

Appendix A

NATURAL RESOURCES SPECIAL STUDY

The following are natural resource protection measures developed through the Eugene-Springfield Metropolitan Plan, Goal 5 Natural Resources Special Study. These protection measures include policies, zone districts and ordinance provisions.

- (NR Study Policy #1. Natural Resource Zone).

Purpose. The sole purpose of this new zoning district would be to permanently protect locally outstanding natural resource sites. Sites to which this recommendation is applied are characterized by one or more of the following: relatively pristine condition, presence of rare plants, or the presence of permanent water features and a wildlife habitat rating of 65 points or greater.

For specified riparian and wetland sites, a natural resource zoning district ordinance shall be established to prohibit development, fill, draining, channelizing, grading, removal of soil or vegetation, or other alteration of the site. No conflicting uses shall be permitted within these sites. Passive recreation, removal of litter and fill, replanting with native plants, and environmentally sensitive removal of invasive, non-native species are not considered conflicting uses.

- (NR Study Policy #2. Waterside Protection and Development Ordinance).

Purpose. The purpose of this ordinance is to control development in and adjacent to specified streams, channels, ponds and wetland areas. The ordinance would allow some activity in and alteration of the sites, and thus is less restrictive than the Natural Resource Zone (#5, below). The ordinance would include two categories, each with a different level of development or alteration allowed.

The more restrictive category is called "waterside protection" and is applied to areas where protecting water quality and existing wildlife habitat values are the primary goals. Buildings and other substantial development would not be allowed within or immediately adjacent to these water features. However, a number of activities would be allowed in these areas including channel maintenance, and construction of public utilities, required access roads and trails. These activities would not be allowed under the Natural Resource Zone designation.

Most of the sites that received this recommendation are drainage channels that are designated in a city drainage master plan, are within the floodplain and are designated wetlands on the National Wetland Inventory. Other sites received this recommendation based upon public ownership of the site, a recommendation for protection in an adopted plan, a relatively high wildlife habitat rating or lack of a proper building site due to a water feature with steep banks.

The less restrictive category is called "waterside development" and is intended to allow and even stimulate development of sensitive, creative buildings or other structures within or immediately adjacent to water features. Development in these areas would be subject to design standards which would require development values to be balanced with protection of water quality, wildlife habitat and natural aesthetics. If a portion of a water feature is lost to the development, the ordinance would require the natural character, functions and values of the remainder of the water feature to be enhanced.

Most of the sites receiving the waterside development recommendation are characterized by NWI wetland designation, building sites adjacent to the resource, and high potential for enhancement of the resource. Some of these sites are distinguished by approved development plans, recreational developments that are already underway or policies in adopted plans which call for recreational development.

2a. Waterside Protection

Waterside protection provisions shall be established for specified portions of river, channel, stream, or pond-side riparian areas, wetlands and upland headwaters. Passive recreation, removal of litter and fill, replanting with native plants, and environmentally sensitive removal of invasive, non-native species are not considered conflicting uses. The Waterside Protection provisions shall specify setbacks and allowed conflicting uses within the setback as follows:

- (1) The following buffer widths shall be applied:
 - (a) 75 feet from the line of ordinary high water along Class A streams and ponds (perennial and within the floodway)
 - (b) 50 feet from the line of ordinary high water along Class B streams and ponds (perennial and not within the floodway)
 - (c) 25 feet from the centerline of Class C streams (seasonal or intermittent)
 - (d) 25 feet from the line of ordinary high water of Class C ponds (seasonal or intermittent)
- (2) Conflicting uses within the water feature itself, the waterside buffer area and within any riparian and wetland areas that are contiguous to the specified water feature shall be limited to:
 - (a) Channel maintenance activities as required by law or as necessary to protect the health and safety of property.
 - (b) Restoration and re-vegetation of pond and channel banks, including rehabilitation (including bank grading or terracing)

- and replanting of bare, eroded or sparsely vegetated banks with native plants.
- (c) Realignment of channels to introduce channel meanders and widening of channels to maintain flow capacity with increased vegetation and meandering alignment.
 - (d) Re-configuration of pond banks to enhance wildlife habitat, natural vegetation, scenic and educational value of the pond.
 - (e) Planned public improvements, subject to Waterside Development Ordinance design standards, only after an analysis of impacts on natural resource values has been conducted as follows:

Address the need for the improvement to be located within the setback area, and consider the following options, which are given in priority order: 1) avoid building within the setback area, 2) minimize impact on natural resources within the setback and compensate for any natural values lost by enhancing adjacent or nearby wildlife habitat or natural areas.

- (3) Any bank grading, terracing, or realignment or reconfiguration of channel or pond banks shall be followed with replanting of appropriate native riparian plants, and shall be conducted in such a way as to minimize adverse impacts to water quality and wildlife.

2b. Waterside Development

For specified riparian areas and wetlands, site design standards and best management practices (BMP's) shall be applied to all development and construction projects to protect natural resource values. The standards shall require development values to be balanced with protection of water quality, wildlife habitat, and natural aesthetics. The ordinance would allow development in accordance with the underlying zoning district only if development would maintain or enhance water quality, wildlife habitat, native vegetation, and recreational and educational opportunities within remaining open space areas.

If the area of the natural resource site is reduced, the ordinance would require that water quality, wildlife habitat, native vegetation, and scenic and educational opportunities for the remainder of the site be enhanced. Standards should ensure that new development integrates the natural resource feature(s) into the development in a way that enhances both the resource and the development.

In some cases, the types of structures or developments are limited beyond the limitations of the underlying zoning district. These limits are applied

to sites with high wildlife habitat value and high potential for recreational use, and are described in the individual site recommendations.

Conflicting uses shall be limited to the following (in addition to other specified allowed conflicting uses):

- (1) Development in accordance with the underlying zoning district, subject to standards described above.

- (NR Study Policy #3. Upland Development Design).

Purpose. The intent of this policy is to allow residential development of forested upland areas, while protecting environmentally sensitive and visually important areas such as stream corridors, ridgelines and steep slopes. The sites designated for upland development design are primarily upland areas that were included in the metropolitan buildable lands inventory, are designated for urban development in the Metropolitan Area General Plan, and which do not have permanent or seasonal water features.

For specified upland sites, comprehensive site design standards shall be implemented through local planned unit or cluster development processes to protect natural resource values. Setbacks shall be established to restrict development on and adjacent to specified ridgeline areas. Tree-cutting within the ridgeline set-back area shall be prohibited. Tree removal in upland development areas will be allowed only on a very limited and selective basis, enforced through local tree cutting ordinances. Identified upland stream corridors shall be protected as specified in the waterside protection provisions, Section 2a, above.

Upland site design standards shall allow development in accordance with the underlying zoning district where development would maintain or enhance water quality, wildlife habitat, native vegetation, scenic and recreation values in required open spaces, and specified ridgeline and stream corridors.

In non-stream corridor or ridgeline upland areas conflicting uses shall be limited to the following:

- (1) Residential development through planned unit development or cluster development processes, and construction of necessary related public facilities.
- (2) Tree removal with an approved development plan only for the following purposes: construction of planned streets, installation of necessary public utilities, within planned building footprints, for required solar access, and to protect public health and safety where trees pose an imminent danger.

- (3) Tree removal without an approved development plan only on a very limited and selective basis, ensuring the protection and maintenance of water quality, wildlife habitat, scenic value, and ensuring the potential of the site for future development.

Conflicting uses within specified ridgeline setbacks shall be limited to the following:

- (1) Construction of low impact foot paths and trail signs
- (2) Construction of low impact fire protection and utility maintenance access roads
- (3) Passive recreation (e.g., hiking, wildlife viewing, photography)

• (NR Study Policy #4. Public Access).

Purpose. This policy is intended to identify those natural resource sites which are appropriate for public access, and to specify the level of recreational activity appropriate for those sites. On those sites that are not recommended for public access, public access would not be allowed unless the site is recommended for (2b) Waterside Development. In these cases, access would be allowed in accordance with the underlying zoning district. In some cases Waterside Development sites are specified for low impact access to limit human impact on the resource site.

Most of the sites recommended for public access are undeveloped areas, some of which already have informal access. Larger sites and less environmentally sensitive sites are generally recommended for active access, while smaller, sensitive sites are recommended for low impact access. In some cases the access recommendation is due to an existing plan, policy or approved development.

Within or along specifically identified waterways, riparian areas, wetlands and uplands corridors, two levels of public access shall be planned and conflicting uses shall be allowed (in addition to other specified allowed uses) within the buffer areas as follows:

4a. Low Impact Recreation Access

- (1) Maintenance of existing trails and other facilities
- (2) Construction of minimum impact trails, footpaths, trail signs, and viewing blinds or platforms where appropriate
- (3) Passive recreation and education (e.g., hiking, wildlife viewing, canoeing, fishing)
- (4) Construction of foot bridges or elevated boardwalks (where appropriate), designed to minimize impact on natural resource values.

4b. Active Recreation Access

- (1) All uses listed under 3.A. above
- (2) Construction of bike paths, informational kiosks, observation areas
- (3) Construction of bicycle bridges, jogging trails and picnic areas
- (4) active recreation (e.g., running, bicycling, etc.)

• (NR Study Policy #5. Clean-up, Restoration and Education).

Purpose. This policy is intended to facilitate and encourage sensitive stewardship of our remaining natural resources within the urban area. It is a "pro-active" approach, emphasizing a community effort to enhance and restore the water quality, wildlife habitat value and natural aesthetics of natural resource sites. The actions described below would require capital and human resources, and could be accomplished through a partnership of public, private and non-profit agencies and businesses. This recommendation is applied to all urban natural resource sites with water features.

Within and adjacent to specified riparian, waterway and wetland areas, programs shall be developed to:

- (1) Remove garbage, litter, fill, and other obstructions (e.g., fences)
- (2) Remove invasive, non-native plants (e.g., Himalayan blackberry, Scotch broom, English ivy)
- (3) Restore and re-vegetate pond, channel and stream banks with native riparian plants
- (4) Educate adjacent owners, residents, and proprietors about natural resource stewardship

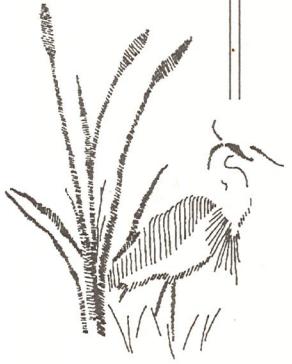
• (NR Study Policy #6. Stormwater Planning).

Purpose. This policy is intended to promote new approaches to stormwater systems that balance the traditional parameters of cost and efficiency with water quality, wildlife habitat value, educational value, and aesthetic value for each specified site. This policy applies to all drainage channels and waterways identified in a city drainage master plan.

For specified natural resource sites which are part of the metropolitan area stormwater drainage system, local governments shall consider the following recommendations:

- (1) Abandon current plans for piping streams or drainageways identified in this inventory in favor of maintaining open, natural channels

- (2) Restore streams to natural conditions (e.g., gently sloped banks, natural riparian vegetation, meandering alignment) through channel improvements such as widening, grading and replanting.
- (3) Acquire easements or additional rights-of-way to allow for expansion of channel widths.
- (4) Widen channels to maintain adequate flow capacity with increased natural vegetation (this approach would be accompanied by changes in channel maintenance practices, such as selective removal or no removal of vegetation within drainage channels).
- (5) Rehabilitate (including bank grading or terracing) and replant bare or sparsely vegetated areas.
- (6) Design new road crossings and reconstruct selected existing road crossings to improve water flow, wildlife habitat, and natural stream qualities (e.g., using bridges and box culverts).
- (7) Restore piped segments of existing drainageways to an open channel condition to provide connections between existing open channels



Appendix B

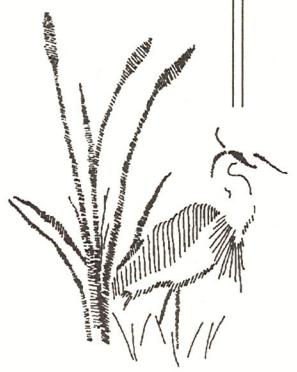
Criteria for Determining Wetland Sites to be Protected and Developed

The following criteria were used to identify those sites suitable for and deserving of protection:

1. Presence of rare plants
2. Site has Metropolitan Plan designation of Natural Resource
3. Site is within the 100 year floodplain
4. Site is near a perennial waterway
5. Site is connected geographically or hydrologically to other wetlands or waterways
6. Site contains a high diversity of wildlife habitat or contributes to the diversity of wildlife habitat within the region
7. Protection of site would further the goals and objectives of this plan
8. Presence of unique Willamette Prairie Grassland plant community

The following is the list of criteria used in evaluating sites for possible development:

1. Prior to adoption of this Plan, the site has an approved wetland impact permit from the Oregon Division of State Lands and U.S. Army Corps of Engineers, or an approved Final Environmental Impact Statement
2. The site is relatively isolated or disconnected from the larger system of wetlands and waterways
3. The site is served by existing streets, roads, sanitary sewers and municipal water
4. The site is adjacent to or surrounded by existing development
5. The site has frontage on a major highway or street



Glossary

GLOSSARY

The following terms are among those used in the West Eugene Wetlands Study which may not be familiar to many readers.

AGRICULTURAL WETLAND: Normally an area must contain three factors to be considered a wetland under the jurisdiction of the state and federal wetland laws (see "Wetland" definition). One exception is when an activity has removed one of those factors. Areas where wetlands soils and hydrology remain, but wetland plants have been removed to allow a crop to be grown are called "agricultural wetlands" or "disturbed areas". If it can be assumed that wetland plants would become re-established if the farming ceased, then the area may be considered a jurisdictional wetland, even though all three factors are not present. This definition of agricultural wetlands is still undergoing debate at the national level.

BEST MANAGEMENT PRACTICES (BMP's): Management practices or techniques used to guide design and construction of new development or infrastructure improvements to minimize adverse environmental impacts. Often organized into a list of practices, from which those practices most suited to a specific site can be chosen to halt or offset anticipated problems. BMP's for a construction site might include: placement of barriers to prevent sediments from entering streams, contour grading, using selected plantings to stop soil erosion during the rainy season, retention of vegetation along a stream, and controlling heavy equipment operations at stream crossings.

BIOFILTER OR BIOLOGICAL FILTER: Using vegetation and water features as a means of filtering pollution from stormwater or streams, water is passed over grassy areas, through sediment traps, and through specially created ponds which trap pollutants or allow them to settle out of the water stream.

BUFFER: A designated area along the perimeter of a stream or wetland which is regulated to control (resist, absorb, or otherwise preclude) the negative effects of adjacent development from intruding into the natural area beyond the buffer.

CANDIDATE ENDANGERED OR THREATENED SPECIES: A species which has been nominated for placement on the federal Endangered or Threatened Species List, but has not been given official status yet for any number of reasons. (See also "Endangered" and "Threatened").

COMPREHENSIVE MONITORING AND MAINTENANCE PROGRAM (CMMP): This program establishes provisions for the monitoring of existing wetland resources and wetlands created, restored or enhanced as a result of wetland mitigation requirements. Wetland mitigation efforts will be monitored against performance standards established during the permitting process and the corrective actions to be taken when these standards are not met. The quantity and quality of surface water, soils, quantity and

diversity of wildlife species and general habitat conditions are the primary factors to be monitored. The program includes maintenance practices such as erosion control, debris and litter removal, selective plant removal and replacement, sedimentation removal, and water level manipulation.

COMPREHENSIVE WETLAND MITIGATION PROGRAM (CWMP): This is a comprehensive program that facilitates and guides wetland mitigation requirements. The program details the wetland functions, values and acreages to be replaced as a result of anticipated wetland losses. It establishes the objectives, location, timing, performance levels, monitoring requirements and the amount of financial guarantee to be provided for insuring successful mitigation.

CONSTRUCTED WETLAND: A facility that exhibits wetland characteristics but was constructed for the express purpose to perform a utility need, such as a sedimentation pond, and is not eligible for mitigation credit or subject to the jurisdictional requirements of federal and state wetland law.

CREATED WETLAND: For the purpose of receiving mitigation credit, the alteration of soils, hydrology, and plants to produce a wetland where no wetland previously existed.

DELINEATION: Determining the boundaries of a jurisdictional wetland. The delineation may be marked in the field or on a map or aerial photograph.

DISTURBED AREA OR WETLAND: See definition of "Agricultural Wetland"

DRAINAGE MASTER PLAN (DMP): Refers to the Eugene Areawide Drainage Master Plan, 1990, a study of stormwater facilities and needs in the Eugene urban growth boundary (see "UGB" definition). This plan was produced by a consultant for the City of Eugene Public Works Department and consists of six volumes.

ECOLOGY: The study of interrelationships within living systems, including plants, animals, insects, water, soil, air and energy.

EMERGENT: An erect, rooted, herbaceous wetland plant that may be temporarily or permanently flooded at its base but is nearly always exposed at the upper portion. Most swamps, bogs, marshes and prairie wetlands contain emergent vegetation.

ENDANGERED: Nearing extinction; either the plant or animal or its habitat are in immediate jeopardy. Under the federal Endangered Species Act, plant and animal species may be listed as either threatened or endangered.

ENHANCEMENT: To improve one or more values in an existing wetland. The improvements may be to soils, water, or plants. Enhancement may improve a particular wetland value at the expense of other values. For example, diking an area to create a

marsh environment for waterfowl nesting may flood a grassy wetland and reduce habitat for small rodents such as mice and voles.

FORB: A non-woody plant, other than grass, including wildflowers and plants which some refer to as "weeds".

404 (WETLAND) PERMIT: A permit issued by the U.S. Army Corps of Engineers under Section 404 of the federal Clean Water Act which allows an activity (filling) within a wetland. A 404 permit usually requires compensation or mitigation for the allowed use in a wetland.

GREENWAY: A system of parks and open spaces along a stream or channel which forms a corridor for water and wildlife movement and for human recreation.

GROUNDWATER: Water under the earth's surface that supplies streams, rivers, wells and springs.

HYDRIC SOIL: Soils that have developed in wet, flooded, moist, or saturated conditions. Hydric soils tend to have a heavy clay content.

HYDROLOGY: The study of the properties, distribution and circulation of water, specifically water on the surface or land, in the soil and underlying rocks, and in the atmosphere. Also used to refer to the characteristics of water flow in or on a given site.

HYDROPHYTIC OR HYDROPHYTES: These are plants adapted to live in wetland conditions.

IMPERVIOUS SURFACE: Surfaces which prohibit water from soaking into the ground. Concrete, asphalt and rooftops are the most common urban impervious surfaces.

JURISDICTIONAL WETLAND: A wetland determined to be subject to requirements of the federal Clean Water Act and Oregon's fill and removal statute.

MITIGATION: This term has two meanings, both of which are used in this plan:

1. The actual enhancement, restoration, or creation of wetlands to compensate for permitted wetland losses in terms of area and wetlands functions and values, and,
2. to protect wetlands by avoiding damage to them (i.e., long-term wetland protection status), by altering the design or timing of development to minimize negative impacts on wetlands, or by reducing external negative impacts (e.g., treating water pollution before it enters a wetland or creating a buffer area between the wetland and adjacent development).

MITIGATION BANK: Wetland enhancement, restoration, or creation undertaken to provide mitigation (compensation) for wetlands losses from future development activities. The bank involves enhancing, restoring or creating wetlands in advance of development of a wetland as part of a credit program.

MITIGATION CREDITS: Through a wetland bank system, credits may be purchased from a mitigation bank to compensate for permitted wetland development. A predetermined formula determines the amount of payment into the bank required prior to issuance of permits or development.

NATIVE PLANTS: Naturally occurring plants of this region which were not introduced by humans.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES): A permitting system devised by the U.S. Environmental Protection Agency (EPA) to administer provisions of the federal Clean Water Act. In Oregon the permitting system has been delegated by the EPA to the Oregon Department of Environmental Quality (DEQ). First applied to water quality in municipal sanitary waste discharges, the permitting system is now being expanded to apply to municipal storm water quality.

PALUSTRINE WETLAND SYSTEM: A freshwater wetland dominated by trees, shrubs, and emergent vegetation. Other systems include marine, estuarine, riverine, and lacustrine (deep water, such as lakes).

RARE SPECIES: Often used to describe species on the official state or federal "Threatened and Endangered Species" lists. In the West Eugene Wetlands Study, "rare" has two meanings: 1) a species which does not have threatened or endangered status, but is present in small numbers throughout its range, and 2) a plant community which was once widespread, but is now extremely limited in its distribution. For example, the prairie grasslands once covered thousands of acres in the Willamette Valley, but now are restricted to fewer than 20 locations in Lane and Benton Counties.

REGIONAL PERMIT: This is a general permit issued to a governmental entity by the U.S. Army Corps of Engineers. A regional permit for Eugene means that developing a wetland and mitigating for its loss would occur in accordance with this Plan and its background studies and inventories. Once issued, the regional permit authorizes the City to issue individual wetland impact permits to those areas identified for development by this Plan. The ACOE and EPA would still have oversight to insure that the City is administering federal laws and regulations in a proper manner.

RESTORATION: To improve a disturbed or altered wetland by returning wetland parameters which may be missing; adding soils, water, or plants. The restoration may return an original wetland habitat or alter the wetland for some other desired outcome; for example, flooding an agricultural field and planting saplings to produce an ash forest.

RIPARIAN: The land bordering a stream, pond or river; also pertaining to the vegetation typical of those borders (grasses, shrubs, and trees such as reed canary grass, spiariea, willows, ash and cottonwoods).

SCRUB-SHRUB WETLAND: This type wetland includes woody plants such as shrubs and small trees under 20 feet in height. They may represent a successional stage to a forested wetland.

SECTION 404 PERMIT: See "404 (Wetlands) Permit" definition.

STORMWATER/STORMWATER RUNOFF: Rain which travels over land surfaces and drains into the street gutters or storm sewer pipes and is discharged into a ditch, channel, stream or river. The velocity and peak volume of stormwater runoff is increased by impervious surfaces such as roofs, driveways, parking lots, and asphalt streets. As stormwater travels over the land, it accumulates pollutants from roofs, yards, driveways, streets, and industrial and commercial land uses.

STORMWATER USER FEE: A storm sewer charge collected from users based on their respective contribution to stormwater runoff and stormwater pollution. This fee would be used to pay directly for some of the stormwater utility's responsibilities, a portion of which would be devoted to the wetlands program.

STORMWATER UTILITY: A branch of the public works department that would be established to deal with stormwater, flood control, wetlands, and water quality matters in terms of planning, designing, maintaining, monitoring, financing, and administering those functions as part of the City of Eugene's on-going organization.

SUCCESSION: The sequence and process of changes in plant communities over time. Species, structure and communities evolve into a stable system. For example, the prairie grasslands may be invaded by young ash trees; then an ash forest forms; then Douglas fir trees invade the ash forest; eventually, the ash forest becomes a fir forest, which maintains itself over time.

SYSTEMS DEVELOPMENT CHARGE (SDC): A fee charged to new development to help pay for the capital costs associated with new growth. A portion of the City of Eugene's SDC may help pay for the stormwater utility functions, including the wetlands program.

TECHNICAL ADVISORY COMMITTEE (TAC): This is a state and federal agency group created to provide local staff with advice on conduct of the west Eugene Wetlands Special Area Study. The TAC consisted of representatives from the U.S. Army Corps of Engineers, Environmental Protection Agency, and Fish and Wildlife Service, and the Oregon Division of State Lands.

THREATENED: Nearing endangered status. The existence of the plant or animal and its habitat are in potential jeopardy.

URBAN GROWTH BOUNDARY (UGB): A site-specific line in the Metropolitan Plan that separates existing and future urban development from rural lands. Urban levels and densities of development, complete with urban levels of services, are planned within the UGB. Outside the UGB, rural lands are planned for farm and forest uses or for rural levels of development with accompanying rural levels of services.

WEST EUGENE WETLANDS SPECIAL AREA STUDY (WEWSAS): WEWSAS is the study which included development of this Plan and the accompanying Technical Report. The study was guided by the Eugene Planning Commission. It involved an intergovernmental staff team, use of consultants, a Technical Advisory Committee, and a series of public workshops with project management provided by the Lane Council of Governments.

WET PRAIRIE GRASSLAND: A unique type of wetland which once covered vast areas of the Willamette Valley floor. This term is used to describe a plant community dominated by tufted hairgrass, Deschampsia cespitosa. This wetland type is typically saturated or slightly flooded in the winter, but the upper soil surface is dry in the summer and early fall. The wet prairie grasslands in west Eugene are the habitat for the three species either listed or nominated for listing on the federal "Threatened and Endangered Species" plant list. Those rare plants are not found on all wet prairie grassland sites.

WETLAND: Wetlands are areas where water exists at or near the land's surface in flooded or saturated soils in sufficient amounts during the March to October growing season to sustain wetland types of plants. Generally, three factors must be present in a wetland: 1) hydric soils (those soils officially identified as being wetland-type soils), 2) water (surface or groundwater within the root growing zone or upper 18 inches of soil), and 3) predominance of plants that are recognized as wetland species. There are several types of wetlands in west Eugene, including agricultural, marshes, ash forests, shrub-scrub, and prairie grasslands. The agricultural wetlands are an exception to the three factor definition used here (see "agricultural wetlands" definition).

WETLAND EVALUATION TECHNIQUE (WET): This is a computer assisted method for assessing wetland functions and values, including social significance, effectiveness, and opportunities. It includes information on 12 wetland functions and values such as rare species, unique heritage, floodflow alteration, sediment stabilization, nutrient removal, wildlife and aquatic species diversity and abundance, recreation, and groundwater recharge.

WETLAND PERMIT: If fill or drainage activities are planned in a jurisdictional wetland, individual permits may be issued by the U.S. Army Corps of Engineers (see "404 (Wetland) Permit" definition) and the Oregon Division of State Lands. If the

activity cannot be justified, no state or federal permit will be issued. If the activity is justified, the permit may require compensatory mitigation to replace the acreage and values of the wetland allowed to be developed.