

## CHAPTER 21.24 DEVELOPMENT STANDARDS - CRITICAL AREAS

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**21.24.010 Purpose.** The purpose of this chapter is to implement the goals and policies of the Washington State Environmental Policy Act, RCW 43.21C, and the City of Woodinville Comprehensive Plan which call for protection of the natural environment and the public health and safety by:

- (1) Including the best available science requirements pursuant to the Washington State Growth Management Act and giving special consideration to anadromous fish when developing the critical areas regulations.
- (2) Establishing development standards to protect defined critical areas;
- (3) Protect members of the public and public resources and facilities from injury, loss of life, property damage or financial loss due to flooding, erosion, landslides, seismic events, soil subsidence or steep slope failures;
- (4) Maintain healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats, and to conserve the biodiversity of plant and animal species.
- (5) Direct activities not dependent on critical areas resources to less ecologically sensitive areas and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;
- (6) Prevent cumulative adverse environmental impact to water quality, wetlands, fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, and habitat conservation areas.
- (7) Protecting unique, fragile and valuable elements of the environment including, but not limited to, wildlife and its habitat;
- (8) Requiring mitigation of unavoidable impacts on environmentally sensitive areas by regulating alterations in or near critical areas;
- (9) Preventing cumulative adverse environmental impacts on water availability, water quality, wetlands and streams;
- (10) Measuring the quantity and quality of wetland and stream resources and preventing overall net loss of wetland and stream functions;
- (11) Protecting the public trust as to navigable waters and aquatic resources;
- (12) Meeting the requirements of the National Flood Insurance Program and maintaining the City of Woodinville as an eligible community for federal flood insurance benefits;
- (13) Alerting members of the public including, but not limited to, appraisers, owners, potential buyers or lessees to the development limitations of critical areas;
- (14) Providing for public enjoyment of environmentally protected areas by encouraging when feasible and sensible, multiple use of critical area buffers; and
- (15) Providing City officials with sufficient information to protect critical areas.

- 21.24.020 Applicability.**
- (1) The provisions of this chapter shall apply to all land uses in the City of Woodinville, and all persons within the City shall comply with the requirements of this chapter.
  - (2) The City of Woodinville shall not approve any permit or otherwise issue any authorization to alter the condition of any land, water or vegetation or to construct or alter any structure or improvement without first assuring compliance with the requirements of this chapter.
  - (3) Approval of a development proposal pursuant to the provisions of this chapter does not discharge the obligation of the applicant to comply with the provisions of this chapter.
  - (4) When any provision of any other chapter of the City of Woodinville Code conflicts with this chapter or when the provisions of this chapter are in conflict, that provision which provides more protection to environmentally critical areas shall apply unless specifically provided otherwise in this chapter or unless such provision conflicts with federal or state laws or regulations.
  - (5) The provisions of this chapter shall apply to all forest practices over which the City has jurisdiction pursuant to RCW 76.09 and WAC 222.
- 21.24.030 Appeals.** Any decision to approve, condition or deny a development proposal based on the requirements of WMC 21.24 may be appealed according to and as part of the appeal procedure for the permit or approval involved.
- 21.24.040 Critical areas rules.** The directors of the applicable departments within the City of Woodinville are authorized to adopt such administrative rules and regulations as are necessary and appropriate to implement WMC 21.24 and to prepare and require the use of such forms as are necessary to its administration.
- 21.24.050 Alteration.** Any human activity which results or is likely to result in an impact upon the existing condition of a critical area is an alteration which is subject to specific limitations as specified for each critical area. Alterations include, but are not limited to, grading, filling, dredging, draining, channelizing, applying herbicides or pesticides or any hazardous substance, discharging pollutants except stormwater, grazing domestic animals, paving, constructing, applying gravel, modifying for surface water management purposes, cutting, pruning, topping, trimming, relocating or removing vegetation or any other human activity which results or is likely to result in an impact to existing vegetation, hydrology, wildlife or wildlife habitat. Alterations do not include walking, fishing or any other passive recreation or other similar activities.
- 21.24.060 Complete exemptions.** The following are exempt from the provisions of this chapter and any administrative rules promulgated hereunder:
- (1) Alterations in response to emergencies that threaten the public health, safety and welfare or which pose an imminent risk of damage to public or private property as long as any alteration undertaken pursuant to this subsection is reported to the City immediately. The Development Services Director shall confirm that an emergency exists and determine what, if any, mitigation shall

be required to protect the health, safety, welfare and environment and to repair any resource damage;

- (2) Agricultural activities in existence before March 31, 1993, as follows:
  - (a) Mowing of hay, grass or grain crops;
  - (b) Tilling, dicing, planting, seeding, harvesting and related activities for pasture, food crops, grass seed or sod if such activities do not take place on steep slopes;
  - (c) Normal and routine maintenance of existing irrigation and drainage ditches not used by salmonids; and
  - (d) Normal and routine maintenance of farm ponds, fish ponds, manure lagoons and livestock watering ponds;
- (3) Public water, electric and natural gas distribution, public sewer collection, cable communications, telephone utility and related activities undertaken pursuant to Public Works Director-approved best management practices and Policy U-1.12 of the Comprehensive Plan, as follows:
  - (a) Normal and routine maintenance or repair of existing utility structures or rights-of-way;
  - (b) Relocation of electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less, only when required by a local governmental agency, which approves the new location of the facilities;
  - (c) Replacement, operation, repair, modification or installation or construction in an improved public road right-of-way of all electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less when such facilities are located within an improved public road right-of-way or Public Works Director-authorized private roadway;
  - (d) Relocation of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances, only when required by a local governmental agency which approves the new location of the facilities; and
  - (e) Replacement, operation, repair, modification, installation or construction of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances when such facilities are located within an improved public right-of-way or Public Works Director-authorized private roadway.
- (4) Maintenance, operation, repair or replacement of publicly improved roadways as long as any such alteration does not involve the expansion of roadways or related improvements into previously unimproved rights-of-way or portions of rights-of-way when such facilities are located within an improved public right-of-way or Public Works Director-authorized private roadway;
- (5) Maintenance, operation or repair of publicly improved recreation areas as long as any such alteration does not involve the expansion of improvements into previously unimproved recreation areas;

- (6) All clearing and grading activities which are exempt from the requirement for a clearing and grading permit as specified in the WMC, unless these activities require other permits or authorizations as specified in WMC 21.24.020.

**21.24.070 Partial exemptions.**

- (1) The following are exempt from the provisions of this chapter and any administrative rules promulgated hereunder, except for the notice on title provisions, WMC 21.24.170 through 21.24.180, and the flood hazard area provisions, WMC 21.24.220 through 21.24.260:
  - (a) Structural modification of, addition to, repair or replacement of structures, except single detached residences, in existence before March 31, 1993, which do not meet the building setback or buffer requirements for wetlands, streams or geological hazard areas if the modification, addition, replacement or related activity does not increase the existing footprint of the structure lying within the above-described building setback area, critical area or buffer. Modifications, additions, and/or replacement of structures shall use bio-engineered techniques beneficial to fish and wildlife and based upon the best available science, including but not limited to stream bank stabilization, wetland enhancement, water quality improvement, and similar methods to preserve and/or enhance habitat functions;
  - (b) Structural modification of, addition to, repair or replacement of single detached residences in existence before March 31, 1993 or residences allowed by reasonable use or variance process which do not meet the building setback or buffer requirements for wetlands, streams or geological hazard areas if the modification, addition, replacement or related activity does not increase the existing footprint of the residence lying within the above-described buffer or building setback area by more than 1000 square feet over that existing before March 31, 1993 and no portion of the modification, addition or replacement is located closer to the critical area or, if the existing residence is in the sensitive area, extends farther into the critical area. Modifications, additions, and/or replacement of structures shall use bio-engineered techniques beneficial to fish and wildlife and based upon the best available science, including but not limited to stream bank stabilization, wetland enhancement, water quality improvement, and similar methods to preserve and/or enhance habitat functions; and
  - (c) Maintenance or repair of structures which do not meet the development standards of this chapter for geological hazard areas if the maintenance or repair does not increase the footprint of the structure and there is no increased risk to life or property as a result of the proposed maintenance or repair.
- (2) The grazing of livestock is exempt from the provisions of this chapter and any administrative rules promulgated hereunder, except for the livestock restriction provisions, WMC 21.24.320 and 21.24.360, and any animal density limitations established by law, if the grazing activity was in existence before March 31, 1993.

- (3) A permit or approval sought as part of a development proposal for which multiple permits are required is exempt from the provisions of this chapter and any administrative rules promulgated hereunder, except for the notice on title provisions, WMC 21.24.170 - 21.24.180, if:
  - (a) City of Woodinville previously reviewed all critical areas on the site;
  - (b) There is no material change in the development proposal since the prior review;
  - (c) There is no new information available, which is important to any critical area review of the site or particular critical area;
  - (d) The permit or approval under which the prior review was conducted has not expired or, if no expiration date exists, no more than five (5) years have lapsed since the issuance of that permit or approval; and
  - (e) The prior permit or approval, including any conditions, has been complied with. (Ord. 375 § 3, 2004; Ord. 175 § 1, 1997. Formerly 21.24.060)

**21.24.080 Exceptions.**

- (1) If the application of this chapter would prohibit a development proposal by a public agency or public utility, the agency or utility may apply for an exception pursuant to this subsection:
  - (a) The public agency or utility shall apply to the Department and shall make available to the Department other related project documents such as permit applications to other agencies, special studies and environmental documents. The Development Services Director shall prepare a recommendation to the Hearing Examiner.
  - (b) The Hearing Examiner shall review the application and conduct a public hearing pursuant to the provisions of City of Woodinville Ordinance No. 18. The Hearing Examiner shall make a decision based on the following criteria:
    - (i) There is no other practical alternative to the proposed development with less impact on the sensitive area; and
    - (ii) The proposal minimizes the impact on critical areas.
  - (c) This exception shall not allow the use of the following critical areas for regional retention/detention facilities except where there is a clear showing that the facility will protect public health and safety or repair damaged natural resources:
    - (i) Class 1 stream buffers;
    - (ii) Class 1 wetland buffers with plant associations of infrequent occurrence; or
    - (iii) Class 1 or 2 wetland buffers, which provide critical or outstanding habitat for herons, raptors or state or federal designated endangered or threatened species unless clearly demonstrated by the applicant that there will be no impact on such habitat.
- (2) If the application of this chapter would deny all reasonable use of the property, the applicant may apply for an exception pursuant to this subsection:
  - (a) The applicant shall apply to the Department, and the Development Services Director shall prepare a recommendation to the Hearing

Examiner. The applicant may apply for a reasonable use exception without first having applied for a variance if the requested exception includes relief from standards for which a variance cannot be granted pursuant to the provisions of WMC 21.44;

- (b) The Hearing Examiner shall review the application and shall conduct a public hearing pursuant to the provisions of City of Woodinville Ordinance No. 18 and Ordinance No. 81. The Hearing Examiner shall make a final decision based on the following criteria:
  - (i) The application of this chapter would deny all reasonable use of the property;
  - (ii) There is no other reasonable use with less impact on the sensitive area;
  - (iii) The proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal site and is consistent with the general purposes of this chapter and the public interest; and
  - (iv) Any alterations permitted to the sensitive area shall be the minimum necessary to allow for reasonable use of the property; and
- (c) Any authorized alteration of a sensitive area under this subsection shall be subject to conditions established by the Hearing Examiner including, but not limited to, mitigation under an approved mitigation plan.

**21.24.090 Critical area maps and inventories.**

- (1) Critical Areas Map. The distribution of many critical areas in the City of Woodinville are displayed on maps in the King County Critical Areas Map Folio and the City of Woodinville Critical Areas Map. Many of the wetlands are inventoried and rated and that information is published in the King County Wetlands Inventory Notebooks.
- (2) Flood Hazard Maps. Many flood hazard areas are mapped by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for King County."
- (3) King County Critical Recharge Areas Map. The King County Critical Recharge Areas, including any authorized updates to this map is hereby adopted as the designation of critical aquifer recharge areas in the City of Woodinville.

If there is a conflict among the maps, inventory and site-specific features, the actual presence or absence of the features defined in this title as critical areas shall govern.

**21.24.100 Disclosure by applicant.**

- (1) The applicant shall disclose to the Development Services Director the presence of critical areas on the development proposal site and any mapped or identifiable sensitive areas within 100 feet of the applicant's property.
- (2) If the development proposal site contains or is within a critical area, the applicant shall submit an affidavit, to the extent consistent with the applicant's constitutional rights which declares whether the applicant has knowledge of any illegal alteration to any or all sensitive areas on the development proposal site and whether the applicant previously has been found in violation of this

chapter, pursuant to WMC 21.50 Enforcement. If the applicant previously has been found in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the Development Services Director.

**21.24.110 Critical area review.**

- (1) The Development Services Director shall perform a critical area review for any City of Woodinville development proposal permit application or other request for permission to proceed with an alteration on a site which includes a critical area or is within an identified critical area buffer.
- (2) As part of the critical area review, the Development Services Director shall:
  - (a) Determine whether any critical area exists on the property and confirm its nature and type;
  - (b) Determine whether a critical area special study is required;
  - (c) Evaluate the critical area special study;
  - (d) Determine whether the development proposal is consistent with this chapter;
  - (e) Determine whether any proposed alteration to the critical area is necessary; and
  - (f) Determine if the mitigation and monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public health, safety and welfare, consistent with the goals, purposes, objectives and requirements of this chapter.

**21.24.120 Critical area special study requirement.**

- (1) An applicant for a development proposal which includes a critical area or is within an identified critical area buffer shall submit a critical area special study (report requirements are available at the Community Development Department) that uses the best available science to adequately evaluate the proposal and all probable impacts.
- (2) The Development Services Director may waive the requirement for a special study if the applicant shows, to the Development Services Director's satisfaction, that:
  - (a) There will be no alteration of the critical area or buffer;
  - (b) The development proposal will not have an impact on the critical area in a manner contrary to the goals, purposes, objectives and requirements of this chapter; and
  - (c) The minimum standards required by this chapter are met.
- (3) If necessary to insure compliance with this chapter, the Development Services Director may require additional information from the applicant, separate from the special study.

**21.24.130 Contents of critical area special study.**

- (1) The critical area special study shall be in the form of a written report and shall contain the following, as applicable:
  - (a) Using the best available science, identification and characterization of all sensitive areas on or encompassing the development proposal site;

- (b) Using the best available science, assessment of the impacts of any alteration proposed for a critical area or buffer, assessment of the impacts of any alteration on the development proposal, other properties and the environment, and/or assessment of the impacts to the development proposal resulting from development in the critical area or buffer;
  - (c) Studies, which propose adequate mitigation, maintenance, monitoring and contingency plans and bonding measures;
  - (d) A scale map of the development proposal site; and
  - (e) Detailed studies, as required by the Development Services Director.
- (2) A critical area special study may be combined with any studies required by other laws and regulations; and
  - (3) If the development proposal will affect only a part of the development proposal site, the Development Services Director may limit the scope of the required special study to include only that part of the site, which may be affected by the development.

**21.24.140 Mitigation, maintenance, monitoring and contingency.**

- (1) As determined by the Development Services Director, mitigation, maintenance and monitoring measures shall be in place to protect critical areas and buffers from alterations occurring on the development proposal site of a proposed development.
- (2) Where monitoring reveals a significant deviation from predicted impacts or a failure of mitigation or maintenance measures, the applicant shall be responsible for appropriate corrective action which, when approved, shall be subject to further monitoring.

**21.24.150 Security to insure mitigation, maintenance and monitoring.**

- (1) When mitigation required pursuant to a development proposal is not completed prior to Development Services Director finally approving the proposal, the Development Services Director may delay final approval until mitigation is completed or may require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the Development Services Director. The security shall be sufficient to guarantee that all required mitigation measures will be completed no later than the time established by the Development Services Director in accordance with this chapter.
- (2) If the development proposal is subject to mitigation, maintenance or monitoring plans, the applicant shall post a maintenance/monitoring bond or other security in a form and amount deemed acceptable the Development Services Director. The security shall be sufficient to guarantee satisfactory workmanship on, materials in and performance of or related to structures and improvements allowed or required by this chapter for a period of up to five (5) years. The duration of maintenance/monitoring obligations shall be established by the Development Services Director, based upon the nature of the proposed mitigation, maintenance or monitoring and the likelihood and expense of correcting mitigation or maintenance failures.

- (3) Performance and maintenance/monitoring bonds or other security shall also be required for restoration of a critical area or buffer not performed as part of a mitigation or maintenance plan, except that no security shall be required for minor stream restoration carried out pursuant to this chapter. The bond or other security shall be in a form and amount deemed acceptable by the Development Services Director.
- (4) Performance and maintenance/monitoring bonds or other security authorized by this section shall remain in effect until the Development Services Director determines, in writing, that the standards bonded for have been met.
- (5) Depletion, failure or collection of security funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring or restoration.
- (6) Public development proposals shall be relieved from having to comply with the security requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring or restoration.

**21.24.160 Critical area markers and signs.**

- (1) Permanent survey stakes delineating the boundary between adjoining property and critical area tracts shall be set, using iron or concrete markers as established by current survey standards.
- (2) The boundary between a critical area tract and contiguous land shall be identified with permanent signs.

**21.24.170 Notice on title.**

- (1) The owner of any property containing critical areas or buffers on which a development proposal is submitted, except a public right-of-way or the site of a permanent public facility, shall file a notice approved by the Development Services Director with the County's records and elections division. The required contents and form of the notice shall be set forth in administrative rules. The notice shall inform the public of the presence of critical areas or buffers on the property, of the application of this chapter to the property and that limitations on actions in or affecting such critical areas or buffers may exist. The notice shall run with the land.
- (2) The applicant shall submit proof that the notice has been filed for public record before the Development Services Director and/or Building Official shall approve any development proposal for the property or, in the case of subdivisions, short subdivisions and binding site plans, at or before recording.

**21.24.180 Critical area tracts or easements and designations on site plans.**

- (1) Critical area tracts shall be used to delineate and protect those critical areas and buffers listed below in development proposals for subdivisions, short subdivisions or binding site plans and shall be recorded on all documents of title of record for all affected lots:
  - (a) All geological hazard areas and buffers which are one (1) acre or greater in size;
  - (b) All fish and wildlife conservation areas;
  - (c) All wetlands and buffers;

- (d) All streams and buffers.
- (2) Any required critical area tract shall be held in an undivided interest by each owner of a building lot within the development with this ownership interest passing with the ownership of the lot or shall be held by an incorporated homeowner's association or other legal entity, which assures the ownership, maintenance and protection of the tract.
- (3) Site plans submitted as part of development proposals for building permits and clearing and grading permits shall include and delineate all flood hazard areas (if they have been mapped by FEMA, King County or City of Woodinville or if a special study is required), geological hazard areas, streams and wetlands, buffers, building setbacks and native growth protection easements. If only a part of the development site has been mapped pursuant to WMC 21.24.130, the part of the site, which has not been mapped, shall be clearly identified and labeled on the site plans. The site plans shall be attached to the notice on title required by WMC 21.24.170.
  - (a) Native growth protection areas (NGPA) shall be marked with critical area signage and/or (wildlife friendly) fencing to protect wildlife corridors and to discourage human intrusion into the critical area. Fencing options will be left up to the discretion of the Director to further protect wildlife habitat.
  - (b) Native Growth Protection areas may be enhanced as part of a mitigation or restoration project. The NGPE shall be designated as protected habitat for fish and wildlife and shall be left in its natural state (with the exception of mitigation to enhance habitat.) Any downed trees shall remain in the NGPA to provide habitat for wildlife.
- (4) Native growth protection easements may be required over delineated critical areas to protect them in perpetuity, as determined by the Development Services Director. Easements shall be recorded with the County Assessor's Office prior to issuance of a certificate of occupancy. (Ord. 375 § 3, 2004; Ord. 175 § 1, 1997)

**21.24.190 Critical aquifer recharge areas: designation and rating**

- (1) The map entitled King County Critical Recharge Areas, including any authorized updates to this map, is hereby adopted as the designation of critical aquifer recharge areas in the City of Woodinville. The designated critical aquifer recharge areas map may be updated from time to time as new information becomes available pursuant to WMC 21.24.090.
- (2) Critical aquifer recharge areas are categorized as follows:
  - (a) Category I critical aquifer recharge areas include those areas designated on the critical aquifer recharge area map as highly susceptible to groundwater contamination and that are located within a sole source aquifer or wellhead protection area.
  - (b) Category II critical aquifer recharge areas include those mapped areas designated that:
    - (i) Have a medium susceptibility to groundwater contamination and are located in a sole source aquifer or wellhead protection area; or

- (ii) Are highly susceptible to groundwater contamination and are not located in a sole source aquifer or wellhead protection area.
- (3) An applicant can request that the Development Services Director declassify a specific area included in the map adopted under WMC 21.24.190(1). The request must be supported by a critical areas report that includes a hydro-geologic assessment. The request to declassify an area shall be reviewed by the Development Services Director following the procedure in WMC 21.24.110.

**21.24.200 Critical aquifer recharge areas: development regulations**

- (1) The following new uses or activities are not allowed in Category I critical aquifer recharge areas:
  - (a) Hazardous liquid transmission pipelines;
  - (b) Sand and gravel, and hard rock mining on land that is not zoned for mining as of December 1, 2004;
  - (c) Mining of any type below the groundwater table;
  - (d) Processing, storage, and disposal of radioactive wastes;
  - (e) Hydrocarbon extraction;
  - (f) Commercial wood treatment facilities on permeable surfaces;
  - (g) Golf courses
  - (h) Cemeteries
  - (i) Wrecking yards
  - (j) Landfills for hazardous waste, municipal solid waste, or special waste, and
  - (k) On-site septic systems on lots smaller than one acre without a treatment system that results in effluent nitrate-nitrogen concentrations below ten (10) milligrams per liter.
- (2) The following new uses and activities are not allowed in a Category II critical aquifer recharge area:
  - (a) Mining of any type below the water table;
  - (b) Processing, storage, and disposal of radioactive substances;
  - (c) Hydrocarbon extraction;
  - (d) Commercial wood treatment facilities on permeable surfaces;
  - (e) Wrecking yards;
  - (f) Landfills for hazardous waste, municipal solid waste, or special waste; and
  - (g) On-site septic systems on lots smaller than one acre without a treatment system that results in effluent nitrate-nitrogen concentrations below ten (10) milligrams per liter.
- (3) The following standards apply to any development proposal in a critical aquifer recharge area:
  - (a) All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the International Fire Code requirements for secondary containment.
  - (b) Commercial vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.

- (c) No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility development must be abandoned using techniques approved by the Washington State Department of Ecology prior to commencement of the proposed activity.
- (d) The activities listed below shall be conditioned in accordance with the applicable state and federal regulations as necessary to protect critical aquifer recharge areas.

Activity	Applicable State and Federal Regulations
Above Ground Storage Tanks	Chapter 173-303 -640 WAC
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Chemical Treatment Storage and Disposal Facilities	Chapter 173-303-182 WAC
Hazardous Waste Generator ( <i>Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.</i> )	Chapter 173-303 WAC
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	Chapter 332-12-450 WAC, WAC , Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	Chapter 332-18-015 WAC
Underground Storage Tanks	Chapter 173-360 WAC
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

**21.24.210 Flood hazard areas: components.**

- (1) A flood hazard area consists of the following components:
  - (a) Floodplain;
  - (b) Flood fringe;
  - (c) Zero-rise floodway; and
  - (d) Federal Emergency Management Agency ("FEMA") floodway.
- (2) The Public Works Director shall determine the flood hazard area after obtaining, reviewing and utilizing base flood elevations and available floodway data for a flood having a one (1) percent chance of being equaled or

exceeded in any given year, often referred to as the "100-year flood." The base flood is determined for existing conditions, unless a basin plan including projected flows under future developed conditions has been completed and adopted by the City of Woodinville, in which case these future flow projections shall be used. In areas where the Flood Insurance Study for the County includes detailed base flood calculations, those calculations shall be used until projections of future flows are completed and adopted by the City of Woodinville.

**21.24.220 Flood Insurance Study adopted.** The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "Flood Insurance Study for King County" dated November 8, 1999, and any revisions thereto, with accompanying Flood Insurance Maps (FIRM), and any revisions thereto, are hereby adopted by reference and declared to be a part of this chapter. The Flood Insurance Study and the FIRM are on file at the Woodinville City Hall. The best available information for flood hazard area identification as outlined in Section 21.24.210(2) shall be the basis for regulation until a new FIRM is issued which incorporates the data utilized under Section 21.24.210(2).

**21.24.230 Flood fringe: development standards and permitted alterations.**

- (1) Development shall not reduce the effective base flood storage volume of the floodplain. Grading or other activity which would reduce the effective storage volume shall be mitigated by creating compensatory storage on the site or off the site if legal arrangements can be made to assure that the effective compensatory storage volume will be preserved over time. Grading for construction of livestock manure storage facilities to control non-point source water pollution designed to the standards of and approved by the County Conservation District is exempt from this compensatory storage requirement.
- (2) No structure shall be allowed which would be at risk due to stream bank destabilization including, but not limited to, that associated with channel relocation or meandering.
- (3) All elevated construction shall be designed and certified by a professional structural engineer licensed by the State of Washington and shall be approved by the Public Works Director prior to construction.
- (4) Subdivisions, short subdivisions and binding site plans shall meet the following requirements:
  - (a) New building lots shall contain 5,000 square feet or more of buildable land outside the zero-rise floodway, and building setback areas shall be shown on the face of the plat to restrict permanent structures to this buildable area;
  - (b) All utilities and facilities such as sewer, gas, electrical and water systems shall be located and constructed consistent with subsections (5), (6), and (7);
  - (c) Base flood data and flood hazard notes shall be shown on the face of the recorded subdivision, short subdivision or binding site plan including, but not limited to, the base flood elevation, required flood protection

elevations and the boundaries of the floodplain and the zero-rise floodway, if determined; and

- (d) The following notice shall also be shown on the face of the recorded subdivision, short subdivision or binding site plan for all affected lots:

**"NOTICE"**

"Lots and structures located within flood hazard areas may be inaccessible by emergency vehicles during flood events. Residents and property owners should take appropriate advance precautions."

- (e) If a subdivision proposal or other proposed new development is in a flood-prone area, any such proposals shall be reviewed to assure that
- (i) All such proposals are consistent with the need to minimize floor damage within the flood-prone area;
  - (ii) All public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage; and,
  - (iii) Adequate drainage is provided to reduce exposure to flood hazards.
- (5) New residential structures and substantial improvements of existing residential structures shall meet the following requirements:
- (a) The lowest floor, including basement shall be elevated one to one and a half feet above the base flood elevation;
  - (b) Portions of a structure, which are below the lowest floor area, shall not be fully enclosed. The areas and rooms below the lowest floor shall be designed to automatically equalize hydrostatic and hydrodynamic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for satisfying this requirement shall meet or exceed the following requirements:
    - (i) A minimum of two (2) openings on opposite walls having a total open area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided;
    - (ii) The bottom of all openings shall be no higher than one (1) foot above grade; and
    - (iii) Openings may be equipped with screens, louvers or other coverings or devices if they permit the unrestricted entry and exit of floodwaters;
  - (c) Materials and methods which are resistant to and minimize flood damage shall be used; and
  - (d) All electrical, heating, ventilation, plumbing, air conditioning equipment and other utility and service facilities shall be flood-proofed to or elevated above the flood protection elevation.
- (6) New nonresidential structures and substantial improvements of existing nonresidential structures shall meet the following requirements:
- (a) The elevation requirement for residential structures contained in subsection (5) shall be met; or

- (b) The structure shall be flood-proofed to the flood protection elevation and shall meet the following requirements:
  - (i) The applicant shall provide certification by a professional civil or structural engineer licensed by the State of Washington that the flood-proofing methods are adequate to withstand the flood-depths, pressures, velocities, impacts, uplift forces and other factors associated with the base flood. After construction, the engineer shall certify that the permitted work conforms with the approved plans and specifications; and
  - (ii) Approved building permits for flood-proofed nonresidential structures shall contain a statement notifying applicants that flood insurance premiums shall be based upon rates for structures, which are one (1) foot below the flood-proofed level;
- (c) Materials and methods which are resistant to and minimize flood damage shall be used; and
- (d) All electrical, heating, ventilation, plumbing, air conditioning equipment and other utility and service facilities shall be flood-proofed to or elevated above the flood protection elevation.
- (7) All new construction and substantial improvement shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- (8) Manufactured and Mobile homes shall meet the following requirements:
  - (a) Manufactured homes and Mobile homes to be placed or substantially improved on sites
    - (i) Outside of a mobile home park or subdivision;
    - (ii) In a new manufactured mobile home park or subdivision;
    - (iii) In an expansion to an existing manufactured mobile home park or subdivision, or
    - (iv) In an existing mobile home park or subdivision on which a mobile home has incurred “substantial damage” as the result of a flood; shall be elevated on a permanent foundation such that the lowest floor of the manufactured or mobile home is elevated one (1) foot above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation collapse and lateral movement.
  - (b) Manufactured and Mobile homes to be placed or substantially improved on sites in an existing mobile home park or subdivision that are not subject to the above manufactured and mobile home provisions must be elevated so that either:
    - (i) The lowest floor of the manufactured or mobile home is elevated to one (1) foot above the base flood elevation, or
    - (ii) The manufactured or mobile home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.

- (c) All new or substantially improved manufactured and mobile homes shall be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include but are not limited to; use of over-the-top or frame ties to ground anchors (Reference FEMA’s “Manufactured Homes Installation in Flood Hazard Areas” guidebook for additional techniques).
- (d) No permit or approval for the following shall be granted unless all manufactured or mobile homes within the mobile home park meet the requirements in Subsection (b) above:
  - (i) A new mobile home park;
  - (ii) An expansion of an existing mobile home park; or
  - (iii) Any repair or reconstruction of streets, utilities or pads in an existing mobile home park which equals or exceeds fifty (50) percent of the value of such streets, utilities or pads.
- (9) Recreational Vehicles must either:
  - (a) Be on site for fewer than 180 consecutive days,
  - (b) Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect-type utilities and security devices, and has no permanently attached additions; or
  - (c) Meet the requirements of Subsection 21.24.230(8) and the elevation and anchoring requirements of manufactured and mobile homes.
- (10) Utilities shall meet the following requirements:
  - (a) All new and replacement water systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters;
  - (b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and,
  - (c) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
  - (d) Sewage and agricultural waste storage facilities shall be flood-proofed to the flood protection elevation;
  - (e) Above-ground utility transmission lines, other than electric transmission lines, shall only be allowed for the transport of non-hazardous substances; and;
  - (f) Buried utility transmission lines transporting hazardous substances shall be buried at a minimum depth of four (4) feet below the maximum depth of scour for the base flood, as predicted by a professional civil engineer licensed by the State of Washington, and shall achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated.
- (11) Critical facilities may be allowed within the flood fringe of the floodplain, but only when no feasible alternative site is available. Critical facilities shall be evaluated through the conditional or special use permit process. Critical facilities constructed within the flood fringe shall have the lowest floor elevated to three or more feet above the base flood elevation. Flood-proofing

and sealing measures shall be taken to ensure that hazardous substances will not be displaced by or released into floodwaters. Access routes elevated to or above the base flood elevation shall be provided to all critical facilities from the nearest maintained public street or roadway.

- (12) Prior to approving any permit for alterations in the flood fringe, the Public Works Director shall determine that all permits required by state or federal law have been obtained.

**21.24.240 Zero-rise floodway: development standards and permitted alterations.**

- (1) The requirements, which apply, to the flood fringe shall also apply to the zero-rise floodway. The more restrictive requirements shall apply where there is a conflict.
- (2) A development proposal including, but not limited to, new or reconstructed structures shall not cause any increase in the base flood elevation unless the following requirements are met:
  - (a) Amendments to the Flood Insurance Rate Map are adopted by FEMA, in accordance with 44 CFR 70, to incorporate the increase in the base flood elevation; and
  - (b) Appropriate legal documents are prepared in which all property owners affected by the increased flood elevations consent to the impacts on their property. These documents shall be filed with the title of record for the affected properties.
- (3) The following are presumed to produce no increase in base flood elevation and shall not require a special study to establish this fact:
  - (a) New residential structures outside the FEMA floodway on lots in existence before March 31, 1993, which contain less than 5,000 square feet of buildable land outside the zero-rise floodway and which have a total building footprint of all proposed structures on the lot of less than 2,000 square feet;
  - (b) Substantial improvements of existing residential structures in the zero-rise floodway, but outside the FEMA floodway, where the footprint is not increased; or
  - (c) Substantial improvements of existing residential structures meeting the requirements for new residential structures in WMC 21.24.230.
- (4) Post or piling construction techniques which permit water flow beneath a structure shall be used.
- (5) All temporary structures or substances hazardous to public health, safety and welfare, except for hazardous household substances or consumer products containing hazardous substances, shall be removed from the zero-rise floodway during the flood season from September 30 to May 1.
- (6) New residential or non-residential structures shall meet the following requirements:
  - (a) The structures shall be outside the FEMA floodway; and
  - (b) The structures shall be on lots in existence before March 31, 1993, which contain less than 5000 square feet of buildable land outside the zero-rise floodway.

- (7) Utilities may be allowed within the zero-rise floodway if the City determines that no feasible alternative site is available, subject to the following requirements:
  - (a) Installation of new on-site sewage disposal systems shall be prohibited unless a waiver is granted by the department of public health; and
  - (b) Construction of sewage treatment facilities shall be prohibited.
- (8) Critical facilities shall not be allowed within the zero-rise floodway except as provided in WMC 21.24.230(11).
- (9) Livestock manure storage facilities and associated non-point source water pollution facilities designed, constructed and maintained to the standards of and approved in a conservation plan by the King County Conservation District may be allowed if the Public Works Director reviews and approves the location and design of the facilities.
- (10) Structures and installations, which are dependent upon the floodway, may be located in the floodway if the development proposal is approved by all agencies with jurisdiction. Such structures include, but are not limited to:
  - (a) Dams or diversions for water supply, flood control, hydroelectric production, irrigation or fisheries enhancement;
  - (b) Flood damage reduction facilities, such as levees and pumping stations;
  - (c) Stream bank stabilization structures where no feasible alternative exists for protecting public or private property;
  - (d) Storm water conveyance facilities subject to the development standards for streams and wetlands and the King County Surface Water Design Manual;
  - (e) Boat launches and related recreation structures;
  - (f) Bridge piers and abutments; and
  - (g) Other fisheries enhancement or stream restoration projects.

**21.24.250 FEMA floodway: development standards and permitted alterations.**

- (1) The requirements, which apply, to the zero-rise floodway shall also apply to the FEMA floodway. The more restrictive requirements shall apply where there is a conflict.
- (2) A development proposal including, but not limited to, new or reconstructed structures shall not cause any increase in the base flood elevation.
- (3) New residential or nonresidential structures are prohibited within the FEMA floodway.
- (4) Substantial improvements of existing residential structures in the FEMA floodway, meeting the requirements of WAC 173-158-070, as amended, are presumed to produce no increase in base flood elevation and shall not require a special study to establish this fact.

**21.24.260 Flood hazard areas: certification by engineer or surveyor.**

- (1) For all new structures or substantial improvements in a flood hazard area, the applicant shall provide certification by a professional civil engineer or land surveyor licensed by the State of Washington of:
  - (a) The actual as-built elevation of the lowest floor, including basement; and

- (b) The actual as-built elevation to which the structure is flood-proofed, if applicable.
- (2) The engineer or surveyor shall indicate if the structure has a basement.
- (3) The Building Official shall maintain the certifications required by this section for public inspection.

**21.24.270 Alteration of watercourses, notice and maintenance required.** In addition to requiring the applicant to meet the requirements of WMC 21.24.360-380 and other applicable local, state, and federal requirements, Woodinville must:

- (1) Notify adjacent communities and the Department of Ecology prior to any alteration or relocation of a watercourse designated as a zone beginning with A on a FIRM map, and submit evidence of such notification to the Federal Insurance Administration.
- (2) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

**21.24.280 Building Official to approve alternate design and methods of construction.** The Building Official shall have the authority to approve alternate design and methods of construction through the building permit process as detailed in section 102.2.8 of the International Building Code as adopted by reference in WMC 15.09.020, provided that these do not conflict with the intent or requirements of WMC 21.24.210-.260.

**21.24.290 Geologically hazardous areas: designation.**

- (1) Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:
  - (a) Erosion hazard;
  - (b) Landslide hazard;
  - (c) Seismic hazard
  - (d) Other geological events including mass wasting debris flows, rock falls, and differential settlement.
- (2) Designation of specific hazard areas.
  - (a) Erosion hazard areas. Erosion hazard areas are those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service or identified by a critical area special study as having a severe to very severe erosion potential.
  - (b) Landslide hazard areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include, but are not limited to the following:
    - (i) Areas of historic failures, such as areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Department of Natural Resources;

- (ii) Areas with all three of the following characteristics:
    1. Slopes steeper than fifteen percent (15%); and
    2. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
    3. Springs or ground water seepage.
  - (iii) Areas that have shown movement during the Holocene epoch (from ten thousand years ago to the present) or that are underlain or covered by mass wastage debris of that epoch;
  - (iv) Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action;
  - (v) Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and
  - (vi) Any area with a slope of forty percent (40%) or steeper and with a vertical relief of ten (10) or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten (10) feet of vertical relief.
- (c.) Seismic hazard areas. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, surface rupture, or soil liquefaction.

**21.24.300 Development standards: general requirements**

- (1) Alterations of geologically hazardous areas or associated buffers may only occur for activities that:
- (a) Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;
  - (b) Will not adversely impact other critical areas; and are designed so that the hazard to the project is eliminated or mitigated to a level where there is no reasonable chance of harm to the project or its associated land use.

**21.24.310 Performance standards: Specific hazards**

- (1) Erosion and landslide hazard areas. Activities on sites containing erosion or landslide hazards shall meet the following requirements:
- (a) Buffer required. A buffer shall be established from all edges of erosion or landslide hazard areas. The size of the buffer shall be determined by the City to eliminate or minimize the risk of property damage, death or injury resulting from erosion and landslides caused in whole or part by the development, based upon review of and concurrence with a critical area report prepared by a qualified professional.
    - (i) Minimum buffer. The minimum buffer shall be fifty (50) feet.
    - (ii) Buffer reduction. The buffer may be reduced to a minimum of ten (10) feet when a qualified professional demonstrates to the satisfaction of the Development Services Directors that the

- reduction will adequately protect the proposed development, adjacent developments and uses and the subject critical area.
- (iii) Increased buffer. The buffer may be increased where the Development Services Director determines a larger buffer is necessary to prevent risk of damage to proposed and existing development;
- (b) Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a geotechnical analysis is submitted and certifies that:
- (i) The development will not increase surface water discharge or sedimentation to adjacent properties beyond pre-development conditions;
  - (ii) The development will not decrease slope stability on adjacent properties; and
  - (iii) Such alterations will not adversely impact other critical areas;
- (c) Design standards. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this Title. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design standards are:
- (i) The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the International Building Code.
  - (ii) Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;
  - (iii) Structures and improvements shall minimize alterations to the natural contour of the slope and foundations shall be tiered where possible to conform to existing topography;
  - (iv) Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
  - (v) The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;
  - (vi) The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes;
  - (vii) Development shall be designed to minimize impervious lot coverage;
- (d) Vegetation shall be retained. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited;

- (e) Seasonal restriction. Clearing shall be allowed only from May 1st to October 1st of each year provided that the Development Services Director may extend or shorten the dry season on a case-by-case basis depending on actual weather conditions, except that timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practice permit issued by the City or the Department of Natural Resources;
  - (f) Utility lines and pipes. Utility lines and pipes shall be permitted in erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be located above ground and properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Stormwater conveyance shall be allowed only through a high-density polyethylene pipe with fuse-welded joints, or similar product approved by the Public Works Director that is technically equal or superior.
  - (g) Point discharges. Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:
    - (i) Conveyed via continuous storm pipe downslope to a point where there are no erosion hazards areas downstream from the discharge;
    - (ii) Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predeveloped state; or
    - (iii) Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope;
  - (h) Subdivisions. The division of land in erosion and landslide hazard areas and associated buffers is subject to the following:
    - (i) Land that is located wholly within an erosion or landslide hazard area or its buffer may not be subdivided. Land that is located partially within an erosion or landslide hazard area or its buffer may be divided provided that each resulting lot has sufficient buildable area outside of, and will not affect, the erosion or landslide hazard or its buffer.
    - (ii) Access roads and utilities may be permitted within the erosion or landslide hazard area and associated buffers if the Development Services Director determines that no other feasible alternative exists.
  - (i) Prohibited development. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.
- (2) Seismic hazard areas. Activities proposed to be located in seismic hazard areas shall meet the standards of WMC 21.24.300 *Development standards – General requirements.*

(3) Other hazard areas. Activities on sites containing or adjacent to other geologically hazardous areas, shall meet the standards of WMC 21.24.300 *Development standards – General requirements.*

**21.24.320 Wetlands: designation and ranking.** Wetlands are those areas designated in accordance with the *Washington State Wetland Identification and Delineation Manual* (1997), that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. The goal of the City of Woodinville is to maintain a standard of no net loss in the functions and values of wetlands.

- (1) Wetland rating. Wetlands shall be rated similarly to the Department of Ecology wetland rating system found in the Washington State Wetland Rating System document, Western Washington, *Ecology Publication #93-74*.
- (2) Wetland rating categories. Wetlands shall be designated as Class 1, Class 2, and Class 3 according to the criteria in this Section.
  - (a) Class 1 Wetlands are those wetlands that meet any of the following criteria:
    - (i) Documented habitat for federal or state listed endangered or threatened fish, animal, or plant species; or
    - (ii) Wetlands documented as high quality habitats in the natural Heritage Information System; or
    - (iii) Wetlands of exceptional local significance or irreplaceable ecological functions, including sphagnum bogs and fens or natural forest swamps; or
    - (iv) Wetlands proximal to and influenced by the mainstem of the Sammamish River or Little Bear Creek.
  - (b) Class 2 Wetlands are those wetlands not rated as Class 1 wetlands and meet any of the following criteria:
    - (i) Wetlands that have significant functions that may not be adequately replicated through creation of restoration; or
    - (ii) Wetlands of any size associated with Type 2 or 3 streams; or
    - (iii) Wetlands greater than one (1) acre in size; or
    - (iv) Wetlands equal to or less than one (1) acre having three (3) or more classes of wetland vegetation as defined in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, et al. 1979); or
    - (v) Wetlands equal to or less than one (1) acre having a forested wetland class or open water habitat.
  - (c) Class 3 Wetlands are those wetlands not rated as Class 1 or 2 Wetlands.

**21.24.330 Wetlands: development standards.** A development proposal on a site containing a wetland shall meet the following requirements:

- (1) The following standard minimum buffers shall be established from the wetland edge:
  - (a) Class 1 wetlands shall have a 150-foot buffer with a fifty (50) foot reduction with enhancement (as defined in WMC 21.06.208).

- (b) Class 2 wetlands shall have a 100-foot buffer with a fifty (50) foot reduction with enhancement.
  - (c) Class 3 wetlands shall have a fifty (50) foot buffer with a twenty-five (25) foot buffer reduction with enhancement.
  - (d) The standard buffer width will be established unless the existing wetland buffer is significantly degraded. If the existing wetland buffer is significantly degraded, the applicant may use a reduced buffer as long as enhancement measures are implemented to provide a net improvement in overall wetland and buffer function and value as determined by a qualified biologist. Enhancement measures shall be conducted in accordance with a plan approved by the Development Services Director.
  - (e) Any wetland restored, relocated, replaced or enhanced because of a wetland alteration shall have the minimum buffer required for the highest wetland class involved.
  - (f) Wetland buffers shall be measured from the wetland edge as delineated and marked in the field using the *1997 Washington State Wetland Identification and Delineation Manual* (Ecology).
  - (g) The Development Services Director shall require increased buffer widths in accordance with a qualified biologist and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:
    - (i) A larger buffer is needed to protect other critical areas;
    - (ii) The buffer or adjacent uplands has a slope greater than thirty percent (30%) or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the wetland.
- (2) Buffer width averaging may be allowed by the Development Services Director in accordance with an approved critical area report and the best available science on a case-by case basis. Averaging of buffer widths may only be allowed where a qualified professional biologist demonstrates compliance with the following provisions:
- (a) Additional protection to the wetland will be provided through implementation of a buffer enhancement plan:
  - (b) It will not reduce wetland functions or values;
  - (c) The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
  - (d) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
  - (e) The buffer width is not reduced by more than twenty percent (20%) of the standard width or fifty (50) feet, whichever is greater.
  - (f) Buffer averaging is allowed as an alternative to buffer reduction with enhancement. Only one method shall be implemented.
  - (g) When wetland standard buffers are reduced for mitigation purposes, wetland areas shall not be filled to create wetland buffers.

- (3) The use of hazardous substances, pesticides and fertilizers in the wetland and its buffer may be prohibited by the Development Services Director.
- (4) Unless otherwise provided, the following restrictions shall apply to all development proposals, which include the introduction of livestock:
  - (a) To prevent damage to Class 1 and 2 wetlands:
    - (i) A plan to protect and enhance the wetland's water quality shall be implemented pursuant to Chapter 21.30 WMC; or
    - (ii) Fencing located at the buffer edge shall be required.
- (5) Standards pertaining to access to streams for watering purposes, stream crossing requirements and use of natural barriers and vegetative buffering in lieu of fencing shall be included in administrative rules promulgated pursuant to this chapter.
- (6) The livestock restrictions contained in subsection (4) of this section shall not apply to wetlands defined as grazed wet meadows, regardless of their classification. (Ord. 375 § 3, 2004; Ord. 175 § 1, 1997. Formerly 21.24.310)

**21.24.340 Wetlands: permitted alterations.** The Development Services Director may allow alterations to a wetland and wetland buffers under the following conditions:

- (1) Special studies completed by qualified professionals determine:
  - (a) The wetland does not serve any of the valuable functions of wetlands identified in WMC 21.06.710 including, but not limited to, biologic and hydrologic functions; or
  - (b) The proposed development will protect or enhance the wildlife habitat, natural drainage or other valuable functions of the wetland and will be consistent with the purposes of this chapter;
  - (c) The existing on-site habitat value, hydrology, erosion and deposition and/or water quality; and
  - (d) Specific recommendations for mitigation which may be required as a condition of development proposal approval. The mitigation may include, but is not limited to construction techniques or design, drainage or density specifications.
- (2) There shall be no introduction of any plant or wildlife, which is not indigenous to the Puget Sound Region into any wetland or buffer unless authorized by a state or federal permit or approval;
- (3) Utilities may be allowed in wetland buffers if the Development Services Director determines that:
  - (a) No practical alternative location is available;
  - (b) Mitigation is required that minimizes the impact of the proposal on the wetland buffer;
  - (c) The utility corridor meets any additional requirements set forth in administrative rules including, but not limited to, requirements for installation, replacement of vegetation and maintenance; and
  - (d) The utility corridor meets the provisions of Policy U-1.12 of the City of Woodinville Comprehensive Plan.
- (4) Sewer utility corridors may be allowed in wetland buffers only if:
  - (a) The applicant demonstrates that sewer lines are necessary for gravity flow;

- (b) The corridor is not located in a wetland or buffer used by species listed as endangered or threatened by the state or federal government or containing critical or outstanding actual habitat for those species or heron rookeries or raptor nesting trees;
  - (c) The corridor alignment including, but not limited to, any allowed maintenance roads follows a path beyond a distance equal to seventy-five (75) percent of the buffer width from the wetland edge;
  - (d) Corridor construction and maintenance protects the wetland and buffer and is aligned to avoid cutting trees greater than twelve (12) inches in diameter at breast height, when possible, and pesticides, herbicides and other hazardous substances are not used;
  - (e) An additional, contiguous and undisturbed buffer, equal in width to the proposed corridor including any allowed maintenance roads, is provided to protect the wetland;
  - (f) The corridor is revegetated with appropriate native vegetation at pre-construction densities or greater immediately upon completion of construction or as soon thereafter as possible, and the sewer utility ensures that such vegetation survives;
  - (g) Any additional corridor access for maintenance is provided, to the extent possible, at specific points rather than by a parallel road;
  - (h) The width of any necessary parallel road providing access for maintenance is as small as possible, but not greater than fifteen (15) feet, the road is maintained without the use of herbicides, pesticides or other hazardous substances and the location of the road is contiguous to the utility corridor on the side away from the wetland; and
  - (i) The utility corridor meets the provisions of Policy U-1.12 of the City of Woodinville Comprehensive Plan.
- (5) Joint use of an approved sewer utility corridor by other utilities may be allowed.
- (6) The following surface water management activities and facilities may be allowed in wetland buffers only as follows:
- (a) Surface water discharge to a wetland from a detention facility, pre-settlement pond or other surface water management activity or facility may be allowed if the discharge does not increase the rate of flow, change the plant composition in a forested wetland or decrease the water quality of the wetland;
  - (b) Class 1 or 2 wetland or buffer may be used for retention/detention facilities if:
    - (i) A public agency and utility exception is granted pursuant to WMC 21.24.080;
    - (ii) All requirements of the King County Surface Water Design Manual are met;
    - (iii) The use will not alter the rating or the factors used in rating the wetland;
    - (iv) The proposal is in compliance with the latest adopted findings of the Puget Sound Wetlands Research Project; and
    - (v) There are no significant adverse impacts to the wetland;

- (vi) Grass lined swales and dispersal trenches may be located in the outer twenty-five percent (25%) of the buffer area. All other surface water management facilities are not allowed within the buffer area;
- (c) Class 3 wetland or buffer which has as its major function the storage of water may be used as a retention/detention facility if a pre-settlement pond is required and all requirements of the King County Surface Water Design Manual are met; and
- (d) Use of a wetland buffer for a surface water management activity or facility, other than a retention/detention facility, such as an energy dissipater and associated pipes, may be allowed only if the applicant demonstrates, to the satisfaction of the Development Services Director, that:
  - (i) No practicable alternative exists; and
  - (ii) The functions of the buffer or the wetland are not adversely affected;
- (7) Public and private trails, or visual access to the sensitive area, are encouraged in wetland buffers provided:
  - (a) The trail surface shall not be made of impervious materials, except that public multi-purpose trails may be made of impervious materials if they meet all other requirements including water quality; and
  - (b) Buffers shall be expanded, where possible, equal to the width of the trail corridor including disturbed areas.
- (8) Wetland road crossings may be allowed if:
  - (a) The Development Services Director determines that no alternative access is practical;
  - (b) All crossings minimize impact to the wetland and provide mitigation for unavoidable impacts through restoration, enhancement or replacement of disturbed areas;
  - (c) Crossings do not change the overall wetland hydrology;
  - (d) Crossings do not diminish the flood storage capacity of the wetland; and
  - (e) All crossings are constructed during summer low water periods.

**21.24.350 Wetlands: mitigation requirements.**

- (1) When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for as outlined by WAC 197-11-768, in the following order of preference:
  - (a) Avoiding the impact altogether by not taking a certain action or parts of actions;
  - (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
  - (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  - (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and/or
  - (e) Compensating for the impact by replacing or providing substitute resources or environments.

- (2) Mitigation shall achieve equivalent or greater biological functions. Mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions. Mitigation plans shall be consistent with the Department of Ecology *Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals*, 1994, as revised.
- (3) Mitigation for lost functions and values. Mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement, and shall provide similar wetland functions as those lost except when:
  - (a) The lost wetland provides minimal functions as determined by a site-specific function assessment and the proposed mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal watershed assessment plan or protocol; or
  - (b) Out-of-kind replacement will best meet formally identified regional goals, such as replacement of historically diminished wetland types.
- (4) Preference of mitigation actions. Mitigation actions that require compensation by replacing, enhancing, or substitution, shall occur in the following order of preference:
  - (a) Restoring wetlands on upland sites that were formerly wetlands.
  - (b) Enhancing significantly degraded wetlands.
  - (c) Preserving high-quality wetlands that are under imminent threat.
- (5) Type and location of mitigation. Mitigation actions shall be conducted within the same sub-drainage basin and on the same site as the alteration except when the all of the following apply:
  - (a) There are no reasonable on-site or in subdrainage basin opportunities or on-site and in subdrainage basin opportunities do not have a high likelihood of success due to development pressures, adjacent land uses, or on-site buffers or connectivity are inadequate;
  - (b) Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and
  - (c) Off-site locations shall be in the same sub-drainage basin and the same Water Resource Inventory Area (WRIA) unless established regional or watershed goals for water quality, flood or conveyance, habitat or other wetland functions have been established and strongly justify location of mitigation at another site.
  - (d) The off-site location is approved by the Development Services Director. The Development Services Director shall approve or deny the off-site location based on written findings and recommendation by a qualified professional wetland biologist.
- (6) Mitigation timing. Where feasible, mitigation projects shall be completed prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing wildlife and flora.
- (7) Mitigation monitoring and maintenance. Mitigation projects shall be

monitored and maintained for a period of five (5) years. A monitoring protocol shall be approved by the Development Services Director and monitoring reports shall be submitted to the City as required.

(8) Mitigation ratios.

- (a) Acreage replacement ratios. The following ratios shall apply to creation or restoration that is in-kind, on-site, the same category, timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a state certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

Class 1	4 to 1
Class 2	2 to 1
Class 3	1.5 to 1

- (b) Increased replacement ratio. The Development Services Director may increase the ratios under the following circumstances:
- (i) Uncertainty exists as to the probable success of the proposed restoration or creation; or
  - (ii) A significant period of time will elapse between impact and replication of wetland functions; or
  - (iii) Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or
  - (iv) The impact was an unauthorized impact.
- (c) Buffer Mitigation Ratios. When the standard buffers for Class 1, 2, and 3 wetlands are reduced, enhancement ratios for the reduced buffers will occur at a 1:1 ratio.
- (d) Wetland mitigation banks. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:
- (i) The bank is certified under Chapter 173-700 WAC;
  - (ii) The City determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and
  - (iii) The proposed use of credits is consistent with the terms and conditions of the bank's certification.
- (e) Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification. (Ordinance. 375 § 3, 2004; Ordinance. 175 § 1, 1997. Formally 21.24.330)

**21.24.360 Wetlands: limited exemption.** Class 3 wetlands less than 1,000 square feet may be exempted from the provisions of WMC 21.24.320 to 21.24.340 and may be

that the altered by filling or dredging if the Development Services Director determines cumulative impacts do not unduly counteract the purposes of this chapter and are mitigated pursuant to an approved mitigation plan.

**21.24.370 Streams: designation and rating.** Streams are water bodies with a defined bed and banks and demonstrable flow of water. Streams shall be designated Type 1, Type 2, Type 3 and Type 4 according to the following criteria:

- (1) Type 1 streams are those streams identified as "Shorelines of the State" under Chapter 90.58 RCW or supporting significant anadromous salmonid use, including the Sammamish River and Little Bear Creek.
- (2) Type 2 streams are those that have perennial (year-round) or intermittent (seasonal) flow and are used by salmonids.
- (3) Type 3 streams are those that have perennial or intermittent flow and are used by fish other than salmonids.
- (4) Type 4 streams are those natural streams with perennial or intermittent flow that are not used by fish.

**21.24.380 Streams: development standards.** A development proposal on a site containing a stream shall meet the following requirements:

- (1) The following standard buffers shall be established from the ordinary high water mark or from the top of the bank if the ordinary high water mark cannot be identified:

Stream Type	Standard Buffer Width	Reduced Buffer Width with Enhancement
1	150 feet	115 feet *
2	115 feet	100 feet
3	75 feet	50 feet
4	50 feet	35 feet

\*A 100 foot buffer may be allowed by the Development Services Director when a special study (based on BAS) determines that functions achieved in 100 feet are equal to the functions achieved in 115 feet for the site in question.

- (a) The standard buffer width will be established unless the existing stream buffer is significantly degraded. If the existing stream buffer is significantly degraded, the applicant may use the reduced buffer as referenced in subsection (1) as long as enhancement measures are implemented to provide a net improvement in overall stream and buffer function and value as determined by a qualified biologist. Enhancement measures shall be conducted in accordance with a plan approved by the Development Services Director.
- (b) The Development Services Director may allow further decreases to buffer widths on streams designated as "urban" in accordance with the recommendations of a qualified professional biologist and the best available science on a case-by-case basis. A reduced buffer must be

sufficient to protect stream functions and values based on site-specific characteristics and must include enhancement measures implemented to provide a net improvement in overall stream and buffer function and value. Stream enhancement measures may be required on-site and/or off-site to improve overall stream function. No buffer shall be reduced on a stream designated as "urban" to less than fifty (50) feet wide unless the stream is not used by fish whereas the minimum buffer will be thirty five (35) feet. Streams designated as "urban" are those streams, which meet all of the following criteria:

- (i) Streams other than Type 1 streams according to the City of Woodinville classification system;
  - (ii) Streams with degraded channel conditions (i.e., presence of piping, sedimentation, channelization, etc.);
  - (iii) Streams with buffers that are currently degraded or developed; and
  - (iv) Streams within sub-basins where restoration opportunities are limited.
- (c) Any stream relocated because of a permitted alteration shall have the minimum buffer required for the stream class involved.
- (d) The Development Services Director shall require increased buffer widths in accordance with the recommendations of a qualified professional biologist and the best available science on a case-by-case basis when a larger buffer is necessary to protect stream functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:
- (i) A larger buffer is needed to protect other critical areas;
  - (ii) The buffer or adjacent uplands has a slope greater than thirty percent (30%) or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the stream; and
- (e) Any stream adjoined by a riparian wetland or other contiguous critical area shall have the buffer required for the stream class involved or the buffer, which applies to the wetland or other sensitive area, whichever is greater.
- (2) The use of hazardous substances, in the stream corridor and its buffer is prohibited; and
  - (3) The use of pesticides and fertilizers in the stream corridor and its buffer shall be restricted by type and seasonal use under the discretion of the Development Services Director.
  - (4) The livestock restrictions in WMC 21.24.330 shall also apply to Type 1 and 2 streams and their buffers.

**21.24.390 Streams: permitted alterations.** Alterations to streams and buffers may be allowed only as follows:

- (1) Alterations may only be permitted if based upon a special study;
- (2) Only plants and wildlife indigenous to the Puget Sound area shall be introduced to any stream or buffer unless authorized by a state or federal permit or approval;
- (3) Utilities may be allowed in stream buffers if:
  - (a) No practical alternative location is available;

- (b) The utility corridor meets any additional requirements set forth in administrative rules including, but not limited to, requirements for installation, replacement of vegetation and maintenance;
  - (c) The requirements for sewer utility corridors in WMC 21.24.330 shall also apply to streams;
  - (d) Joint use of an approved utility corridor by more than one utility may be allowed; and
  - (e) The utility corridor meets the provisions of Policy U-1.12 of the City of Woodinville Comprehensive Plan.
- (4) The following surface water management activities and facilities may be allowed in stream buffers as follows:
- (a) Surface water discharge to a stream from a detention facility, pre-settlement pond or other surface water management activity or facility may be allowed if the discharge is in compliance with the King County Surface Water Design Manual;
  - (b) Stormwater management facilities. Grass lined swales and dispersal trenches may be located in the outer twenty-five percent (25%) of the buffer area. All other surface water management facilities are not allowed within the buffer area;
- (5) Public and private trails, or visual access to the stream, is encouraged in stream buffers provided:
- (a) Trail surface shall not be made of impervious materials, except that public multi-purpose trails may be made of impervious materials if they meet all other requirements including water quality; and
  - (b) Buffers shall be expanded, where possible, equal to the width of the trail corridor including disturbed areas;
- (6) Stream crossings may be allowed if:
- (a) All crossings use bridges or other construction techniques in accordance with best management practices, which do not disturb the stream bed or bank, except that bottomless culverts or other appropriate methods demonstrated to provide fisheries protection may be used for Type 2 or 3 streams if the applicant demonstrates to the satisfaction of the Development Services Director that such methods and their implementation will pose no harm to the stream or inhibit migration of fish;
  - (b) All crossings are constructed during the summer low flow and are timed to avoid stream disturbance during periods when use is critical to salmonids;
  - (c) Crossings do not occur over salmonid spawning areas unless the Development Services Director determines that no other possible crossing site exists;
  - (d) Bridge piers or abutments are not placed within the FEMA floodway or the ordinary high water mark;
  - (e) Crossings do not diminish the flood-carrying capacity of the stream;
  - (f) Underground utility crossings are laterally drilled and located at a depth of four (4) feet below the maximum depth of scour for the base flood predicted by a civil engineer licensed by the State of Washington; and

- (g) Crossings are minimized and serve multiple purposes and properties whenever possible.
- (7) Stream relocations may be allowed subject to the following limitations:
  - (a) All stream types as part of a public road project for which a public agency and utility exception is granted pursuant to WMC 21.24.060; and
  - (b) All stream types for the purpose of enhancing or restoring resources in the stream if:
    - (i) Appropriate floodplain protection measures are used; and
    - (ii) The relocation occurs on the site, except that relocation off the site may be allowed if the applicant demonstrates that any on-site relocation is impracticable, the applicant provides all necessary easements and waivers from affected property owners and the off-site location is in the same drainage sub-basin as the original stream;
    - (iii) A scientific study shows that the relocation is beneficial to fish and wildlife habitat.
  - (c) Relocations are constructed during the summer low flow and are timed to avoid stream disturbance during periods when use is critical to salmonids.
  - (d) Streams shall not be relocated solely for development purposes.
- (8) Stream relocation pursuant to this section, the applicant shall demonstrate, based on information provided by a civil engineer and a qualified biologist, that:
  - (a) Equivalent base flood storage volume and function will be maintained;
  - (b) No adverse impact to local groundwater;
  - (c) No increase in velocity;
  - (d) No increase in transfer of water;
  - (e) No increase in the sediment load;
  - (f) Requirements set out in the mitigation plan are met;
  - (g) Relocation conforms to other applicable laws; and
  - (h) All work will be carried out under the direct supervision of a qualified biologist.
- (9) Stream channel stabilization may occur if:
  - (a) Movement of the stream channel threatens existing residential or commercial structures, public facilities or improvements, unique natural resources or the only existing access to property; and
  - (b) Stabilization is done in compliance with the requirements of WMC 21.24.210 through 21.24.260 and administrative rules promulgated pursuant to this chapter.
- (10) Stream enhancement not associated with any other development proposal may be allowed if accomplished according to a plan for its design, implementation, maintenance and monitoring prepared by a civil engineer and a qualified biologist and carried out under the direct supervision of a qualified biologist pursuant to provisions contained in administrative rules.
- (11) A minor stream restoration project for fish habitat enhancement may be allowed if the restoration is:
  - (a) Accomplished by a public agency with a mandate to do such work;
  - (b) Unassociated with mitigation of a specific development proposal;

- (c) Limited to placement of rock weirs, log controls, spawning gravel, culvert replacement and other specific salmonid habitat improvements;
- (d) Involves the use of hand labor and light equipment; and
- (e) Performed under the direct supervision of a qualified biologist.

**21.24.400 Streams: mitigation requirements.**

- (1) Restoration or mitigation shall be required as part of a development proposal whereby impacts, either direct or indirect, to the stream occur. Restoration shall also be required when a stream or its buffer is altered in violation of law or without any specific permission or approval by the Development Services Director. A mitigation plan for the restoration or mitigation shall demonstrate that the:
  - (a) Stream has been degraded and will not be further degraded by the restoration or mitigation activity;
  - (b) Restoration or mitigation will reliably and demonstrably improve the water quality and fish and wildlife habitat of the stream;
  - (c) Restoration or mitigation will have no lasting significant adverse impact on any stream functions; and
  - (d) Restoration or mitigation will assist in stabilizing the stream channel.
- (2) The following minimum requirements shall be met for the restoration or mitigation of impacts to a stream or its buffer:
  - (a) All work shall be carried out under the direct supervision of a qualified biologist;
  - (b) Basin analysis shall be performed to determine hydrologic conditions;
  - (c) Natural channel dimensions shall be replicated including its depth, width, length and gradient at the original location, and the original horizontal alignment (meander lengths) shall be replaced;
  - (d) Identical or similar materials shall be used to restore the stream bottom;
  - (e) Bank and buffer configuration shall be restored to its original condition;
  - (f) Channel, bank and buffer areas shall be replanted with native vegetation which replicates the original vegetation in species, sizes and densities; and
  - (g) Pre-existing biologic functions of the stream shall be recreated.
- (3) Mitigation projects shall be monitored and maintained for a period of five (5) years. A monitoring protocol shall be approved by the Development Services Director and monitoring reports shall be submitted to the Development Services Director as required.
- (4) The requirements in subsection (2) above may be modified if the applicant demonstrates to the satisfaction of the Development Services Director that a greater biologic function can otherwise be obtained;
- (5) Replacement or enhancement shall be required when a stream or buffer is altered pursuant to an approved development proposal. There shall be no net loss of stream functions on a development proposal site and no impact on stream functions above or below the site due to approved alterations.
- (6) Requirements, which apply, to the restoration of streams in subsection (2) shall also apply to the relocation of streams, unless the applicant demonstrates to the satisfaction of the Development Services Director that a greater biologic function can be obtained by modifying these requirements.

- (7) Replacement or enhancement for approved stream or buffer alterations shall be accomplished in streams and on the site unless the applicant demonstrates to the satisfaction of the Development Services Director that:
  - (a) Enhancement or replacement on the site is not possible;
  - (b) Off-site location is in the same drainage sub-basin as the original stream; and
  - (c) Greater biologic and hydrologic functions will be achieved.
- (8) Surface water management or flood control alterations shall not be considered enhancement unless other functions are simultaneously improved.
- (9) Day-lighting a stream is encouraged when redeveloping. The Planning Director may modify the requirements pertaining to aquatic areas and their buffers, when locating or day-lighting a stream.

**21.24.410 Fish and Wildlife Habitat Conservation Areas: designation**

- (1) Fish and wildlife habitat conservation areas are those habitat areas that meet any of the following criteria:
  - (a) Documented presence of species listed by the federal government or the State of Washington as endangered or threatened; or
  - (b) Heron rookeries or active nesting trees; or
  - (c) Class 1 Wetlands and buffers as defined in WMC 21.24.310; or
  - (d) Type 1 Streams and buffers as defined in WMC 21.24.350; or
  - (e) Native Growth Protection Easements / Native Growth Protection Areas (NGPE / NGPA) and other areas designated by the City.
  - (f) Sites containing a bald eagle territory as mapped by WDFW. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (Chapter 232-12-292 WAC).
- (2) All areas within the City meeting one or more of these criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Title.

**21.24.420 Fish and Wildlife Conservation Area Report Requirements**

Requirements for critical areas reports for fish and wildlife habitat conservation areas are available from at the City Hall Planning Department.

**21.24.430 Fish and wildlife habitat conservation areas: Performance standards**

- (1) Habitat Management Plan. A Habitat Management Plan shall be required whenever the priority habitats and species maps or natural heritage program maps maintained by the City, or other information, indicate the presence of areas with which species listed as endangered or threatened under federal law have a primary association, or which contain heron nests.
- (2) All Habitat Management Plans shall be prepared in consultation with the Washington Department of Fish and Wildlife. Habitat Management Plans for species listed as endangered or threatened or heron rookeries shall be approved by the Department of Fish and Wildlife.
- (3) Habitat Management Plan Content Requirements. Based on the characteristics of the site and information submitted by the applicant, the

Director may require that all or a portion of the following be included in a Habitat Management Plan:

- (a) A map drawn to scale or survey showing the following information:
  - (i) All lakes, ponds, streams, and wetlands on, or adjacent to the subject property, including the name (if named), ordinary high water mark of each, and the stream type or wetland class consistent with this Title.
  - (ii) The location and description of the fish and wildlife habitat conservation areas on the subject property, as well as any potential fish and wildlife habitat conservation areas within 200 feet of the subject property as shown on maps maintained by the City, and
  - (iii) The location of any observed evidence of use by a threatened or endangered species.
- (b) An analysis of how the proposed development activities will affect the fish and wildlife habitat conservation area and listed species;
- (c) Provisions to reduce or eliminate the impact of the proposed development activities on any fish and wildlife habitat conservation area and listed species including:
  - (i) Prohibition or limitation of development activities within the fish and wildlife habitat conservation area,
  - (ii) Establishment of a buffer around the fish and wildlife habitat conservation area,
  - (iii) Retention of certain vegetation or areas of vegetation critically important to the listed species,
  - (iv) Limitation of access to the fish and wildlife habitat conservation area and buffer,
  - (v) Seasonal restrictions on construction activities on the subject property,
  - (vi) Clustering of development on the subject property is appropriate, and
  - (vii) Preservation or creation of a habitat area for the listed species.
- (4) Fish and wildlife habitat conservation areas may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat. All new structures and land alterations shall be prohibited within habitat conservation areas, except in accordance with this Title. Some NGPE areas are wetlands and riparian corridors where standard buffers are set for Type 1 streams and Class 1 wetlands at 150 feet. Other NGPE areas are steep slopes with designated buffers also (50 ft). The remaining areas are open space which do not have prescribed buffers but are left to the director's discretion.
- (5) Introduction of plant, wildlife, or fish species not indigenous to the region into a fish and wildlife habitat conservation areas shall be prohibited unless authorized by a state or federal permit or approval.
- (6) Mitigation sites shall be located to achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved Habitat Management Plan to minimize the isolating effects of development on

habitat areas. Mitigation of aquatic habitat shall be located within the same aquatic ecosystem as the area disturbed.

- (7) Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic functions. Mitigation shall address each function affected by the alteration in order to achieve functional equivalency or improvement on a per function basis.
- (8) Any mitigation for alterations or impacts to a fish and wildlife habitat conservation area shall be supported by the best available science.
- (9) Buffers. The Director shall require the establishment of buffer areas for activities in, or adjacent to, fish and wildlife habitat conservation areas, when needed to protect fish and wildlife habitat conservation areas. Buffers shall be established to protect the integrity, functions and values of the affected habitat. Buffers shall either consist of an undisturbed area of native vegetation, or of areas identified for restoration or enhancement. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby, and shall be consistent with the management recommendations issued by the Washington Department of Fish and Wildlife.
- (10) Seasonal restrictions. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions, as determined by the Washington Department of Fish and Wildlife, may apply. Larger buffers may be required and activities may be further restricted during the specified season.
- (11) Tree retention. The tree retention provisions of WMC 21.15 shall apply to the protection of Fish and Wildlife Habitat Conservation Areas.
- (12) Additional information may be required by the Director when appropriate, due to the type of habitat or species present or project area conditions.

**21.24.440 Fish and wildlife habitat conservation areas: Performance standards for Specific habitats**

- (1) The following development standards shall apply for areas with endangered or threatened species:
  - (a) No development shall be allowed without prior approval within a fish and wildlife habitat conservation area with which state or federally endangered or threatened species have a primary association.
  - (b) Whenever activities are proposed abutting a fish and wildlife habitat conservation area with which state or federally endangered or threatened species have a primary association, such area shall be protected through the application of protection measures in accordance with a Habitat Management Plan prepared by a qualified professional biologist and approved by the Director. Approval for alteration of land adjacent to the fish and wildlife habitat conservation area or its buffer shall not occur prior to consultation with the Washington Department of Fish and Wildlife and the appropriate federal agency, as applicable.
- (2) Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). Whenever activities are proposed adjacent to a verified nest territory or communal roost, a Habitat Management

Plan shall be developed by a qualified professional. Activities are adjacent to bald eagle sites when they are within eight hundred (800) feet, or within a quarter mile (2,640 feet) and in a shoreline foraging area. The Director shall verify the location of eagle management areas for each proposed activity. Approval of the activity shall not occur prior to approval of the Habitat Management Plan by the Development Services Director and Department of Fish and Wildlife.

- (3) Great blue heron rookery:
  - (a) A buffer equal to the distance of 820 feet radius measured from the outer most nest tree in the rookery will be established around an active rookery. This area will be maintained in native vegetation.
  - (b) Between January 1 and July 31, no clearing, grading or land disturbing activity shall be allowed within 900 feet of the rookery, unless approved by the Director and WDFW.
  - (c) Approval of all activities requiring permits shall not occur within 900 feet of a heron rookery prior to the approval of a Habitat Management Plan by the Director and WDFW.
- (4) Anadromous fish:
  - (a) All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:
    - (i) Activities shall be timed to occur only during the allowable work window as designated by the Washington Department of Fish and Wildlife for the applicable species;
    - (ii) An alternative alignment or location for the activity is not physically practicable;
    - (iii) The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas; and
    - (iv) Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved habitat management plan.
  - (b) Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.
  - (c) Fills, when authorized pursuant to the City of Woodinville's Shoreline Management Master Program, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts, and shall only be allowed for a water-dependent use.