall be identified as Locally Significant if it meets one or more of the following criteria:

(1) The wetland performs any of the following functions according to the OFWAM:

- (A) Provides diverse wildlife habitat;
- (B) Provides intact fish habitat;
- (C) Provides intact water quality function; or
- (D) Provides intact hydrologic control function.

(2) The wetland or a portion of the wetland occurs within a horizontal distance of less than one-fourth mile from a water body listed by the Department of Environmental Quality as a water quality limited water body under Clean Water Act (CWA, 33 U.S.C. 1250, et seq., at 1313(d)) Section 303 (d), and the wetland's water quality function is described as "intact" or "impacted or degraded" using OFWAM. The 303(d) List specifies which parameters (e.g., temperature, pH) do not meet state water quality standards for each listed water body. The Director may determine a wetland is not significant under this paragraph upon documentation that the wetland does not provide water quality improvements for the specified parameter or parameters.

(3) The wetland contains one or more rare plant communities, as defined in this rule.

(4) The wetland is inhabited by any species listed by the federal government as threatened or endangered, or listed by the state as sensitive, threatened or endangered, unless the appropriate state or federal agency indicates that the wetland is not important for the maintenance of the species.

(A) The use of the site by listed species must be documented, not anecdotal. Acceptable sources of documentation may include but are not limited to, field observations at the wetland sites during the local wetlands inventory and functional assessments, and existing information on rare species occurrences as maintained by agencies, including, but not limited to, the Oregon Natural Heritage Program, Oregon Department of Fish and Wildlife, Oregon Department of Agriculture, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service.

(B) Input originating from other locally knowledgeable sources constitutes documentation for the purposes of this paragraph if it is verified by one of the agencies identified under paragraph (A) of this subsection, or in a university or college reference collection.

(5) The wetland has a direct surface water connection to a stream segment mapped by the Oregon Department of Fish and Wildlife as habitat for indigenous salmonids, and the wetland is determined to have "intact" or "impacted or degraded" fish habitat function using OFWAM.

~~(b)~~ (c) A wetland may be identified as Locally Significant if the wetland meets one or more of the following criteria:

(1) The wetland represents a locally unique native plant community or, if the entire UGB has been inventoried, the wetland contains the only representative of a particular native wetland plant community in the UGB. To be identified as Locally Significant under this paragraph, the wetland must also have been assessed to perform at least one of the following functions according to OFWAM:

(A) The wetland provides diverse habitat, or provides habitat for some wildlife species;

(B) Its fish habitat is either intact, or impacted or degraded;

(C) Its water quality function is either intact, or impacted or degraded; or

(D) Its hydrologic control function is either intact, or impacted or degraded.

(2) The wetland is publicly owned and determined to “have educational uses” using OFWAM, and such use by a school or organization is documented for that site.

~~(e)~~ (d) **Exclusions.** Notwithstanding subsections ~~(b)~~ (c) and ~~(e)~~ (d) of this section, wetlands shall not be designated as Locally Significant if they fall within any one of the following categories:

(1) Wetlands artificially created entirely from upland that are:

(A) Created for the purpose of controlling, storing, or maintaining stormwater; or

(B) Active surface mining or active log ponds; or

(C) Ditches without a free and open connection to natural waters of the state, as defined in OAR 141-085-0010(9), and which do not contain food or game fish as defined in ORS 496.009; or:

(D) Less than one acre in size and created unintentionally as the result of:

(i) Irrigation water overflow or leakage; or

(ii) Construction activity not related to compensatory mitigation for permitted wetland impacts; or

(E) Of any size and created for the purpose of wastewater treatment, cranberry production, farm or stock watering, settling of sediment, cooling industrial water, or as a golf course hazard.

(2) Wetlands or portions of wetlands that are contaminated by hazardous substances, materials or wastes under the following conditions:

(A) The wetland is documented as contaminated on either the U.S. Environmental Protection Agency's National Priority List ("Superfund List"), or the Oregon Department of Environmental Quality's Inventory of Hazardous Substance Sites.

(B) Only that portion of the wetland affected by such hazardous substances or wastes shall be excluded from the Locally Significant Wetland analysis. Affected portions shall be delineated in consultation with EPA and DEQ, and shall include areas potentially disturbed by clean-up activities.

(C) Contaminated wetlands that have subsequently been removed from the NPL or DEQ Inventory following clean-up shall be re-evaluated under the Locally Significant Wetlands criteria no later than the City of Salem's next periodic review.

Section 5. SRC 126.040. (SECTION MOVED TO SRC 126.045) Notification of Identification; Request for Redesignation; Delineations.

~~(a) Each property owner whose property contains a wetland which is identified under SRC 126.030, and each person owning property within one hundred of such affected property, shall receive written notice of such designation. The notice shall contain the following:~~

~~(1) A description of the affected property;~~

~~(2) A statement that a wetland exists on the property, with a map of the approximate location of the wetland, which has been subject to evaluation and identification as Locally Significant or Non Significant;~~

~~(3) A statement that such a determination was performed according to the requirements of the Oregon Division of State Lands and the Department of Land Conservation and Development pursuant to ORS 197.279(3)(b);~~

~~(4) A statement that the wetlands may be subject to local, state, or federal regulation.~~

~~(5) The name and phone number of a City of Salem staff person to contact for~~

~~further information.~~

~~(b) Any property owner who receives a notice under subsection (a) of this section may file a request for redesignation or delineation with the Director within 90 days of the date the notice is issued. No redesignation shall occur unless the property owner can show, using the best available information the designation fails to satisfy the criteria for "local significance under SRC 126.030(a) or (b). No adjustment to the official map based on a delineation shall be made unless the delineation has been approved by the Oregon Division of State Lands. Appeals from the decision of the Director shall be made to the hearings officer pursuant to SRC 114.020(b).~~

Amendments to LWI and Locally Significant Wetlands Maps. Amendments to the LWI or Locally Significant Wetlands Map may be made by the Director if:

- (a) Wetlands are identified which are not listed in the Local Wetlands Inventory. Any newly identified wetland shall be assessed for significance as soon as practicable after discovery;
- (b) A property owner demonstrates that the wetland significance determination should be redesignated because the criteria for a locally significant wetland under SRC 126.030(a)-(c) are no longer satisfied, and the factors or conditions that have changed the condition of the wetland were not caused by unlawful alteration, fill, or dredging;
- (c) The receipt of a delineation approved by the Division of State Lands which changes the boundaries of a wetland identified as locally significant on the LWI or Locally Significant Wetlands Map; or
- (d) The Director determines that the wetland significance determination was erroneous at the time of original significance designation.

Section 6. SRC 126.045. Procedure for Notification of Locally Significant Wetlands and Amendments Based on Newly Identified Wetlands.

(a) Each property owner whose property contains either a wetland which will be identified on the LWI or Locally Significant Wetlands Map as a Locally Significant Wetland or a wetland which will be redesignated, each person owning property within two hundred and fifty feet of such affected property, and any person who has requested notice in writing of designation of locally significant wetlands, shall receive written notice of such designation or proposed redesignation. The notice shall contain the following:

- (1) A description of the affected property;
- (2) A statement that a wetland exists on the property, with a map of the approximate location of the wetland, which has been subject to evaluation and

determination of significance;

(3) A statement that such a determination was performed according to the requirements of the Oregon Division of State Lands and the Department of Land Conservation and Development pursuant to ORS 197.279(3)(b);

(4) A statement that the wetlands may be subject to local, state, or federal regulation; and

(5) The name and phone number of a City of Salem staff person to contact for further information, and that any appeal shall be made to the hearings officer pursuant to SRC 114.010(b).

(b) Any property owner who receives a notice under subsection (a) of this section may file a request for redesignation with the Director at the time the property owner files an application for a land use action or building permit, whichever is first submitted. No redesignation shall occur unless the property owner can show, using the best available information, that the wetland fails to satisfy the criteria for locally significant under SRC 126.030(b) or (c).

Section 7. SRC 126.050. ~~Locally Significant and Non-Significant Wetlands Maps; Adoption and Procedure for Amendments to the LWI and Locally Significant Wetlands Map Based on Revised Delineations.~~

~~(a) The Director shall develop a map depicting each wetland, using the criteria under SRC 126.030. The map shall show the boundary of the wetland, based on the best available information and shall identify each wetland as Locally Significant or Non-Significant. The wetland map shall be adopted or amended by resolution of the city council. Any wetland identified as Locally Significant on the official map shall be subject to the regulations for Locally Significant Wetlands under SRC Chapter 68.~~

~~(b) Wetlands not identified in the Local Wetlands Inventory shall be assessed for local significance pursuant to SRC 126.030 as soon as practicable after discovery, and added to the official wetland map, if determined by the Director to be locally significant.~~

~~(c) Amendments to the official wetland map may be made if the property owner demonstrates, using the best available information, that the designation fails to satisfy the criteria for a locally significant wetland under SRC 126.030(a) and (b), or the delineation is no longer accurate. No adjustment to the official map based on the accuracy of a delineation shall be made unless a redelineation has been approved by the Oregon Division of State Lands.~~

~~(d) Notice of proposed amendments to the official wetlands map shall be made pursuant to SRC 126.040(a). Any property owner who receives a notice of under subsection (d) of this~~

~~section may file a request for redesignation or delineation with the Director within 90 days of the date the notice is issued. Appeals from the decisions amending the official wetlands map shall be made to the hearings officer pursuant to SRC 114.020(b).~~

(a) The Director shall amend the LWI and Locally Significant Wetlands Map to reflect a new or revised delineation of any wetland identified on the LWI or Locally Significant Wetlands Map. Any amendment made pursuant to this section shall be deemed ministerial in nature.

(b) The Director shall give notice of any such amendment by providing a copy of the amendment available to any person who has requested notice, in writing, and by providing a copy to the owner of the real property affected by the amendment not less than fifteen days prior to adoption. For the purposes of this section, an owner is "affected" if the person owns the property upon which the wetland is located, or contains a buffer area surrounding the wetland. The notice shall include:

(1) A list of the principal documents, reports, or studies, if any, prepared by or relied upon by the Director in considering the need for and in preparing the intended amendment, and a statement of the location at which those documents are available for public inspection.

(2) Any person may request mailed copies of notices of intended amendments. The request shall be in writing, and shall be directed to the Director. Upon receipt, the Director shall acknowledge the request, establish a mailing list, and maintain a record of all mailings made to all persons submitting such requests.

Section 8. SRC 126.055. Basis and Validity for Amendments; Publication of Amendments. All amendments adopted in substantial compliance with SRC 126.045 and SRC 126.050 of this section shall be in effect from and after the date the amendment is adopted.

Section 9. SRC 126.060. Required Notification of the Oregon Division of State Lands. Within 5 working days of receiving a completed application for development or a land use action in an area designated as a wetland on the ~~official wetlands map~~, Local Wetlands Inventory, the City shall:

(a) Send a Wetland Land Use Notification form to the Division of State Lands of any application for development or land use on a lot or parcel identified as containing a wetland ~~in on the official wetlands map~~ Local Wetlands Inventory; and

(b) Send a letter to the applicant, and, if different from the owner of the lot or parcel, and the watershed council functioning in the area within which the wetland lies, stating that Division of State Lands is being notified, along with a copy of the completed Wetland Land Use Notification form.

Section 10. SRC 126.070. Wetland Protection Areas, Applicability, and Application Submittal

Requirements.

- (a) Any wetland identified as Locally Significant on the LWI or Locally Significant Wetlands Map shall be subject to the regulations for Locally Significant Wetlands under this chapter and SRC Chapter 68.
- (b) The boundary of a Wetland Protection Area is the edge of a Locally Significant Wetland as determined by a regulatory delineation.
- (c) Any application for a land use action or building permit, or any plan for the construction of public facilities, on a real property containing a Wetland Protection Area, or portion thereof, shall contain the following:
 - (1) A delineation of the Wetland Protection Area completed by a professional wetland scientist or similar expert, qualified to delineate wetlands in accordance with Oregon Division of State Lands rules. If the proposed development is designed to avoid the Wetland Protection Area, a wetland determination report may be provided in place of the delineation.
 - (2) A scale drawing that clearly depicts the Wetland Protection Area, the surface water source, existing trees and vegetation, property boundaries, and proposed site alterations including proposed excavation, fill, structures, and paved areas.
 - (3) Verification that the application packet has been submitted to the Oregon Department of Fish and Wildlife for review and comment.
- (d) No review under SRC 126.070 through 126.110 is required if the proposed development is located 50 feet or greater from a Wetland Protection Area.

Section 11. SRC 126.080. Continued Signs, Structures and Landscaping.

- (a) Signs or structures existing within a Wetland Protection Area that conform to the zoning code and development standards existing on **(give effective date of ordinance)** are deemed continued signs and structures. Except as otherwise provided in this section, such signs or structures may not be intensified, enlarged, or altered. The maintenance and alteration of pre-existing ornamental landscaping is allowed within a Wetland Protection Area, so long as no native vegetation is disturbed. The owner shall have the burden to demonstrate continuing status under this section.
- (b) Any sign or structure that has been determined by the Building Official to be derelict or dangerous, as defined in SRC 50.600 and 56.230, shall be removed.
- (c) Replacement of a sign or structure which is deemed continued pursuant to this section shall be allowed, provided, however, that the structure or sign has the same building footprint and does not disturb additional area.

(d) Expansion of a sign or structure which is deemed continued pursuant to this section shall be allowed, provided, however, that the area of expansion is not located within and does not disturb the Wetland Protection Area, and otherwise complies with the development standards applicable within the zone.

Section 12. SRC 126.090. Allowed Activities. The following activities, and maintenance thereof, are allowed within a Wetland Protection Area, provided that any applicable state or federal permits are secured:

- (a) Wetland restoration and rehabilitation;
- (b) Restoration and enhancement of native vegetation;
- (c) Felling, and if necessary to protect wetland functions, removal of trees which pose a hazard to structures or people due to threat of falling;
- (d) Removal of non-native vegetation, if replaced with native plant species at an appropriate coverage or density;
- (e) Normal farm practices, such as grazing, planting, cultivation and harvesting, that meet the following criteria:
 - (1) The land is zoned Exclusive Farm Use;
 - (2) The farm practices were occurring on the property on **(give effective date of ordinance)**, are of no greater scope or intensity than the operations on this date; and
 - (3) The farm practice does not involve any new or expanded structures, roads, or other facilities, the placement of fill material, excavation, or any new drainage measures.
- (f) Maintenance of existing drainage ways or ditches, other than structures, to maintain flow at original design capacity and mitigate upstream flooding, provided that management practices minimize sedimentation and impact to native vegetation;
- (g) Emergency stream bank stabilization;
- (h) Maintenance and repair of existing roads and streets, including repaving and repair of existing bridges and culverts, provided that effective practices are used to minimize sedimentation and other discharges into the Wetland Protection Area;
- (i) Interpretative and educational improvements, including, but not limited to, boardwalks, elevated bridges and ramps, and new fencing, provided, however, that the applicant demonstrates to the Director that the following criteria are satisfied:

- (1) The improvements or fencing do not affect the hydrology of the site;
- (2) The improvements or fencing do not create an obstruction that would increase flood velocity or intensity;
- (3) Fish habitat is not adversely affected;
- (4) The improvements or fencing is the minimum necessary to achieve the applicant's purpose;
- (5) Applications for improvements or new fencing within a Wetland Protection Area shall contain a scale drawing that clearly depicts the Wetland Protection Area boundary.

Section 13. SRC 126.100. Activities Prohibited within Wetland Protection Areas.

(a) Except as may otherwise be permitted under Section 126.080 or 126.090 above, the following activities are prohibited within a Wetland Protection Area:

- (1) Placement of new structures or impervious surfaces;
- (2) Excavation, drainage, grading, fill, or removal of vegetation, except for fire protection purposes or removing hazard trees;
- (3) Expansion of ornamental landscaping, such as a lawn or garden, into the wetland protection area;
- (4) Dumping, piling, or disposal of refuse, yard debris, or other material;
- (5) New direct discharge of untreated stormwater, unless in compliance with the City Stormwater Master Plan; and
- (6) Uses not allowed as a permitted use in the underlying zone.

Section 14. SRC 126.110. Exceptions.

(a) Notwithstanding SRC 126.090, the City may make excavation, fill, placement of impervious surfaces and vegetation removal in a Wetland Protection Area in order to provide for the improvement of a road in a public right-of-way that existed on (Add Date), where there is a clear public interest in providing the improvement, and there is no reasonable alternative that would result in less damage to the Wetland Protection Area.

(b) An exception to the provisions of SRC 126.070 through 126.100 may be granted to a property owner if all of the following criteria are satisfied:

(1) Through application of this ordinance, the property has been rendered not buildable or a significant hardship under SRC 115.020 has been imposed on the property;

(2) The applicant has sought a redesignation or redelineation, and been denied;

(3) The exception is the minimum necessary to afford relief, considering the potential for increased flood and erosion hazard, and potential adverse impacts on native vegetation, fish and wildlife habitat, and water quality;

(4) No significant adverse impacts on water quality, erosion, or slope stability will result from approval of this hardship variance, or these impacts have been mitigated to the greatest extent possible; and

(5) Loss of vegetative cover is minimized.

(b) Requests for exceptions under this section shall be processed under the provisions of to SRC Chapter 115.

APPENDIX C

SRC CHAPTER 68: PRESERVATION OF TREES AND VEGETATION

CHAPTER 68

PRESERVATION OF TREES AND VEGETATION

- 68.010. Title and Purpose
- 68.020. Definitions
- 68.025. Prohibited Activities
- 68.030. Consistency; Relationship to other Regulations
- 68.035. Significant Trees
- 68.040. Tree Stands
- 68.050. Trees and Vegetation in Riparian Corridors
- 68.065. Regulated Area Maps; Adoption; Amendment
- 68.070. Exceptions Review
- 68.075. Tree Conservation Plans
- 68.080. Variances
- 68.085. Violations

68.010. TITLE AND PURPOSE. The purpose of this chapter is to regulate the removal of trees in order to preserve the wooded character of the City and to protect trees and vegetation as natural resources of the City. (Ord. 13-2000)

68.020. DEFINITIONS. DEFINITIONS. As used in this chapter, except where the context otherwise clearly requires: (a) Words and phrases defined in SRC chapter 111 shall have the meaning set forth therein unless another definition is set forth in this section.

(b) Arborist means a person who has met the criteria for certification from the International Society of Arboriculture, American Society of Consulting Arborists, or similar professional organization, and maintains accreditation.

(c) Existing landscaping means an area existing prior to June 21, 2000 and within a waterway that is managed to provide human-oriented benefits and is comprised of, but not limited to, the following elements: a combination of native and non-native trees and vegetation, ponds, rocks, bark chips, cinders, terraces, vegetable or flower gardens, trellises, or pathways that has reasonably required, and continues to reasonably require, human management to distinguish the area from a natural area.

(d) Fish-bearing waterway means a waterway which supports salmonid fish species. Designation of fish-bearing waterways is based on information in "City of Salem Fish Distribution, 1999", prepared by the Oregon Department of Fish and Wildlife, data from the Oregon Division of State Lands, and maps prepared by the Oregon Department of Forestry. Fish-bearing waterways include those waterways upstream of studied waterways, from the point of connection with downstream water where fish presence is known, to the first natural or non-removable fish passage barrier.

(e) Fish Passage Barrier means an obstacle that prevents or impedes any life stage (juvenile to adult) of fish from successful upstream or downstream passage (recognizing that factors such as jumping ability, swimming speed and swimming endurance can vary between age class and species). Typical impediments to passage include: 1) drops or jump heights that are too high; 2) steep gradients; 3) high water velocities; 4) turbulence; 5) inadequate depth in a jump pool or a long reach of stream; 5) distances that require sustained swimming without rest; and, 6) openings too narrow or small for fish to pass through. Barriers can be either natural or artificial. Natural barriers are most often created by waterfalls or reaches of stream that are of extremely high gradient, turbulence, or velocity. Artificial barriers can include dams, culverts, some bridges, fords or even water quality (temperature, pollution) and flow modification.

(f) Hazard tree means a tree that is cracked, split, leaning or physically damaged to the degree that it is likely to fall and injure persons or property. Hazard trees include diseased trees, meaning those trees with a disease of a nature that, without reasonable treatment or pruning, is likely to spread to adjacent trees and cause such adjacent trees to become diseased or hazard trees.

(g) Intact riparian corridor vegetation means vegetation that is characterized by a diverse, multi-layered assemblage of native trees and a vigorous, dense understory of native plants that provide any or all of the following benefits: (1) maintains or improves water quality; (2) provides fish and wildlife habitat; (3) mitigates development-related hydrologic changes, (4) mitigates flood hazards; and, (5) provides other significant ecological, aesthetic, or educational benefits due to its natural conditions and functions.

(h) Invasive non-native vegetation means plant species that have been introduced to an area and due to aggressive growth patterns and lack of natural enemies spread rapidly into native

plant communities. For purposes of this chapter, a list of invasive non-native vegetation shall be prepared by the planning administrator and maintained at the city's permit center.

(i) Native vegetation means plant species which are indigenous to the area and appropriate to local site conditions such as hydrology, soils, light availability, and slope aspect.

(j) Non-Removable Fish Passage Barrier means a fish passage barrier, the removal of which is not practicable, considering the permanency of the barrier, the cost and value of its removal, and the availability of resources to effect removal.

(k) Percent slope means an inclined earth surface expressed as the ratio of vertical distance to horizontal distance, multiplied by 100; e.g., a 25 percent slope is a vertical rise of 25 feet over a horizontal distance of 100 feet multiplied by 100.

(l) Person means an individual, corporation, local or state government, association, firm, partnership, limited liability company or joint stock company.

(m) Planning administrator means the Urban Planning Administrator of the department of community development or designee.

(n) Restoration means the return of a stream, wetland, or riparian corridor to a state in which its functions and values approach its unaltered state as closely as possible.

(o) Riparian corridor means the land and water resources included in the area adjacent to a waterway consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem. The riparian corridor boundary is measured 50 feet horizontally from the top of bank on each side of a waterway with less than 1,000 cubic feet per second average annual stream flow, and 75 feet horizontally from the top of bank of each side of a waterway with 1,000 or more cubic feet per second average annual stream flow (Willamette River). Where such area includes all or portions of a significant wetland, the riparian corridor includes the whole of the wetland, and the corridor boundary is measured horizontally from the upland edge of the wetland. The upland edge of the wetland is indicated on the significant wetlands map or on a wetland delineation approved by the Oregon Division of State Lands under OAR 141-086-0120.

(p) Salmonid fish species are fish of the family Salmonidae which include salmon and trout.

(q) Significant tree means (1) Heritage, rare, threatened or endangered tree of any size as defined or designated under state or federal law and identified in records maintained by the Planning Administrator, or (2) Heritage tree defined in SRC 86.010, designated by council and identified in records maintained by the Planning Administrator.

(r) Significant wetland means a wetland that meets the criteria for locally significant wetland as defined in OAR 141-086-0350 and as determined by the city council.

(s) Top of bank means the elevation at which water overflows the natural banks and begins to inundate the upland. In the absence of physical evidence, the two-year recurrence interval flood elevation may be used to approximate the top of bank.

(t) Tree means any living, standing, woody plant, having a trunk eight inches or more in diameter or 25 inches or more in circumference, measured at a point four feet above grade at the base of the trunk. If a tree splits into multiple trunks above ground, but below four feet, the trunk is measured at its most narrow point beneath the split, and is considered one tree. If the tree splits into multiple trunks below the ground, each trunk shall be considered one tree. For the purposes of this chapter, English laurel, photinia, arborvitae, poison oak, and English ivy shall not be considered a tree.

(u) Tree conservation plan means a site plan submitted with a building permit or land use application identifying trees for preservation which is prepared, reviewed, and approved as provided in SRC 68.075.

(v) Tree removal, remove or removal means to cut down a tree or remove all or 50% or more of the crown, trunk, or root system of a tree; or to damage a tree so as to cause the tree to decline or die. "Removal" includes but is not limited to topping, damage inflicted upon a root system by application of toxic substances, operation of equipment and vehicles, storage of materials, change of natural grade due to unapproved excavation or filling, or unapproved alteration of natural physical conditions. "Removal" does not include normal trimming or pruning of trees.

(w) Vegetation means any living plant, other than a tree eight inches or more in diameter or 25 inches or more in circumference. Vegetation includes all grasses, plants and shrubs.

(x) Waterway means any perennial river, stream, or creek within the city as designated by the director of public works or designee.

(y) Water-dependent use means a use or activity which can be carried out only on, in, or adjacent to water areas because the use requires access to the water body for water-borne transportation, recreation, energy production, or source of water.

(z) Wetland means an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (ORS 196.800). (Ord. 13-2000; Ord No. 30-2000)

68.025. PROHIBITED ACTIVITIES. Except as provided in this chapter, it shall be unlawful for a person to cause, suffer or permit the removal of trees contrary to the provisions of this chapter. (Ord. 13-2000)

68.030. CONSISTENCY; RELATIONSHIP TO OTHER REGULATIONS. Where more than one section of this chapter applies to particular tree stands or significant trees, the sections shall independently apply, unless there is a conflict in which case the more restrictive, (preservation-facilitating) provision will apply. Where the provisions of this chapter conflict with other provisions of this code, or comparable state or federal law, the provisions that are the more restrictive shall govern. (Ord. 13-2000)

68.035. SIGNIFICANT TREES. No significant trees may be removed except pursuant to an approved tree conservation plan as described in SRC 68.075, or if excepted under SRC 68.070 (b) (1), or as permitted under the terms of a variance provided in SRC 68.080. (Ord. 13-2000; Ord. 33-2001)

68.040. TREE STANDS. On lots or parcels 20,000 square feet or more in area, or on contiguous property under the same ownership 20,000 square feet or more in area, no more than five trees or up to 15% of the trees on the property, whichever is greater, may be removed within a calendar year. Exceptions to the requirements of this section may be allowed pursuant to an approved tree conservation plan as described in SRC 68.075, or if excepted under SRC 68.070, or permitted under the terms of a variance as provided in SRC 68.080. (Ord. 13-2000)

68.050. TREES AND VEGETATION IN RIPARIAN CORRIDORS. (a) Corridors of fish-bearing waterways. No trees or intact riparian corridor vegetation shall be removed within the riparian corridor of a fish-bearing waterway.

(b) Corridors of non fish-bearing waterways.

No trees shall be removed within the riparian corridor of a non fish-bearing waterway.

(c) Fish-bearing and non fish-bearing waterways shall be shown on maps adopted as part of this chapter.

(d) Trees and vegetation in riparian corridors may be removed if excepted under Section 68.070 or permitted under the terms of a variance provided in Section 68.080. (Ord No. 30-2000)

68.065. REGULATED AREA MAPS; ADOPTION; AMENDMENT. (a) Maps the boundaries of fish-bearing and non fish-bearing waterways and significant wetlands shall be adopted by ordinance by the council and shall be available in the city's permit center and entered in the city's Geographic Information System data files.

(b) Amendments to these maps may be made by council based upon the receipt of corrected, updated or refined data or the revision of studies upon which the maps were initially based. When map amendments are requested by persons other than the city, field investigation and analysis by a qualified expert shall be required to confirm the extent of the regulated area. A "qualified expert" for the purposes of this subsection means a person who is professionally trained in the relevant area: e.g., wetlands biology or ecology; hydrology; stream and fisheries biology or ecology. (Ord No. 30-2000)

68.070 EXCEPTIONS; REVIEW. (a) **Exceptions Not Requiring Administrative Review.** Unless identified as an exception requiring administrative review under subsection (b) of this section, the following tree removals are excepted from the requirements of this chapter without the need for administrative review and approval.

(1) Those in vision clearance areas, defined in SRC 130.280.

(2) Those required by the city or a public utility for the installation or maintenance or repair of roads, utilities or other structures or improvements within publicly owned and accepted rights-of-way, easements or properties subject to immediate possession condemnation by any government.

(3) Those vegetation removals necessary for continued maintenance of existing landscaping.

(4) Those associated with commercial operation of orchards and Christmas tree farms;

(5) Those necessary for the installation, maintenance or repair of any of the following: irrigation systems; stormwater detention areas; pumping stations; erosion control and soil stabilization features; and pollution reduction facilities. Maintenance includes the cleaning of existing drainage facilities and trash removal.

(6) Those constituting invasive non-native or nuisance vegetation in riparian corridors, as this vegetation is shown on a list prepared by the planning administrator and maintained in the city permit center.

(7) Those necessary for public trail development and maintenance.

(8) Those necessary to conduct flood mitigation.

(9) Those necessary to effect emergency actions which must be undertaken immediately or for which there is insufficient time for full compliance with this chapter when it is necessary to

prevent an imminent threat to public health or safety, or prevent imminent danger to public or private property, or prevent an imminent threat of serious environmental degradation. Trees subject to emergency removal must present an immediate danger of collapse. For purposes of this subsection, "immediate danger of collapse" means that the tree is already leaning, with the surrounding soil heaving, and there is a significant likelihood that the tree will topple or otherwise fall and cause damage. The person undertaking emergency action shall notify the planning administrator within one working day following the commencement of the emergency activity. If the planning administrator determines that the action or part of the action taken is beyond the scope of allowed emergency action, enforcement action by the department of community development may be taken.

(10) Those on city-owned land, or "shade trees", "street trees" or "trees" defined in and subject to the provisions of SRC chapter 86.

(11) Those associated with the establishment or alteration of any public park.

(12) Those effected in the course and scope of the duties of agents of the city or public utility companies maintaining public facilities or public utilities.

(13) Those commercial timber harvests conducted in accordance with the Oregon Forest Practices Act (FPA), ORS 527.610 to 527.992, on properties enrolled in a forest property tax assessment program, and which are not being converted to a non-forestland use. Properties from which trees have been harvested under the FPA may not be partitioned, subdivided, developed as a planned unit development, or developed for commercial uses for a period of five years following the completion of the timber harvest.

(14) Those associated with mining operations conducted in accordance with an existing operating permit approved by the Oregon Department of Geology and Mineral Industries (DOGAMI) under Oregon Mining Claim law (ORS 517.750 to 517.955).

(b) **Exceptions Requiring Administrative Review.** The following exceptions shall require application to, review and approval by the planning administrator prior to any tree removal under the exception:

(1) **Hazard and Diseased Trees.** The applicant for a hazard tree exception must show that the condition or location of the tree presents a hazard or danger to persons or property; and that such hazard or danger cannot reasonably be alleviated by treatment or pruning. The applicant for an exception for a diseased tree shall demonstrate that the subject tree has a disease of a nature that even with reasonable treatment or pruning is likely to spread to adjacent trees and cause such trees to become hazard trees.

(2) **Restoration Activity.** The applicant for an exception for restoration activities must demonstrate that the proposed use or development is designed to improve the habitat, hydrology, or water quality function of the riparian corridor or wetland without reducing any of these functions; that short-term impacts of the activity will be minimized and effective erosion control measures will be implemented; and all necessary permits have been obtained. Examples of restoration activity warranting an exception include replacing non-native invasive species with native species, removing barriers to fish migration, re-shaping and planting a stream bank prone to erosion, or enhancing fish or wildlife habitat. In addition to other application requirements, the applicant must submit plans showing the topography, inventory of vegetation, and details of the area receiving restoration, including proposed work and anticipated results.

(3) **Exceptions for maintenance or replacement of existing structure.** The applicant for exceptions necessary for repair, alteration or replacement of structures existing as of June 21, 2000 must demonstrate that the exceptions are reasonably necessary to effect the otherwise lawful repair,

alteration or replacement of such structures; that the structure footprint is not enlarged; and that no additional riparian corridor area is disturbed beyond that essential to the undertaking.

(4) Exceptions necessary for water-dependent uses. The applicant for an exception to allow tree or vegetation removal necessary for the development of a water-dependent use shall demonstrate that the proposed use is a water-dependent use as defined, and that no additional riparian corridor area is disturbed beyond that essential to the development.

(5) Tree removal subject to a tree conservation plan under SRC 68.075 (b) when at least 25% of the trees on a property are proposed for preservation.

(6) Tree removal subject to a tree conservation plan under SRC 68.075 (c) when less than 25% of the trees on a property are proposed to be preserved.

(7) Exceptions in areas subject to map error. An applicant claiming a map error shall show that, based upon the information available when the subject map was adopted, a cartographic error or clear interpretational mistake caused the erroneous inclusion of the property.

(c) **Application and Review, Generally.** Applicants seeking exceptions requiring administrative review and determination shall file applications upon forms prescribed by the planning administrator along with such fee as the council shall establish by resolution. The application shall contain (1) the number, size, and location of trees to be removed on a site plan of the property, (2) a statement of the reason for removal, (3) demonstration of required basis for the exception, and (4) any other information reasonably required by the planning administrator. The applicant shall have the burden of proving that the application complies with this section and may be required by the planning administrator at applicant's expense to provide reports from an arborist. The city shall have the right, at its own expense, to hire a qualified expert to obtain a second or additional opinion. (Ord N. 30-2000; Ord. 33-2001)

68.075 TREE CONSERVATION PLANS. Tree conservation plans shall be required in conjunction with any building permit, land division, manufactured dwelling or mobile home placement permit or park permit, conditional use, variance, greenway permit or planned unit development, for properties with trees protected by this chapter and proposed for removal. Tree conservation plans shall be submitted and approved as follows:

(a) **Submittal Requirements.** Tree conservation plan submittals shall be filed with the planning administrator and shall be accompanied by such fee as council adopts by resolution. The submittal shall include a site plan of the subject property showing contour lines at two foot intervals, identification of slopes greater than 25 percent, identification of the type, size and location of all existing trees on the property, existing and proposed structures, parking areas, utilities and other improvements, buffer yards and required yards, and identification of those trees proposed for preservation and those designated for removal.

Where the property is the site of a fish-bearing riparian corridor or fish-bearing riparian corridor containing a significant wetland, the boundary of the riparian corridor and significant wetland shall be shown along with a description of the vegetation within any significant wetland or riparian corridor located on site.

(b) **Non-Discretionary Approval Criteria.** Tree conservation plans designating for preservation 1) all trees subject to SRC 68.035 and 68.050, and 2) at least 25% of the existing trees on the property, shall be approved administratively.

(c) **Discretionary Approval Criteria.** When less than 25% of the trees on a property are proposed for preservation, the applicant shall show, and the planning administrator shall find that

only those trees reasonably necessary to be removed to accommodate development are designated for removal. In designating trees, the applicant shall show, and the planning administrator shall find, that trees subject to SRC 68.035 are designated for preservation and that trees have been designated in a manner as to provide buffers from adjacent properties, unless the removal of such trees is shown to be reasonably necessary to accommodate development.

Trees subject to SRC 68.050 shall not be designated for removal unless the applicant demonstrates, and the planning administrator finds, that there are no reasonable design alternatives that would enable preservation of such trees.

Other trees shall be designated for preservation which best meet the following criteria:

1) have the greatest chance for survival; 2) will buffer adjacent properties; 3) are Heritage trees; 4) will be located within required yards and buffer yards; 5) are greater than 24 inches in diameter; 6) are located on slopes greater than 25 percent; and 7) are least subject to windthrow, determined based upon expected wind conditions, tree support conditions, and the impact of the removal of surrounding trees.

(d) **Tree Protection Measures During Construction.** All trees designated for preservation under the tree conservation plan shall be marked and protected from removal during construction.

(e) **Approval, Effect, Appeal.** When less than 25% of the trees on property are proposed for preservation under SRC 68.075 (c), the planning administrator shall adopt written findings and conclusions supporting the administrator's action, and shall serve by regular mail a copy of the decision on the applicant and each property owner in the notification area defined in SRC 111.150.

Unless the council initiates review pursuant to SRC 114.210, or an appeal to the Hearings Officer filed within 15 calendar days from the date the decision is mailed, the planning administrator's decision shall be final.

Upon approval by the planning administrator, the tree conservation plan and any amendments of the plan shall be binding on the property and adherence to the plan shall become a condition of approval for any building permit or subdivision, partition, manufactured dwelling or mobile home placement or park permit, conditional use, variance, greenway permit or planned unit development. Tree conservation plans for single family residential land divisions shall be of no further force and effect on any lot following completion of a residence on that lot. Completion of the residence shall mean that a Final Occupancy Permit or Notice of Final Completion has been issued. No tree designated for removal shall be removed until the tree conservation plan is approved and the permit or action it is filed in conjunction with is issued. (Ord No. 13-2000; Ord No. 30-2000)

68.080. VARIANCES. Variances from the requirements of this chapter which are reasonably necessary to permit development or activity associated with an otherwise lawful use may be granted by the planning administrator. Variance applications shall be made upon forms prescribed by the planning administrator and accompanied by such fee as the council by resolution shall provide.

(a) **Hardship Variance.** The applicant for a hardship variance must demonstrate that the criteria set forth in SRC 115.020 are met and that the proposed variance is the minimum necessary to allow for the requested use. In granting a variance, the planning administrator may impose such conditions as are necessary to limit any adverse impacts that may result from granting relief. In addition, the variance to the requirements of SRC 68.050 shall be subject to the following conditions: those altered riparian corridor areas that can be reasonably restored, shall be restored, and

in no case shall alterations either (1) occupy more than 50 percent of the width of the riparian area measured from the upland edge of the corridor, or (2) result in less than 15 feet of vegetated corridor on each side of the waterway.

(b) **Economical Use Variance.** The applicant for an economical use variance shall demonstrate that without the exception, the applicant would be denied all economically viable use of the applicant's property or otherwise suffer an unconstitutional taking of property; that the standards of SRC 115.020 cannot be met; that no other application could result in permission for an economically viable use, considering all allowed uses; that the proposed exception is the minimum necessary to allow for economically viable use or otherwise avoid a taking of property, and that the proposed exception is consistent with all other applicable local, state and federal laws.

(c) The planning administrator shall adopt written findings and conclusions supporting the administrator's action, and shall serve by regular mail a copy of the decision on the applicant and each property owner in the notification area defined in SRC 111.150. Unless the council initiates review pursuant to SRC 114.210, or an appeal to the Hearings Officer is filed within 15 calendar days from the date the decision is mailed, the planning administrator's decision shall be final. (Ord. 13-2000; Ord No. 30-2000)

68.085. VIOLATIONS. (a) **Penalties.** A violation of any provision of this chapter or the breach of any condition of a variance or provision of a tree conservation plan shall be an infraction. The second and subsequent violation in any one year period shall be a misdemeanor. In addition to penalties associated with an infraction or misdemeanor, the city enforcement staff may require the person to pay as an enforcement fee an amount established by resolution of the council or in the absence of such resolution, the value of the tree as determined by an arborist in accordance with the methods set forth in the "Guide for Plant Appraisal," an official publication of the International Society of Arboriculture.

(b) **Cumulative remedies.** The rights, remedies and penalties provided in this chapter are cumulative and not mutually exclusive and are in addition to any other right, remedies and penalties available to the city under any other provision of law.

(c) **Evidence of violation.** In cases of tree removal, violations shall be determined by measuring the stump. Lacking evidence to the contrary, a stump that exceeds 110 percent of the regulated diameter shall be considered prima facie evidence of a violation of this chapter. Proof of violation of this chapter shall be deemed prima facie evidence that such violation is that of the owner of the property upon which the violation was committed. Prosecution of or failure to prosecute the owner shall not be deemed to relieve any other responsible person. (Ord. 13-2000)

APPENDIX D

PHOTOGRAPHS



Photo 1: Pringle Creek, showing log structures placed as part of restoration work



Photo 2: Riparian corridor of Pringle Creek showing blackberry control and willow plantings



Photo 3: Pringie Creek riparian corridor, showing area of plantings and red alder reproduction



Photo 4: Non fish-bearing stream (Area 1) showing incised channel and blackberry thickets



Photo 5: Significant Tree Stand Number 5



Photo 6: Significant Tree Stand Number 13



Photo 7: Significant Tree Stand Number 16



Photo 8: Open grasslands and old fields with blackberry thicket



Photo 9: Blackberry thickets and old orchards



Photo 10: Mixed saplings, shrubs and grassland

APPENDIX E

NATIVE PLANTS FOUND ON SITE

Botanical Name	Common Name
<i>Abies grandis</i>	Grand fir
<i>Acer circinatum</i>	Vine maple
<i>Acer macrophyllum</i>	Bigleaf maple
<i>Allium sp.</i>	Wild onion
<i>Alnus rubra</i>	Red alder
<i>Amelanchier alnifolia</i>	Serviceberry
<i>Arbutus menziesii</i>	Pacific madrone
<i>Athyrium filix-femina</i>	Lady fern
<i>Bidens frondosa</i>	Beggars' ticks
<i>Callitriche heterophylla</i>	Water starwort
<i>Cardamine oligosperma</i>	Few-seeded bittercress
<i>Carex densa</i>	Dense sedge
<i>Carex obnupta</i>	Slough sedge
<i>Cornus sericea</i>	Red osier dogwood
<i>Corylus cornuta</i> *	Beaked hazelnut
<i>Crataegus douglasii</i>	Black hawthorn
<i>Eleocharis palustris</i>	Common spikerush
<i>Epilobium ciliatum</i>	Watson's willow herb
<i>Equisetum telmateia</i>	Giant horsetail
<i>Fraxinus latifolia</i>	Oregon ash
<i>Gaultheria shallon</i>	Salal
<i>Geum macrophyllum</i>	Large-leaf avens
<i>Impatiens noli-tangere</i>	Western touch-me-not
<i>Juncus effusus</i>	Soft rush
<i>Juncus ensifolius</i>	Daggerleaf rush
<i>Mahonia aquifolium</i>	Tall Oregon grape
<i>Oemleria cerasiformis</i>	Indian plum
<i>Oenanthe sarmentosa</i>	Water parsley
<i>Quercus garryana</i>	Oregon oak
<i>Physocarpus capitatus</i>	Pacific ninebark
<i>Pinus ponderosa</i>	Ponderosa pine
<i>Polystichum munitum</i>	Swordfern
<i>Populus trichocarpa</i>	Black cottonwood
<i>Pseudotsuga menziesii</i>	Douglas fir
<i>Pteridium aquilinum</i>	Brackenfern
<i>Quercus garryana</i>	Oregon white oak
<i>Rhus diversiloba</i>	Poison oak
<i>Rosa nootkatensis</i>	Nootka rose

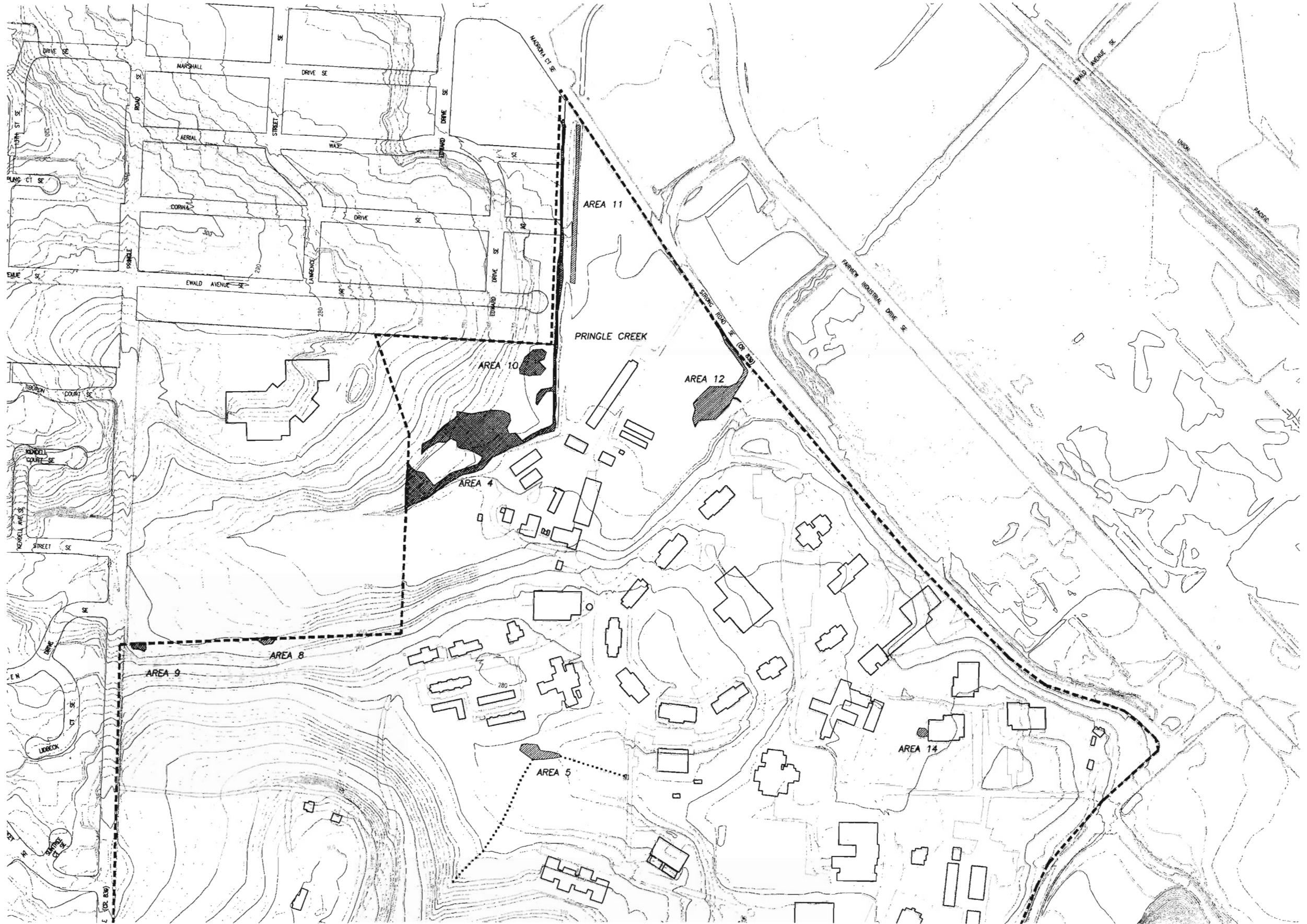
Botanical Name	Common Name
<i>Rosa pisocarpa</i>	Clustered rose
<i>Rubus spectabilis</i>	Salmonberry
<i>Rubus ursinus</i>	Dewberry
<i>Salix lasiandra</i>	Pacific red willow
<i>Salix piperi</i>	Piper willow
<i>Salix scouleriana</i>	Scouler willow
<i>Sambucus racemosa</i>	Red elderberry
<i>Scirpus microcarpus</i>	Small-fruited bulrush
<i>Symphoricarpos albus</i>	Snowberry
<i>Taxus brevifolia</i>	Pacific yew
<i>Tolmiea menziesii</i>	Piggy-back plant
<i>Typha latifolia</i>	Common cattail
<i>Veronica americana</i>	Veronica
<i>Vicia americana</i>	American purple vetch

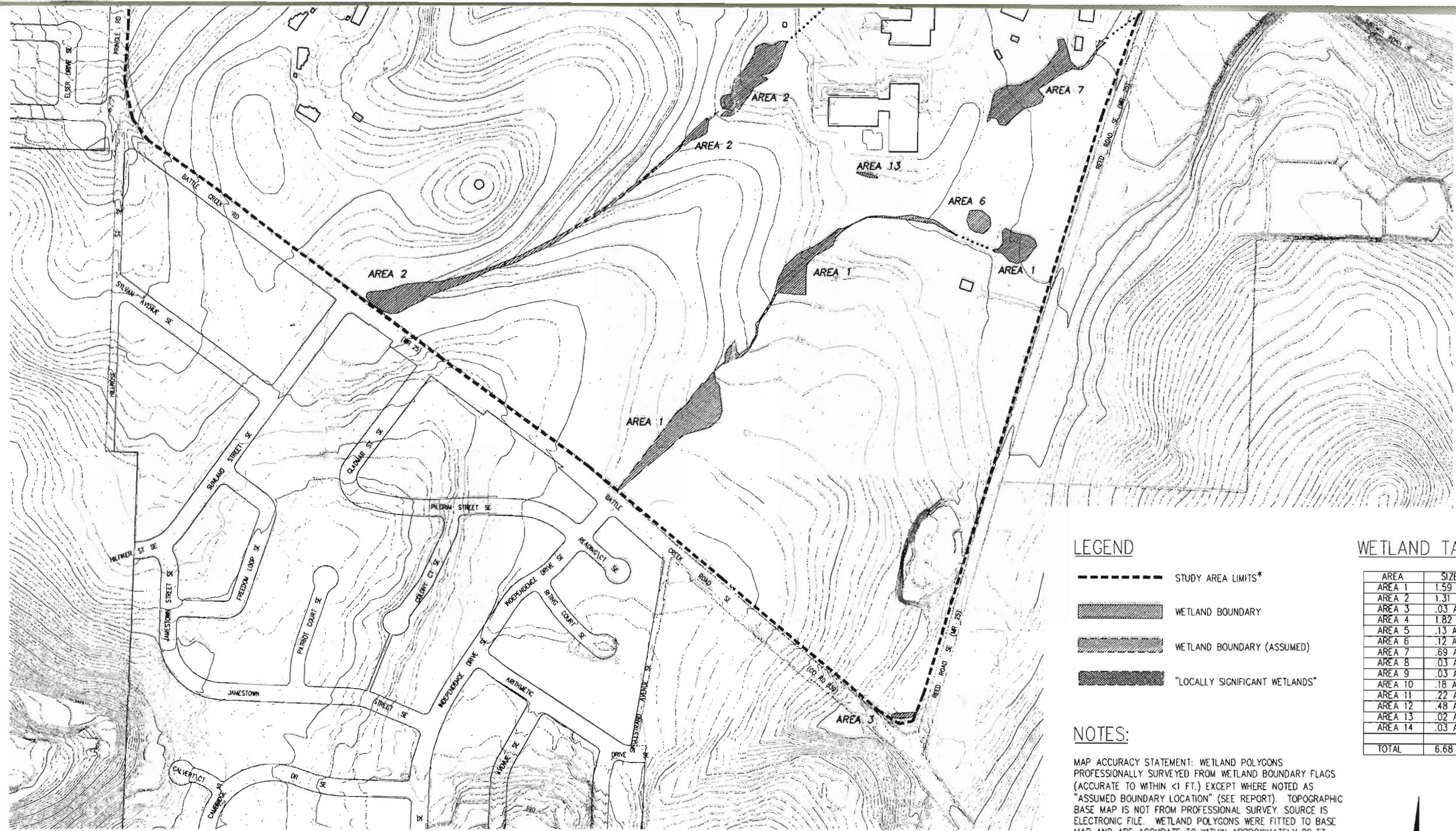
APPENDIX F

**ANIMAL AND BIRD SPECIES
OBSERVED ON SITE**

Common Name	Scientific Name
Black tailed deer *	<i>Odocoileus hemionus ssp. columbianus</i>
Striped skunk	<i>Mephitis mephitis</i>
Coyote	<i>Canis latrans</i>
Nutria *	<i>Myocastor coypus</i>
Raccoon *	<i>Procyon lotor</i>
Bewick's wren	<i>Thryomanes bewickii</i>
Rufous-sided towhee	<i>Pipilo erythrophthalmus</i>
Mourning dove	<i>Zenaida macroura</i>
Common crow	<i>Corvus brachyrhynchos</i>
Red-breasted nuthatch	<i>Sitta canadensis</i>
Northern flicker	<i>Colaptes auratus</i>
Robin	<i>Turdus migratorius</i>
Scrub jay	<i>Aphelocoma coerulescens</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Red-breasted sapsucker	<i>Sphyrapicus ruber</i>
American goldfinch	<i>Carduelis tristis</i>
Bushtit	<i>Psaltriparus minimus</i>
Black-capped chickadee	<i>Parus atricapillus</i>
Dark-eyed junco	<i>Junco hyemalis</i>

* Signs of this animal observed. Presence reported by others.





LEGEND

- STUDY AREA LIMITS*
- WETLAND BOUNDARY
- WETLAND BOUNDARY (ASSUMED)
- "LOCALLY SIGNIFICANT WETLANDS"

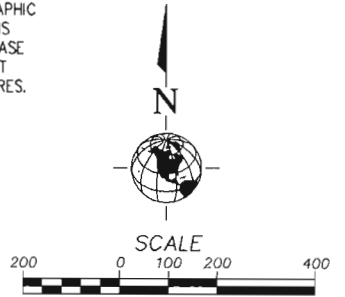
NOTES:

MAP ACCURACY STATEMENT: WETLAND POLYGONS PROFESSIONALLY SURVEYED FROM WETLAND BOUNDARY FLAGS (ACCURATE TO WITHIN <1 FT.) EXCEPT WHERE NOTED AS "ASSUMED BOUNDARY LOCATION" (SEE REPORT). TOPOGRAPHIC BASE MAP IS NOT FROM PROFESSIONAL SURVEY. SOURCE IS ELECTRONIC FILE. WETLAND POLYGONS WERE FITTED TO BASE MAP AND ARE ACCURATE TO WITHIN APPROXIMATELY 20 FT HORIZONTALLY RELATIVE TO CONTOURS AND OTHER FEATURES.

*STUDY AREA LIMITS APPROXIMATE THE PROPERTY LIMITS, EXCEPT ALONG PRINGLE CREEK, WHERE STUDY AREA WAS EXTENDED TO INCLUDE WEST BANK OF CREEK.

WETLAND TABLE

AREA	SIZE
AREA 1	1.59 Ac.
AREA 2	1.31 Ac.
AREA 3	.03 Ac.
AREA 4	1.82 Ac.
AREA 5	.13 Ac.
AREA 6	.12 Ac.
AREA 7	.69 Ac.
AREA 8	.03 Ac.
AREA 9	.03 Ac.
AREA 10	.18 Ac.
AREA 11	.22 Ac.
AREA 12	.48 Ac.
AREA 13	.02 Ac.
AREA 14	.03 Ac.
TOTAL	6.68 Ac.



DESIGNED BY	RAI	CHECKED BY	PJD
DRAWN BY	RAI	APPROVED BY	
LAST EDIT	03/26/03	PLOT DATE	10/29/03
DATE	BY	REVISION	DESCRIPTION

FIG. 2

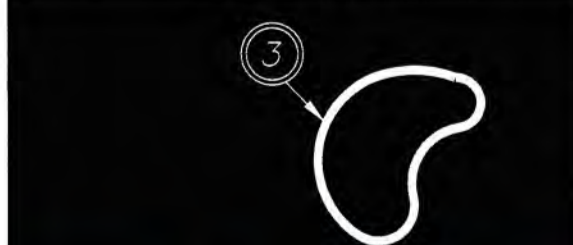

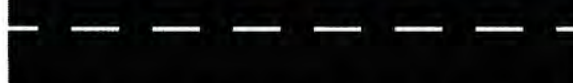



**SUSTAINABLE FAIRVIEW ASSOCIATES
FAIRVIEW - SALEM, OREGON
FIGURE 2
WETLAND MAP**

SALEM	PROJECT NO	30527 (839931)	DRAWING FILE NAME	839931-plan-pfvwvt01
SCALE	AS NOTED			

W&H PACIFIC
 9755 SW Barnes Road
 Suite 300
 Portland, Oregon 97225
 (503)826-0455
 (503)528-0775 Fax
 whpacific.com
 Planners • Engineers • Surveyors • Landscape Architects



LEGEND

-  SIGNIFICANT TREE STAND
-  SITE BOUNDARY
-  FISH BEARING STREAM
-  NON-FISH BEARING STREAM
-  RIPARIAN CORRIDOR (50' BUFFER)
-  WILDLIFE HABITAT TYPES

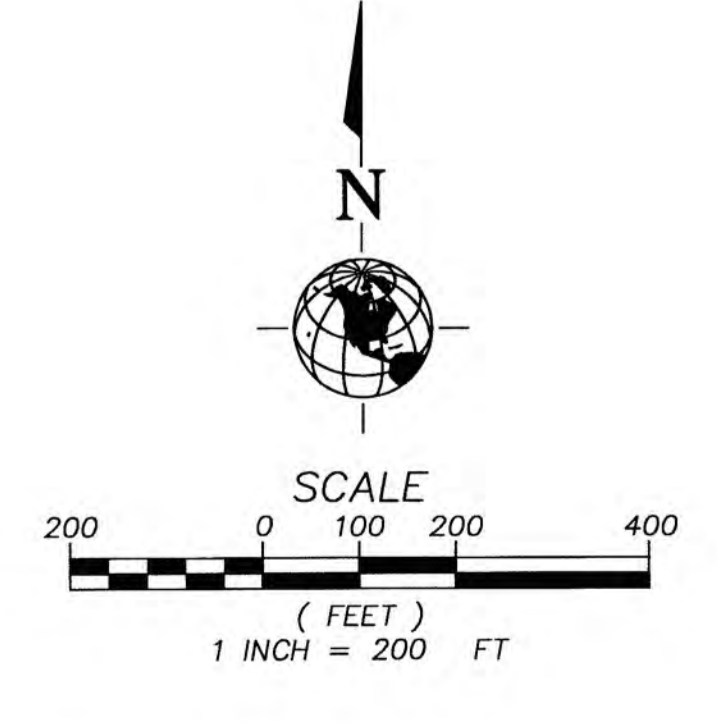


FIG. 3
SHEET

DESIGNED BY:	JUG	CHECKED BY:	PJO		
DRAWN BY:	JUG	APPROVED BY:			
LAST EDIT:	10/16/03	PLOT DATE:	03/07/05		
DATE	BY	REV#	REVISION	CK'D	APPR

SALEM
SCALE:
1"=200'

SUSTAINABLE FAIRVIEW ASSOCIATES
FAIRVIEW - SALEM, OREGON
FIGURE 3
NATURAL RESOURCE INVENTORY MAP

PROJECT NO. 30527 (839931)
DRAWING FILE NAME: 839931-plan-pfvwtt07

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