EXHIBIT B—SeaTac Municipal Code Chapter 15.700

Chapter 15.700 CRITICAL AREAS

S

Sections:	
15.700.005	Purpose
15.700.010	Authority and Application
15.700.015	Definitions
15.700.020	Appeals
15.700.030	Critical Area Rules
15.700.040	Complete Exemptions
15.700.050	Partial Exemptions
15.700.060	Exceptions
15.700.070	Critical Area Maps and Inventories
15.700.080	Disclosure by Applicant
15.700.090	Critical Area Review
15.700.100	Critical Area Report Requirement
15.700.110	Contents of Critical Area Report
15.700.120	Mitigation, Maintenance, Monitoring and Contingency
15.700.130	Bonds to Insure Mitigation, Maintenance and Monitoring
15.700.140	Vegetation Management Plan
15.700.150	Critical Area Markers and Signs
15.700.160	Notice on Title
15.700.170	Critical Area Tracts and Designation on Site Plans
15.700.180	Building Setbacks
15.700.190	Erosion Hazard Areas – Development Standards and Permitted Alterations
15.700.200	Flood Hazard Areas – Components
15.700.210	Flood Fringe – Development Standards and Permitted Alterations
15.700.220	Zero-Rise Floodway – Development Standards and Permitted Alterations
15.700.230	FEMA Floodway – Development Standards and Permitted Alterations
15.700.240	Flood Hazard Areas – Certification by an Engineer or Surveyor
15.700.250	Landslide Hazard Areas – Development Standards and Permitted
	Alterations
15.700.260	Seismic Hazard Areas – Development Standards and Permitted Alterations
15.700.270	Steep Slope Hazard Areas – Development Standards and Permitted
	Alterations
15.700.275	Wetlands – Identification and Rating
15.700.280	Wetlands – Limited Exemption
15.700.285	Wetlands – Development Standards
15.700.290	Wetlands – Permitted Alterations and Allowed Uses
15.700.300	Wetlands – Alteration of Wetlands Historically and Continuously Used for
	Agricultural Purposes
	0 1

15.700.310 Wetlands – Mitigation Requirements

15.700.330	Streams – Development Standards
15.700.340	Streams – Permitted Alterations
15.700.350	Streams – Mitigation Requirements
15.700.360	Wellhead Protection Areas and General Groundwater Resources
15.700.370	Fish and Wildlife Habitat Conservation Areas

15.700.005 Purpose

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

A. Establishing development standards to protect defined critical areas;

B. Protecting members of the public, public resources and facilities from injury, loss of life, property damage or financial loss due to flooding, erosion, landslides, seismic and soil subsidence or steep slope failures;

C. Protecting unique, fragile and valuable elements of the environment including, but not limited to, wildlife and its habitat;

D. Requiring mitigation of unavoidable impacts on environmentally critical areas by regulating alterations in or near critical areas;

E. Preventing cumulative adverse environmental impacts on water availability, water quality, wetlands and streams;

F. Measuring the quantity and quality of wetland and stream resources and preventing overall net loss of wetland and stream functions and values;

G. Protecting the public trust as to navigable waters and aquatic resources;

H. Meeting the requirements of the National Flood Insurance Program and maintaining SeaTac as an eligible community for Federal flood insurance benefits;

I. Alerting members of the public including, but not limited to, appraisers, owners, real estate agents, potential buyers or lessees to the development limitations of critical areas; and

J. Providing City officials with sufficient information to protect critical areas.

15.700.010 Authority and Application

A. The provisions of this chapter shall apply to all land uses in the City and property owners within the City shall comply with the requirements of this chapter.

B. The City shall not approve any permit or issue any authorization to alter the condition of any land, water or vegetation or to construct any structure or improvement without first assuring compliance with the requirements of this chapter;

C. The provisions of this chapter do not apply to any habitat areas which come under the jurisdiction of the Shoreline Management Program; and

D. When any provision of any other chapter of the SeaTac Municipal Code conflicts with this chapter or when the provisions of this chapter are in conflict, that provision which provides more protection to critical areas shall apply unless specifically provided otherwise in this chapter or unless such provision conflicts with Federal or State laws or regulations.

15.700.015 Definitions

Alteration

Alterations include, but are not limited to, grading, filling, channelizing, dredging, clearing of vegetation, construction, compaction, excavation, or any other activity that changes the character of a critical area or its buffer.

Base Flood

The flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designation on maps always includes the letters A or VA flood having a one percent (1%) chance of being equaled or exceeded in any given year, often referred to as the "one hundred (100) year flood."

Base Flood Elevation

The water surface elevation of the base flood in relation to the National Geodetic Vertical Datum of 1929.

Buffer or Buffer Zone

The area contiguous with a critical area that maintains the functions and/or structural stability of the critical area.

Creation

The manipulation of the physical, chemical, or biological characteristics to develop a wetland on an upland or deep water site, where a wetland did not previously exist. Creation results in a gain in wetland acreage and function. A typical action is the excavation of upland soils to elevations that will produce a wetland hydroperiod and hydric soils, and support the growth of hydrophytic plant species.

Critical Area

Any of those areas in the City which are subject to natural hazards or those land features which support unique, fragile or valuable natural resources including fishes, wildlife and other organisms and their habitat, and such resources which carry, hold or purify water in their natural state. Critical areas include coal mine hazard areas, erosion hazard areas, flood hazard areas, landslide hazard areas, seismic hazard areas, steep slope hazard areas, streams, volcanic hazard areas, wetlands and critical aquifer recharge areas. For purposes of this chapter, wellhead protection areas and general groundwater resources are not considered to be critical aquifer recharge areas.

Critical Drainage Area

An area which has been formally defined in the City Surface Water Management Program to require more restrictive regulation than is standard in noncritical areas of the City in order to mitigate severe flooding, water quality issues, erosion or sedimentation problems which result from the cumulative impacts of development and urbanization.

Enhancement

The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in a change in wetland function(s) and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Examples are planting vegetation, controlling non-native or invasive species, and modifying site elevations to alter hydroperiods.

Erosion and Deposition

The removal of soils and the placement of these removed soils elsewhere by the natural forces of wind and/or water runoff.

Federal Emergency Management Agency (FEMA) Floodway

The channel of the stream and that portion of the adjoining floodplain which is necessary to contain and discharge the base flood flow without increasing the base flood elevation more than one (1) foot.

Flood Elevation Study

An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).

Flood Fringe

That portion of the floodplain outside of the zero-rise floodway (see "Floodway, Zero-Rise") which is covered by floodwater during the base flood, generally associated with standing water rather than rapidly flowing water.

Flood Hazard Areas

Those areas in the City subject to inundation by the base flood including, but not limited to, streams, lakes, wetlands and closed depressions.

Flood Insurance Rate Map (FIRM)

The official map on which the Federal Insurance Administration has delineated <u>bothsome of</u> the major areas of <u>special</u> flood hazards. <u>both the areas of special flood hazards</u> and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Flood Elevation Study

<u>An examination, evaluation and determination of flood hazards and, if appropriate,</u> corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).</u>

Flood Insurance Study for King County

The official report provided by the Federal Insurance Administration which includes flood profiles and the flood insurance rate map.

Floodplain

Any land area susceptible to being inundated by water from any source. The total area subject to inundation by the base flood.

Flood proofing

Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents. Flood proofed structures are those that have the structural integrity and design to be impervious to floodwater below the Base Flood Elevation.

Floodproofing

Adaptations, pursuant to the Building Code, which will make a structure that is below the flood protection elevation substantially impermeable to the passing of water and resistant to hydrostatic and hydrodynamic loads including the impacts of buoyancy.

Flood Protection Elevation

An elevation which is one (1) foot above the base flood elevation.

Floodway or Regulatory Floodway

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Floodway, Zero-Rise

The channel of a stream and that portion of the adjoining floodplain which is necessary to contain and discharge the base flood flow without any measurable increase in flood height. A measurable increase in base flood height means a calculated upward rise in the base flood elevation, equal to or greater than 0.01 foot, resulting from a comparison of existing conditions and changed conditions directly attributable to development in the floodplain. This definition is broader more narrow than that of the FEMA-Regulatory floodway, but always includes the FEMA-Regulatory floodway. The boundaries of the one hundred (100) year floodplains, as shown on the FIRM maps for King County, are considered the boundaries of the zero-rise floodway unless otherwise delineated by a critical area report.

Functions and Values

The services provided by critical areas to society, including but not limited to improving and maintaining water quality, providing fish and wildlife habitat, supporting terrestrial and aquatic food chains, reducing flooding and erosive flows, wave attenuation, historical or archaeological importance, educational opportunities, and recreation.

Hazardous Production Material (HPM)

A solid, liquid or gas that has a degree of hazard rating in health, flammability or reactivity of 3 or 4 as ranked by Fire Code Standard No. 79-3 and which is used directly in research, laboratory or production processes which have, as their end product, materials which are not hazardous.

Hazardous Substances

Any solid, liquid, gas or sludge, including any material, substance, product, commodity or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090 or 173-303-100.

Ordinary High Water Mark

The mark found by examining the bed and banks of a stream and ascertaining where the presence and action of waters are common and long maintained in ordinary years as to mark upon the soil a vegetative character distinct from that of the abutting upland. In any area where the ordinary high water mark cannot be found, the line of mean high water shall substitute. In any area where neither can be found, the top of the channel or lake bank shall substitute. In braided channels and alluvial fans, the ordinary high water mark or line of mean high water shall be measured so as to include the entire stream feature.

Qualified Professional

A person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology, or related field, and have at least five years of related work experience.

A. A qualified professional for wetlands must be a professional wetland scientist or hydrogeologist licensed in the State of Washington with at least two (2) years of full-time work experience as a wetlands professional, including delineating wetlands using the Federal manuals and supplements, preparing wetlands reports, conducting function assessments, and developing and implementing mitigation plans.

B. A qualified professional for habitat must have a degree in biology or a related degree and professional experience related to the subject species.

C. A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the State of Washington.

D. A qualified professional for critical aquifer recharge areas means a hydrogeologist, geologist, or engineer licensed in the State of Washington, or other scientist with experience in preparing hydrogeologic assessments.

Reestablishment

The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Reestablishment results in rebuilding a former wetland and results in a gain in wetland acres and functions. Activities could include removing fill, plugging ditches, or breaking drain tiles.

Rehabilitation

The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could

involve breaching a dike to reconnect wetlands to a floodplain or returning tidal influence to a wetland.

Restoration

Measures taken to restore an altered or damaged natural feature, including:

A. Active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to an unauthorized alteration; and

B. Actions performed to reestablish structural and functional characteristics of a critical area that have been lost by alteration, past management activities, or catastrophic events.

Retention/Detention Facility

A type of drainage facility designed either to hold water for a considerable length of time and to release it by evaporation, plant transpiration and/or infiltration into the ground, or to hold runoff via structural controls and then release it to the surface and storm drainage system.

Retention/Detention Facility, Regional

A surface water control structure installed in or adjacent to a drainage facility, stream or wetland of a basin or sub-basin by the City or a project proponent, as required by the City. Such facilities protect downstream properties from predicted significant regional basin flooding or erosion problems.

Seismic Hazard Area

Those areas in the City subject to severe risk of earthquake damage as a result of soil liquefaction in areas underlain by cohesionless soils of low density and usually in association with a shallow groundwater table or other seismically induced settlement.

SEPA

The State Environmental Policy Act (Chapter 43.21C RCW) and the adopted City environmental policies.

Shoreline Master Program

The applicable City and State laws/codes related to the shoreline programs.

Steep Slope Hazard Areas

Those areas in the City on slopes of forty percent (40%) or greater within a vertical elevation change of at least twenty (20) feet. A slope is delineated by establishing its toe and top, and is measured by averaging the inclination over at least ten (10) feet of vertical relief.

Stream

A course or route, formed by nature, including those modified by man, generally consisting of a channel with a bed, banks, or sides substantially throughout its length, along which surface waters naturally and normally flow in draining from higher to lower lands. Normal rainfall is rainfall that is at or near the mean of the accumulated annual rainfall record, based upon the water year as recorded at the Seattle-Tacoma International Airport. Pursuant to the critical areas section, there are the following stream classifications:

A. Class 1 streams, only including streams inventoried as "Shorelines of the State" under the adopted Shoreline Master Program, pursuant to Chapter 90.58 RCW;

B. Class 2 streams, only including streams smaller than Class 1 streams which flow year-round during years of normal rainfall or those which are used by salmonids; and

C. Class 3 streams, only including streams which are intermittent or ephemeral during years of normal rainfall and which are not used by salmonids.

Stream Functions

Natural processes performed by streams including functions which are important in facilitating food chain production; providing habitat for nesting, rearing and resting sites for aquatic, terrestrial and avian species; maintaining the availability and quality of water, such as purifying water; acting as recharge and discharge areas for groundwater aquifers; moderating surface and storm water flows and maintaining the free flowing conveyance of water, sediments and other organic matter.

Wetland

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetlands intentionally created from non-wetlands.

Wetland Edge

The line delineating the outer edge of a wetland established in accordance with the approved Federal wetland delineation manual and applicable regional supplements.

Wetland, Forested

A wetland with at least thirty percent (30%) of the surface area covered by woody vegetation greater than twenty (20) feet in height that is at least partially rooted within the wetland.

Wetland Functions

Natural processes performed by wetlands, including functions which are important in facilitating food chain production, providing habitat for nesting, rearing and resting sites for aquatic, terrestrial and avian species, maintaining availability and quality of water, acting as recharge and discharge areas for groundwater aquifers and moderating surface and storm water flows, as well as providing other functions including, but not limited to, those set forth in 33 CFR 320.4(b)(2), 1988.

Wetland, Isolated

A wetland that is outside of and not contiguous to any one hundred (100) year flood plain of a lake, river or stream, and has no contiguous hydric soil or hydrophytic vegetation between the wetland and any surface water including other wetlands.

Wetland Mitigation Bank

A site where wetlands are restored, created, enhanced, or in exceptional circumstances preserved expressly for the purpose of providing compensatory mitigation in advance of unavoidable impacts to wetlands or other aquatic resources typically unknown at the time of certification to compensate for future, permitted impacts to similar resources.

Wetland Mosaic

An area with a concentration of multiple small wetlands, in which each patch of wetland is less than one (1) acre; on average, patches are less than one hundred (100) feet from each other; and areas delineated as vegetated wetland are more than fifty percent (50%) of the total area of the entire mosaic, including uplands and open water.

Wet Meadow, Grazed

Palustrine emergent wetland typically having up to six (6) inches of standing water during the wet season and dominated under normal conditions by meadow emergents such as reed, canary grass, spike rushes, bulrushes, sedges and other rushes. During the growing season, the soil is often saturated but not covered with water. These meadows frequently have been or are being used for livestock activities.

Wet Pond

An artificial water body constructed as a part of a surface water management system.

15.700.020 Appeals

Any decision to approve, condition or deny a development proposal based on the requirements of this chapter, Critical Areas, may be appealed according to, and as part of, the appeal procedure for the permit or approval involved.

15.700.030 Critical Area Rules

Applicable City departments are authorized to adopt administrative rules and regulations as are necessary and appropriate to implement this chapter, Critical Areas, and to prepare and require the use of such forms as are necessary for its administration.

15.700.040 Complete Exemptions

The following are exempt from the provisions of this chapter and any administrative rules promulgated thereunder:

A. Emergencies which threaten the public health, safety and welfare or which pose an imminent risk of damage to private and public property as long as any alteration undertaken pursuant to this subsection is reported to the Department and Department of Public Works immediately, upon which the Director(s) shall either confirm that an emergency exists or determine if further permit review or mitigation is necessary;

B. Agricultural activities in existence before November 27, 1990, as follows:

1. Mowing of hay, grass or grain crops;

2. 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; and

3. Normal and routine maintenance of existing irrigation and drainage ditches not used by salmonids;

C. Public water, electric and natural gas distribution, public and private sewer collection, storm water treatment and/or flow control facilities, cable communications, telephone distribution and collection system, and related activities undertaken pursuant to City approved best management practices, as follows:

1. Normal and routine maintenance or repair of existing utility structures or rights-of-way;

2. Relocation of electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of fifty-five thousand (55,000) volts or less, only when required by a local governmental agency which approves the new location of facilities;

3. Replacement, operation, repair, modification or installation or construction in an improved City road right-of-way of all electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of fifty-five thousand (55,000) volts or less;

4. Relocation or maintenance of sanitary and storm sewer systems, public water local distribution, natural gas, cable communication or telephone distribution and collection facilities, lines, pipes, ditches, mains, equipment or appurtenances, only when required by a local governmental agency which approves the new location of the facilities; and

5. Replacement, operation, repair, modification, installation or construction in an improved City road right-of-way of public local collection, public water distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances;

D. Improvements, ongoing maintenance, operation, repair or replacement of public roadways and pedestrian improvements in an improved public road right-of-way in existence prior to November 27, 1990, which, at a minimum, is improved with an all-weather driving surface (with any associated shoulders);

E. Construction and improvements of unimproved public rights-of-way in existence prior to November 27, 1990;

F. Improvements, on-going maintenance, operation, repair or replacement of public roadways and pedestrian improvements in an improved public road right-of-way constructed after November 27, 1990, in conformance with this chapter which, at a minimum, is improved with an all-weather driving surface (with any associated shoulders);

G. Emergent wetlands that have been created directly as the result of poorly maintained public storm drainage systems and would have not been created if the storm drainage system had otherwise been maintained;

H. Public agency development proposals only to the extent of any construction contract awarded before November 27, 1990; provided, that any law or regulation in effect at the time of such award shall apply to the proposal.

15.700.050 Partial Exemptions

The following are exempt from the provisions of this and any administrative rules promulgated thereunder, except for the notice on title provisions, SMC 15.700.160, Notice on Title, and the flood hazard area provisions, SMC 15.700.200, Flood Hazard Areas – Components, through 15.700.240, Flood Hazard Areas – Certification by an Engineer or Surveyor:

A. Structural modification of, addition to, or replacement of structures, except single-family detached residences, in existence before November 27, 1990, which do not meet the building setback or buffer requirements for wetlands, streams or steep slope 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;

B. Structural modification of, addition to, or replacement of single-family detached residences in existence before November 27, 1990, which do not meet the building setback or buffer requirements for wetland, streams or steep slope 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 one thousand (1,000) square feet over that existing before November 27, 1990, and no portion of the modification, addition or replacement is located closer to the critical area or, if the existing residence is in the critical area, extends further in the critical area; and

C. Maintenance or repair of structures which do not meet the development standards of this chapter for landslide and seismic 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.

15.700.060 Exceptions

A. 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 as follows:

1. 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 SEPA documents. The application shall be processed as a Type II application pursuant to Chapter 16A.03 SMC;

2. The Director shall review the application and issue a decision based on the following criteria:

a. There is no other practical alternative to the proposed development with less impact on the critical area; and

b. The proposal minimizes the impact on critical areas;

3. 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:

a. Class 1 streams or buffers;

b. Class I wetlands or buffers with plant association of infrequent occurrence; or

c. Class I or II wetlands or 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.

d. See SMC 15.700.290(L)(2) for additional criteria.

B. If the application of this chapter would deny all reasonable use of the property, the applicant may apply for a reasonable use exception pursuant to this subsection:

1. The applicant shall apply to the Department, which shall process the application as a Type II application pursuant to Chapter 16A.03 SMC. 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 this chapter.

2. The Director shall review the application and make a final decision based on the following criteria:

a. The application of this chapter would deny all reasonable use (as defined in SMC 15.105.180) of the property;

b. There is no other reasonable use with less impact on the critical area;

c. 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

d. Any alterations permitted to the critical area shall be the minimum necessary to allow for reasonable use of the property.

3. Any authorized alteration of a critical area under this subsection shall be subject to conditions established by the Director including, but not limited to, mitigation under an approved mitigation plan.

15.700.070 Critical Area Maps and Inventories

The distribution of critical areas in the City is displayed on maps in the Environment Element of the City's Comprehensive Plan, available from the Community and Economic Development

Department and through the City's website. If there is a conflict among the maps, inventory and site-specific features, the actual presence or absence of the features defined in this code as critical areas shall govern.

15.700.080 Disclosure by Applicant

A. The applicant shall disclose to the City the presence of critical areas on the development proposal site.

B. If the development proposal site contains or is within a critical area, the applicant shall submit an affidavit which declares whether the applicant has knowledge of any illegal alteration to any or all critical areas on the development proposal site and whether the applicant previously has been found in violation of this chapter. If the applicant previously has been found in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the City.

15.700.090 Critical Area Review

A. The City shall review any development proposal, permit application, or other request for permission to proceed with an alteration on a site which includes a potential or confirmed critical area or buffer.

- B. As part of the review, the City shall:
 - 1. Determine whether a critical area report is required;
 - 2. Evaluate the critical area report;
 - 3. Determine whether the development proposal is consistent with this chapter;
 - 4. Determine whether any proposed alteration to the critical area is necessary; and

5. 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.

15.700.100 Critical Area Report Requirement

A. An applicant for a development proposal which requires a critical area report pursuant to SMC 15.700.090 shall submit a critical area report that complies with the requirements of this chapter.

B. The Director shall maintain a roster of qualified professionals from which the applicant may select a consultant. If the applicant uses a qualified professional from this roster, the City will accept the results of the report and will not require peer review of the report.

If the critical area report concludes that the proposed development site does not contain a critical area or buffer, the City shall apply a credit to the cost of the applicant's subsequent development permit(s); provided, that such application, along with proof of payment for the report, is submitted within one hundred eighty (180) days of submittal of the critical area report. The credit shall be in the amount of the cost of the critical area report, up to the cost of the development permit(s). In no case shall the credit exceed the cost of the development permit(s).

C. Alternatively, if the applicant chooses to use a consultant not on the City's roster of qualified professionals as provided in subsection (B) of this section, the applicant shall enter into a three (3) party agreement, as approved by the City, whereby the applicant shall pay the costs for the City to hire the appropriate consultant(s) from the roster to provide peer review of the applicant's critical area report. The selection of the consultant(s) hired by the City shall be at the sole discretion of the City.

D. The City may waive the requirement for a critical area report if the applicant shows to the City's satisfaction that:

- 1. There will be no alteration of the critical area or buffer;
- 2. 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
- 3. The minimum standards required by this chapter are met.

E. If necessary to insure compliance with this chapter, the City may require additional information from the applicant or consultant pursuant to the agreement specified in subsection (C) of this section

15.700.110 Contents of Critical Area Report

A. The critical area report shall be based on the best available science as defined in WAC 365-195-900 through 365-195-925, as amended, and shall be conducted by a qualified professional(s).

B. The critical area report shall contain the following:

1. Identification and characterization of all critical areas on or encompassing the development proposal site;

2. Assessment of the impacts of any alteration proposed for a critical area or buffer, as applicable, assessment of the impacts of any alteration on the development proposal, other properties and the environment;

3. Studies which propose adequate mitigation, maintenance, monitoring and contingency plans and bonding measures;

4. A scale map of the development proposal site; and

5. Detailed studies, as required by the City.

C. A critical area report may be combined with any studies required by other laws and regulations.

15.700.120 Mitigation, Maintenance, Monitoring and Contingency

A. Before impacting any critical area or its buffer, an applicant shall demonstrate that the following actions have been taken. Actions are listed in the order of preference:

1. Avoid the impact altogether by not taking a certain action or parts of an action.

2. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.

3. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.

4. Reduce or eliminate the impact over time by preservation and maintenance operations.

5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.

6. Monitor the required compensation and take remedial or corrective measures when necessary.

15.700.130 Bonds to Insure Mitigation, Maintenance and Monitoring

A. When mitigation required pursuant to a development proposal is not completed prior to the City finally approving the proposal, the City 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 City. The bond shall be sufficient to guarantee that all required mitigation measures will be completed no later than the time established by the City in accordance with this chapter.

B. 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 by the City. The bond shall be sufficient to guarantee performance of conditions or mitigation measures required by this chapter for a period of up to five (5) years. The duration of maintenance/monitoring obligations shall be established by the City, based upon the nature of the proposed mitigation, maintenance or monitoring and the likelihood and expense of correcting mitigation or maintenance failures.

C. 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 bond 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 City.

D. Performance and maintenance/monitoring bonds or other security authorized by this section shall remain in effect until the City determines, in writing, that the standards bonded for have been met.

E. Depletion, failure or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring or restoration.

F. Development proposals made by the City shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring or restoration.

15.700.140 Vegetation Management Plan

A. For all development proposals where preservation of existing vegetation is required by this chapter, a vegetation management plan shall be submitted and approved prior to issuance of the permit or other request for permission to proceed with any alteration.

B. The vegetation management plan shall identify the proposed clearing limits for the project and any areas where vegetation in a critical area or its buffer is proposed to be disturbed.

C. Where clearing includes cutting any merchantable stand of timber, as defined in WAC 222-16-010, the vegetation management plan shall include a description of proposed logging practices which demonstrates how all critical areas will be protected in accordance with the provisions of this chapter. D. Clearing limits as shown on the plan shall be marked in the field in a prominent and durable manner. Proposed methods of field marking shall be reviewed and approved by the City prior to any site alteration. Field marking shall remain in place until the certificate of occupancy or final project approval is granted.

E. The vegetation management plan may be incorporated into a temporary erosion and sediment control plan or landscaping plan where either of these plans is required by other laws or regulations.

F. Submittal requirements for vegetation management plans shall be set forth in the application packet.

15.700.150 Critical Area Markers and Signs

A. Permanent survey stakes delineating the boundary between adjoining properties and critical area tracts shall be set, using iron or concrete markers as established by current survey standards.

B. The boundary between a critical area tract and contiguous land shall be identified with permanent signs, printed in two (2) international languages.

C. In all new developments, short plats, and formal subdivisions, all storm drains shall be stenciled "Dump No Waste, Drains to Stream" prior to the occupancy of any structures within the new development, or prior to the occupancy of any new residence within the short plat or formal subdivision.

15.700.160 Notice on Title

A. 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 covenant approved by the City with the King County 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 covenant shall run with the land.

B. The applicant shall submit proof that the notice has been filed for public record before the City shall approve any development proposal for the property or, in the case of subdivisions, short subdivisions, and binding site plans, at or before recording.

15.700.170 Critical Area Tracts and Designation on Site Plans

A. Critical area tracts shall be used to delineate and protect those critical areas and buffers listed below in development proposals for subdivisions, binding site plans and easements for short plats and other developments, and shall be recorded on all documents of title of record for all affected lots:

- 1. All landslide hazard areas and buffers which are one (1) acre or greater in size;
- 2. All steep slopes hazard areas and buffers which are one (1) acre or greater in size;
- 3. All wetlands and buffers; and
- 4. All streams and buffers.

B. Any required critical area tract shall be held in 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.

C. Site plans submitted as part of development proposals for building permits, master plan developments and clearing and grading permits shall include and delineate all landslide and steep slope hazard areas, streams and wetlands, buffers and building setbacks. The site plans shall be attached to the notice on title required by SMC 15.700.160, Notice on Title.

15.700.180 Building Setbacks

Unless otherwise provided, buildings and other structures shall be set back a distance of fifteen (15) feet from the edges of all critical area buffers or from the edges of all critical areas if no buffers are required. The following may be allowed in the building setback area:

A. Landscaping (such as vegetated LID BMPs);

B. Uncovered decks;

C. Building overhangs if such overhangs do not extend more than eighteen (18) inches into the setback area; and

D. Impervious ground surfaces, such as driveways and patios; provided, that such improvements may be subject to special drainage provisions specified in City policies and rules adopted for the various critical areas. Driveways and patio areas shall be permeable pavement where feasible.

Critical area buffer requirements may be found in the development standards section for each type of critical area.

15.700.190 Erosion Hazard Areas – Development Standards and Permitted Alterations

A. Clearing on an erosion hazard area is allowed only from April 1st to September 1st, except that:

1. Up to fifteen thousand (15,000) square feet may be cleared on any lot, subject to any other requirement for vegetation retention and subject to any clearing and grading permit required by Chapter 15.445 SMC, Landscaping and Tree Retention; and

2. Timber harvest may be allowed pursuant to an approved forest practice permit issued by the Washington Department of Natural Resources or a clearing and grading permit issued by the City.

B. All development proposals on sites containing erosion hazard areas shall include a temporary erosion control plan consistent with this section and other laws and regulations prior to receiving approval.

C. All subdivisions, short subdivisions or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:

1. Except as provided in this section, existing vegetation shall be retained on all lots until building permits are approved for development on individual lots;

2. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to submit a restoration plan to the City for review and approval. Following approval, the applicant shall be required to implement the plan;

3. Clearing of vegetation on lots may be allowed without a separate clearing and grading permit if the City determines that:

- a. Such clearing is a necessary part of a large scale grading plan;
- b. It is not feasible to perform such grading on an individual lot basis; and
- c. Drainage from the graded area will meet current water quality standards.

D. The use of hazardous substances, pesticides and fertilizers in erosion hazard areas may be prohibited by the City under the applicable RCW statutes.

15.700.200 Flood Hazard Areas - Components

A. <u>SMC 12.40.030 provides the basis for establishing the areas of special flood hazard.</u>

AB. fFlood hazard areas consists of the following components:

- 1. Floodplain;
- 2. Flood fringe;
- 3. Zero-rise floodway; and
- 4. Federal Emergency Management Agency (FEMA) floodway.

BC. SMC 12.40.070(E) and SMC 12.40.070(G) address how to interpret Flood Insurance Rate Map (FIRM) boundaries and changes to the special flood hazard areas, respectively. The City shall determine the flood hazard area after obtaining, reviewing and utilizing base flood elevations and available floodway data for a flood having a one percent (1%) chance of being equaled or exceeded in any given year, often referred to as the "one hundred (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, approved and adopted by the City, in which case these future flow projections shall be used. In areas where the flood insurance study for the City includes detailed base flood calculations, those calculations may be used until projection of future flows are completed and approved by the City in concurrence with FEMA.

15.700.210 Flood Fringe – Development Standards and Permitted Alterations

A. Development proposals 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 ensure that the effective compensatory storage volume will be preserved over time.

B. 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.

C. All elevated construction shall be designed and certified by a professional structural engineer licensed by the State of Washington and shall be reviewed by the City prior to construction.

D. Subdivisions, short subdivisions and binding site plans shall meet the following requirements:

1. The requirements under SMC 12.40.080(D;

2. New building lots shall contain five thousand (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;

23. All utilities and facilities such as sewer, gas, electrical, and water systems shall be located and constructed consistent with subsections (E), (F), (H) and (I) of this section;

3.4 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

45. 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 precaution.

E. New residential structures and substantial improvements of existing residential structures shall meet the following-requirements in SMC 12.40.090(A). \div

1. The lowest floor shall be elevated above the official floodplain elevation;

2. 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:

a. 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;

b. The bottom of all openings shall be no higher than one (1) foot above grade; and

c. Openings may be equipped with screens, louvers or other coverings or devices if they permit the unrestricted entry and exit of floodwaters;

3. Materials and methods which are resistant to, and minimize, flood damage shall be used; and

4. All electrical, heating, ventilation, plumbing, air conditioning equipment and other utility and service facilities shall be floodproofed to or elevated above the flood protection elevation.

F. New nonresidential structures and substantial improvements of existing nonresidential structures shall meet the <u>following</u>-requirements in <u>SMC 12.40.090(B)</u>:

1. The elevation requirement for residential structures contained in subsection (E)(1) of this section shall be met; or

2. The structure shall be floodproofed to the flood protection elevation and shall meet the following requirements:

a. The applicant shall provide certification by a professional civil or structural engineer licensed by the State of Washington that the floodproofing 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

b. Approved building permits for floodproofed, nonresidential structures shall contain a statement notifying the applicant that flood insurance premiums shall be based upon rates for structures which are one (1) foot below the floodproofed level;

3. Materials and methods which are resistant to and minimize flood damage shall be used; and

4. All electrical, heating, ventilation, plumbing, air-conditioning equipment and other utility and service facilities shall be floodproofed to or elevated above the flood protection elevation.

G. Mobile homes and mobile home parks shall meet the following requirements:

1. Mobile homes shall meet all requirements for flood hazard protection for residential structures and shall be anchored and installed using Building Code methods and practices which minimize flood damage; and

2. No permit or approval for the following shall be granted unless mobile homes within the mobile home park meet the requirements for flood hazard protection for residential structures:

a. A new mobile home park;

b. An expansion of an existing mobile home park; or

c. Annual repair or reconstruction of streets, utilities or pads in an existing mobile home park which equals or exceeds fifty percent (50%) of the value of such streets, utilities or pads.

H. Utilities shall meet the following-requirements:

1. <u>The requirements under SMC 12.40.080(C);</u>

<u>2.</u> New and replacement utilities including, but not limited to, sewage treatment facilities shall be flood_proofed to or elevated above the flood protection elevations;

23. New, on-site sewage disposal systems shall be, to the extent possible, located outside the limits of the base flood elevation. The installation of new, on-site sewage disposal systems in the flood fringe may be allowed if no feasible alternative site is available;

<u>34</u>. Sewage and agricultural waste storage facilities shall be flood_proofed to the flood protection elevation;

4<u>5</u>. Above-ground utility transmission lines, other than electric transmission lines, shall only be allowed for the transport of nonhazardous substances; and

56. 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 determined 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: and:

I. 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 major conditional use permit process. Critical facilities constructed within the flood fringe shall have the lowest floor elevated to three (3) 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 the 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.

J. Prior to approving any permit for alterations in the flood fringe, the City shall determine that all permits required by State or Federal law have been obtained.

15.700.220 Zero-Rise Floodway – Development Standards and Permitted Alterations

A. 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.

B. 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:

1. 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

2. 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.

C. The following are presumed to produce no increase in base flood elevation and shall not require a special study to establish this fact:

1. New residential structures outside the FEMA floodway on lots in existence before November 27, 1990, which contain less than five thousand (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 two thousand (2,000) square feet;

2. Substantial improvements of existing residential structures in the zero-rise floodway, but outside the FEMA floodway, where the footprint is not increased; or

3. Substantial improvements of existing residential structures meeting the requirements for new residential structures in this section.

D. Post or piling construction techniques which permit water flow beneath a structure shall be used.

E. 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 30th to May 1st.

F. New residential or nonresidential structures shall meet the following requirements:

1. The structures shall be outside the FEMA floodway; and

2. The structures shall be on lots in existence before November 27, 1990, which contain less than five thousand (5,000) square feet of buildable land outside the zero-rise floodway.

G. 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:

1. Installation of new on-site sewage disposal systems shall be prohibited unless a waiver is granted by the Seattle/King County Department of Public Health; and

2. Construction of sewage treatment facilities shall be prohibited.

H. Critical facilities shall not be allowed within the zero-rise floodway.

I. 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:

1. Dams or diversions for water supply, flood control, irrigation or fisheries enhancement;

2. Flood damage reduction facilities, such as levees and pumping stations;

3. Stream bank stabilization structures where no feasible alternative exists for protecting public or private property;

4. Stormwater conveyance facilities subject to the development standards for streams and wetlands and the Surface Water Design Manual;

- 5. Recreation structures;
- 6. Bridge piers and abutments; and
- 7. Other fisheries enhancement or stream restoration projects.

15.700.230 FEMA Floodway – Development Standards and Permitted Alterations

A. 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.

B. A development proposal including, but not limited to, new or reconstructed structures shall not cause any increase in the base flood elevation. An engineering analysis indicating no rise of the base flood elevation shall be required.

C. New residential or nonresidential structures are prohibited within the FEMA floodway.

D. 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.

15.700.240 Flood Hazard Areas – Certification by an Engineera Land-or Surveyor

A. 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:

- 1. The actual, as-built elevation of the lowest floor, including basement; and
- 2. The actual, as-built elevation to which the structure is flood-proofed, if applicable.

B. The engineer or surveyor shall indicate if the structure has a basement.

C. The City shall maintain the certifications required by this section for public inspection.

15.700.250 Landslide Hazard Areas – Development Standards and Permitted Alterations

A development proposal on a site containing a landslide hazard area shall meet the following requirements:

A. A minimum buffer of fifty (50) feet shall be established from all edges of the landslide hazard area. The buffer shall be extended as required to mitigate a steep slope or erosion hazard or as otherwise necessary to protect the public health, safety and welfare;

B. Unless otherwise provided herein, or as part of an approved alteration, removal of any vegetation from a landslide hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to the City shall be provided prior to any vegetation removal permitted by this subsection;

C. Vegetation on slopes within a landslide hazard area or buffer which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to the City pursuant to an enhancement plan approved by the City. The use of hazardous substances, pesticides and fertilizers in landslide hazard areas and their buffers may be prohibited by the City under the applicable RCW statutes; and

D. Alterations to landslide hazard areas and buffers may be allowed only as follows:

1. A landslide hazard area located on a slope of forty percent (40%) or steeper may be altered only if the alteration meets the standards and limitations set forth for steep slope hazard areas in SMC 15.700.270, Steep Slope Hazard Areas – Development Standards and Permitted Alterations;

2. A landslide hazard area located on a slope less than forty percent (40%) may be altered only if the alteration meets the following requirements:

a. The development proposal will not decrease slope stability on contiguous properties; and

b. The landslide hazard area is modified or the development proposal is designed so that the landslide hazard to the project and contiguous property is limited or mitigated, and the development proposal on the site is determined to be safe by the City based on a study prepared by a geologist or geotechnical engineer; and

3. Neither buffers nor a critical area tract shall be required if the alterations meet the standards of subsection (D)(2) of this section.

15.700.260 Seismic Hazard Areas – Development Standards and Permitted Alterations

A development proposal on a site containing a seismic hazard area shall meet the following requirements:

A. Unless exempt, development proposals shall be subject to review standards based on two (2) occupancy types: critical facilities and other structures. The review standards for critical facilities shall be based on larger earthquake reoccurrence intervals. The review standards for both occupancy types shall be set forth in administrative rules;

B. Alterations to seismic hazard areas may be allowed only as follows:

1. The evaluation of site-specific subsurface conditions shows that the proposed development site is not located in a seismic hazard area; or

2. Mitigation is implemented which renders the proposed development as safe as if it were not located in a seismic hazard area; and

C. The following are exempt from the provisions of this section:

- 1. Mobile homes; and
- 2. Single story, nonresidential structures which are less than two thousand five hundred (2,500) square feet and are not used as places of employment or public assembly.

15.700.270 Steep Slope Hazard Areas – Development Standards and Permitted Alterations

A development proposal on a site containing a steep slope hazard area shall meet the following requirements:

A. A minimum buffer of fifty (50) feet shall be established from the top, toe and along all sides of any slope forty percent (40%) or steeper. The buffer shall be extended as required to mitigate a landslide or erosion hazard or as otherwise necessary to protect the public health, safety and welfare. The buffer may be reduced to a minimum of ten (10) feet if, based on a critical area report, the City determines that the reduction will adequately protect the proposed development and the critical area. For single-family residential building permits only, the City may waive the special study requirement and authorize buffer reductions if the City determines that the reduction will adequately protect area;

B. Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a steep slope hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to the City shall be provided prior to any vegetation removal permitted by this subsection;

C. Vegetation on steep slopes within steep slope hazard areas or their buffers which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to the region pursuant to a vegetation management plan approved by the City. The use of hazardous substances, pesticides and fertilizers in steep slope hazard areas and their buffers may be prohibited by the City;

D. Alterations to steep slope hazard areas and buffers may be allowed only as follows:

1. Approved surface water conveyances, as specified in the Surface Water Design Manual, may be allowed on steep slopes if they are installed in a manner to minimize disturbance to the slope and vegetation;

2. Public and private trails may be allowed on steep slopes if they receive site-specific approval by the City, as guided by the construction and maintenance standards in the U.S. Forest Service "Trails Management Handbook," FSH 2309.18, June 1987, as amended, and the "Standard Specifications for Construction of Trails" (EM-7720-102, June 1984, as amended). Under no circumstances shall trails be constructed of concrete, asphalt or other impervious surfaces which will contribute to surface water runoff, unless such construction is necessary for soil stabilization or soil erosion prevention or unless the trail system is specifically designed and intended to be accessible to handicapped person(s);

3. Utility corridors may be allowed on steep slopes if a special study shows that such alterations will not subject the area to the risk of landslide or erosion;

4. Limited trimming and pruning of vegetation may be allowed on steep slopes pursuant to an approved vegetation management plan for the creation and maintenance of views if the soils are not disturbed and the activity is subject to administrative rules; and

5. Approved mining and quarrying activities may be allowed; and

E. The following are exempt from the provisions of this section:

1. Slopes which are forty percent (40%) or steeper with a vertical elevation change of up to twenty (20) feet if no adverse impact will result from the exemption based on the City's review of and concurrence with a soils report prepared by a geologist or geotechnical engineer; and

2. The approved regrading of any slope which was created through previous legal grading activities. Any slope which remains forty percent (40%) or steeper following site development shall be subject to all requirements for steep slopes.

15.700.275 Wetlands - Identification and Rating

A. Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved Federal wetland delineation manual and applicable regional supplement. All areas within the City meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this chapter. Wetland delineations are valid for five (5) years; after which time the City may determine whether a revision or additional assessment is necessary.

B. Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication No. 04-06-029, or as revised and approved by Ecology), which contains the definitions, methods and criteria for determining a wetland's categorization as Category I, II, III or IV.

C. Wetland rating categories shall not change due to illegal modifications.

15.700.280 Wetlands – Limited Exemption

The following wetlands may be exempted from the requirement to avoid impacts (SMC 15.700.120(A)(1)) and may be filled if the City determines that the impacts are fully mitigated based on the actions in SMC 15.700.120(A)(5) and (6).

A. All isolated Category III and IV wetlands less than one thousand (1,000) square feet that:

- 1. Are not associated with riparian areas or buffers;
- 2. Are not part of a wetland mosaic;

3. Do not contain habitat identified as essential for local populations of priority species identified by the Washington Department of Fish and Wildlife.

15.700.285 Wetlands – Development Standards

A development proposal on a site containing a wetland shall meet the following requirements:

A. **Buffers Required.** A buffer shall be established adjacent to designated wetland areas. The purpose of the buffer area shall be to protect the integrity, functions and values of the wetland area. Buffer widths shall be appropriate for the sensitivity of the wetland and for the risks associated with land use development.

B. **Standard Buffers Comply with BAS.** The following standard buffers have been established in accordance with the best available science (codified at WAC 365-195-900 through 365-195-925). They are based on the category of wetland and the habitat score as determined by a qualified wetland professional.

Standard Wetland Buffers

Watland Catagowy	Habitat Score			
wenand Category	3 – 4	5	6 – 7	8 – 9
		Buffer Wi	dth in Feet	
Category I	75	105	165	225
Category II	75	105	165	225
Category III	60	105	165	225
Category IV	40		·	·

The following table specifies standard buffers, which may be modified pursuant to subsections (E) through (I) of this section:

C. **Impact Minimization Measures Required.** The use of the standard buffer widths requires the implementation of the measures in the following table, where applicable, to minimize the impacts of the adjacent land uses. Activities listed under "Examples of Activities That Cause Disturbances" include but are not limited to those listed. If an applicant chooses not to apply those measures, then a thirty-three percent (33%) increase in the width of all buffers is required. For example, a seventy-five (75) foot buffer with the measures implemented would increase to a one hundred (100) foot buffer without them.

Wetland Impact Minimization Measures

Disturbance	Examples of Activities and Uses That Cause Disturbances	Required Measures to Minimize Impacts
Lights	 Parking lots Warehouses Industrial Multi-family residential 	• Direct lights away from wetland
Noise in excess of limitations as set forth in SMC 15.460.020	 Industrial Parking lots Multi-family residential 	• Locate activity that generates noise away from wetland
Toxic runoff	Parking lotsRoadsIndustrial	• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered

Wetland Impact Minimization Measures

Disturbance	Examples of Activities and Uses That Cause Disturbances	Required Measures to Minimize Impacts
	 Residential Pesticide application Landscaping 	 Establish covenants limiting use of pesticides within 150 ft of wetland Apply integrated pest management*
Stormwater runoff	 Roads Driveways Parking lots	 Retrofit stormwater detention and treatment for roads and existing adjacent development Prevent channelized flow from lawns that directly enters the buffer Use LID BMPs
Changes in water regime	 Impervious surfaces Lawns Tilling 	• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	 Single-family residential Multi-family residential Leash free dog park 	 Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the regional ecology Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	Excavation Construction	• Use best management practices to control dust

* "Integrated pest management" is defined as the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that reduce or minimize risks to human health and the environment.

D. **Vegetated Buffer Assumption.** The buffer widths assume that the buffer is vegetated with a native plant community appropriate for the regional ecology. If the existing buffer is sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer shall either be planted to create the appropriate plant community or widened to ensure that functions and values of the buffer are adequately provided.

E. **Increased Buffers.** Increased buffer widths may be required on a case-by-case basis when necessary to protect wetland functions and values. This determination shall be supported by a critical area report or other appropriate documentation showing that it is reasonably related to protection of the functions and values of the wetland, or when:

1. The buffer is within twenty-five (25) feet of the top or toe of a slope that is greater than thirty percent (30%); or

2. The slope is susceptible to erosion and standard best management practices (BMPs) and erosion-control measures will not prevent adverse impacts to the wetland.

F. **Buffer Width Averaging.** Buffer width averaging may be allowed in accordance with an approved critical area report; provided, that all of the following criteria are met:

1. It will not reduce protection to wetlands or their functions;

2. The total area contained in the buffer after averaging does not decrease;

3. The buffer at its narrowest point is not less than seventy-five percent (75%) of the standard width; and

4. The critical area report shall describe the current functions and values of the wetland and its buffer, and the measures that will be taken to ensure that there is no loss of wetland function due to averaging.

G. **Reduced Buffer Allowance.** Reduced buffers may be allowed, with enhancements, in accordance with an approved critical area report, provided:

1. The existing condition of the buffer is degraded, and

2. Additional protection to the wetland is provided through the implementation of a buffer enhancement plan.

3. Buffer enhancement may include, but is not limited to:

a. Planting native vegetation that would increase value for fish and wildlife habitat, improve water quality, or provide aesthetic or recreational value;

b. Enhancement of wildlife habitat by incorporating structures that are likely to be used by wildlife, including wood duck boxes, bat boxes, nesting platforms, snags, rootwads, stumps, birdhouses, and nesting areas;

c. Removing non-native plant species and noxious weeds from the buffer area and replanting the area subject to subsection (G)(3)(a) of this section.

H. **Buffer Reductions Limited.** Buffer reductions under this section shall be limited to twenty-five percent (25%) of the standard buffer width.

I. **Buffer Exemption.** When a property redevelops, if portions of a buffer width required by this chapter are already developed with legally established physical improvements (e.g.,

buildings, pavement), those portions of the proposed redevelopment area within the required buffer width are exempt from the buffer requirements of this chapter.

J. **Buffers on Mitigation Sites.** All mitigation sites shall have buffers consistent with the buffer requirements of this chapter. Buffers shall be based on the target or expected category of the wetland.

K. **Determination by Wetland Professional.** Alterations to buffer width requirements pursuant to this section shall be determined by a qualified wetland professional using established methodologies and approved Federal and State manuals.

L. **Hazardous Substances Prohibited.** The use of hazardous substances, pesticides, herbicides and fertilizers in a wetland or its buffer is prohibited except as provided in SMC 15.700.290(D).

15.700.290 Wetlands – Permitted Alterations and Allowed Uses

Alterations to wetlands and buffers may be allowed only as follows:

A. If the City determines, based upon its review of a critical area report completed by qualified professionals, that 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.

To establish the conditions in this subsection, detailed studies may be required as part of the critical area report on habitat value, functions, hydrology, erosion, and/or water quality. Such detailed studies shall include at a minimum:

- 1. Specific recommendations for mitigation;
- 2. Existing and proposed wetland acreage;
- 3. Vegetative, faunal and hydrologic conditions;
- 4. Relationship within watershed and to existing waterbodies;
- 5. Soil and substrate conditions, topographic elevations;
- 6. Existing and proposed adjacent site conditions;
- 7. Required wetland buffers;
- 8. Property ownership; and

9. A discussion of ongoing management practices to monitor and maintain wetland functions and habitat value.

The requirements in this subsection may be modified upon written approval of the Director, if the applicant demonstrates that the requirements of this section are met or are otherwise unnecessary;

B. If a wetland is in a flood hazard area, the applicant shall notify affected communities and native tribes of proposed alterations prior to any alteration and submit evidence of such notification to the Federal Insurance Administration;

C. The introduction of any plant or wildlife which is not indigenous to the City or King County into any wetland or buffer unless authorized by a State or Federal permit or approval is prohibited;

D. Enhancement of a wetland buffer through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species;

E. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife;

F. The harvesting of wild crops (e.g., native berries) in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications or alteration of the wetland by changing existing topography, water conditions or water sources;

G. Educational and scientific research activities;

H. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not expand the footprint of the facility or right-of-way;

I. Utilities may be allowed in wetland buffers if:

1. The City determines that no practical alternative location is available; and

2. 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;

J. Sanitary and storm sewer utility corridors may be allowed in wetland buffers only if:

1. The applicant demonstrates that sewer lines are necessary for gravity flow;

2. 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 contain critical or outstanding actual habitat for those species or heron rookeries or raptor nesting trees;

3. The corridor alignment including, but not limited to, any allowed maintenance roads follows a path beyond a distance equal to seventy-five percent (75%) of the buffer width from the wetland edge;

4. Corridor construction and maintenance protects the wetland and buffer and is aligned to avoid cutting trees greater than eight (8) inches in diameter as measured four (4) feet above ground level, when possible, and pesticides, herbicides, and hazardous substances are not used;

5. An additional, contiguous and undisturbed buffer, equal in width to the proposed corridor including any allowed maintenance roads, is provided to protect the wetland;

6. The corridor is revegetated with appropriate vegetation native to the City and King County at preconstruction densities or greater immediately upon completion of construction or as soon thereafter as possible, and the sewer utility ensures that such vegetation survives;

7. Any additional corridor access for maintenance is provided, to the extent possible, at specific points rather than by a parallel road; and

8. 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;

K. Joint use of an approved sewer utility corridor by other utilities may be allowed;

L. The following surface water management activities and facilities may be allowed in wetland buffers only as follows:

1. Surface water discharge to a Class I or II wetland from a detention facility, presettlement 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;

2. A Class I or II wetland or buffer may be used for a regional retention/detention facility if:

a. A public agency and utility exception is granted pursuant to SMC 15.700.060, Exceptions;

b. Constructed in accordance with the requirements of the Surface Water Design Manual;

c. The use will not alter the rating or the factors used in rating the wetland;

d. The proposal is in compliance with the latest adopted findings of the Puget Sound Wetlands Research Project; and

e. There are no significant adverse impacts to the wetland;

3. A Class III wetland or buffer which has as its major function the storage of water may be used, expanded or reconstructed as a regional retention/detention facility if requirements of the Surface Water Design Manual are met;

4. Vegetated LID BMPs are allowed within the outer twenty-five percent (25%) of the wetland buffer if:

a. Constructed in accordance with the requirements of the Surface Water Design Manual;

b. There are no significant adverse impacts to the wetland; and

5. 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 City, that:

a. No other practical alternative exists; and

b. The functions and values of the buffer or the wetland are not adversely affected;

M. Wetlands can be used for retention/detention facilities other than for regional facilities;

N. Passive recreation facilities designed and in accordance with an approved critical area report, including:

1. Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent (25%) of the wetland buffer area, and located to avoid removal of significant trees. The trail surface should not be made of impervious materials, not more than five (5) feet in width for pedestrian use only; and

2. Wildlife viewing structures;

O. A dock, pier, moorage, float or launch facility may be allowed, subject to the provisions of the Shoreline Management Act, if:

1. The existing and zoned density around the wetland is three (3) dwelling units or more;

2. At least seventy-five percent (75%) of the lots around the wetland have been built upon and no significant buffer or wetland vegetation remains on these lots; and

3. Open water is a significant component of the wetland;

P. Alterations to isolated wetlands may be allowed only as follows:

1. On sites less than twenty (20) acres in size, one (1) isolated wetland may be altered by relocating its functions into a new wetland on the site pursuant to an approved mitigation plan;

2. On sites of less than twenty (20) acres in size, up to three (3) isolated wetlands may be altered by combining their functions into one (1) or more replacement wetland on the site pursuant to an approved mitigation plan; and

3. Whenever an isolated wetland is altered pursuant to this subsection, the replacement wetland shall include enhancement for wildlife habitat;

Q. One (1) additional agricultural building or associated residence may be allowed within the wetland buffer on a grazed meadow if all hydrologic storage is replaced on the site;

R. Repair and maintenance of non-conforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity;

S. Subject to a clearing and grading permit issued pursuant to Chapter 15.445 SMC, Landscaping and Tree Retention, and other City Codes, the cutting of up to one (1) cord of firewood may be permitted in buffers of five (5) acres or larger in any year if the overall function of the buffer is not adversely affected. Removal of brush may also be permitted for the purpose of enhancing tree growth if the area of removal is limited to the diameter of the tree canopy at the time of planting;

T. Wetland road crossings may be allowed if:

1. The City determines that no alternative access is practical;

2. All crossings minimize impact to the wetland and provide mitigation for unavoidable impacts through restoration, enhancement or replacement of disturbed areas;

- 3. Crossings do not change the overall wetland hydrology;
- 4. Crossings do not diminish the flood storage capacity of the wetland; and
- 5. All crossings are constructed during summer low water periods.

15.700.300 Wetlands – Alteration of Wetlands Historically and Continuously Used for Agricultural Purposes

Class II and III wetlands that have been used for agricultural purposes for a minimum of fifty (50) continuous years may be altered subject to the following minimum requirements:

A. The applicant/property owner can provide evidence that the wetland has been used for agricultural use continuously for fifty (50) years. This evidence, at a minimum, shall include aerial photographs of the site at the beginning of the fifty (50) year span of use. Aerial photographs of the site over the span of the use of the wetland for agricultural uses to the present shall be provided. At no time shall there be more than ten (10) years between the chronology of the photographs;

B. If an agricultural wetland is located solely on one (1) parcel of property, no more than twenty-five percent (25%) of the wetland may be filled;

C. If the altered wetland is located on more than one (1) property, no more than twenty-five percent (25%) of the entire wetland may be filled. The remainder of the wetland shall be enhanced as approved by the City provided it can be shown by a qualified professional, approved by the City that:

1. The enhancement of the remaining wetland shall provide the same or better hydrologic or biologic functions as the class of wetland identified in the wetland study for the site;

2. If the altered wetland is located on more than one property, the entire altered wetland shall be identified; and

Any altered wetlands located in a flood hazard area shall conform with
SMC 15.700.140, Vegetation Management Plan, through 15.700.240, Flood Hazard Areas
Certification by an Engineer or Surveyor; and

D. For altered wetlands that are located on more than one property, development rights may be transferred from one owner to the other for development within the altered wetland. This shall be done by a non-revocable contract, as approved by the City. The transfer of property rights shall run with the land. In no case shall the transfer of development rights allow more than 0.99 acres of fill within an altered wetland.

15.700.310 Wetlands – Mitigation Requirements

A. Requirements for Compensatory Mitigation.

1. Compensatory mitigation for alterations to wetlands shall be used only:

a. When impacts cannot be addressed by steps 1 through 4 of SMC 15.700.120(A);

b. And shall not apply to allowed alterations pursuant to SMC 15.700.285(F), (G), or (I);

c. And shall achieve equivalent or greater biological functions.

2. Compensatory mitigation plans shall be consistent with this chapter and Wetland Mitigation in Washington State, Part 2: Developing Mitigation Plans, Version 1, (Ecology Publication No. 06-06-011b) or as amended, and Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington) (Publication No. 09-06-32, Olympia, WA, December 2009), or other best available science as recommended by Dept. of Ecology.

3. A performance bond or other approved financial surety is required before any project permits are issued. The purpose of the financial surety is to hold an applicant accountable for implementing the mitigation and monitoring plans. The release of financial surety is contingent on satisfactory completion by the applicant of the proposed construction mitigation and monitoring plans.

4. Mitigation ratios shall be consistent with subsection (G) of this section.

B. **Compensating for Lost or Affected Functions.** Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:

1. The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or

2. Out-of-kind replacement will best meet formally identified regional goals, such as replacement of historically diminished wetland types.

C. **Preference of Mitigation Actions.** Mitigation for lost or diminished wetland and buffer functions shall rely on the types below in the following order of preference:

1. Restoration (Reestablishment and Rehabilitation) of Wetlands.

a. The goal of reestablishment is returning natural or historic functions to a former wetland.

b. The goal of rehabilitation is repairing natural or historic functions of a degraded wetland.

2. Creation (Establishment) of Wetlands on Disturbed Upland Sites Such as Those with Vegetative Cover Consisting Primarily of Non-Native Species or Noxious Weeds. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to the wetland community that is anticipated in the design.

3. Enhancement of Significantly Degraded Wetlands in Combination with

Restoration or Creation. Enhancement should be part of a mitigation package that includes replacing the altered area and meeting appropriate ratio requirements. Applicants proposing to enhance wetlands or associated buffers shall demonstrate:

a. How the proposed enhancement will increase the wetland's/buffer's functions and values;

b. How this increase in function will adequately compensate for the impacts; and

c. How all other existing wetland functions and values at the mitigation site will be protected.

4. Preservation of high quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Ratios for preservation in combination with other forms of mitigation generally range from 10:1 to 20:1, as determined on a case-by-case basis, depending on the quality of the wetlands being altered and the quality of the wetlands being preserved.

D. Location of Compensatory Mitigation. Mitigation actions shall be conducted within the same subdrainage basin and on the site of the alteration except when all of the following apply:

1. 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;

2. On-site mitigation would require elimination of high quality upland habitat;

3. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions; and

4. Off-site locations shall be in the same subdrainage basin and in the same water resource inventory area (WRIA) unless:

a. Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions and values have been established and strongly justify location of mitigation at another site; or

b. Credits from a State-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;

c. If compensatory wetland or wetland buffer mitigation is proposed off site, a signed statement of consent is required from owners of all affected properties. This statement shall be submitted to the City and a notice recorded with the King County Recorder prior to approval of a compensatory mitigation plan.

E. **Responsible Party for Mitigation Site.** Mitigation for lost or diminished critical area functions and values for either wetlands or streams shall use the following options:

1. **Applicant-Responsible Mitigation.** The applicant is responsible for the implementation, monitoring and success of the mitigation pursuant to this chapter.

2. Non-Applicant-Responsible Mitigation – In-Lieu Fee Mitigation.

a. Funds are collected from the applicant by the sponsoring agency, nonprofit, private party or jurisdiction. The sponsor is responsible from that point forward for the completion and success of the mitigation. The applicant's fee is based on the project impact and includes all costs for the mitigation, including design, land acquisition, materials, construction, administration, monitoring, and stewardship.

b. Credits purchased by an applicant from an in-lieu fee mitigation program that is certified under Federal and State rules may be used as a method of mitigation if approved by the City to compensate for impacts when all of the following apply:

i. The City determines as part of the critical area approval that it would provide equivalent or greater replacement of wetland functions and values when compared to conventional permittee-responsible mitigation;

ii. The City reviews and approves the assessment of debits associated with the proposed impacts calculated by the applicant's qualified professional using the credit assessment method or appropriate method for the impact as specified in the approved instrument for the program;

iii. The proposed use of credits is consistent with the terms and conditions of the in-lieu fee program instrument; and

iv. The compensatory mitigation agreement occurs before the building or grading and clearing permits for the authorized impact.

F. **Timing of Compensatory Mitigation.** Mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development causing the wetland alteration. Construction of mitigation projects shall be timed to reduce impacts to existing wildlife and flora.

G. Wetland Mitigation Ratios. In the following table the first number indicates the acreage of replacement wetlands and the second number indicates the acreage of wetlands altered.

Category and Type of Wetland	Creation or Reestablishment	Rehabilitation	Enhancement
Category I: Mature Forested	6:1	12:1	24:1
Category I: Based on Functions	4:1	8:1	16:1
Category II	3:1	6:1	12:1
Category III	2:1	4:1	8:1
Category IV	1.5:1	3:1	6:1

H. Illegal Alteration.

1. When a wetland or its buffer has been altered in violation of this chapter, all ongoing development work on the site shall stop and the critical area shall be restored. The City shall have the authority to issue a "stop work" order, pursuant to Chapter 1.15 SMC, to cease all ongoing development work and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violating provisions of this chapter.

2. The following minimum requirements shall be met for the restoration of a wetland:

a. The original wetland structure, functions and values of the wetland shall be restored including hydrologic function, water quality and habitat functions;

b. The original soil type and configuration shall be restored;

c. The wetland edge and buffer configuration shall be restored to its original condition; and

d. The wetland, edge and buffer shall be replanted with vegetation native to the regional ecology which replicates the original vegetation in species, sizes and densities.

3. The requirements in subsection (H)(2) of this section may be modified if the applicant demonstrates that greater wetland functions can otherwise be obtained.

15.700.330 Streams – Development Standards

A development proposal on a site containing a stream shall meet the following requirements:

A. The following minimum buffers shall be established from the ordinary high water mark (OHWM) or from the top of the bank if the OHWM cannot be identified:

- 1. A Class 1 stream shall have a one hundred (100) foot buffer;
- 2. A Class 2 stream used by salmonids shall have a one hundred (100) foot buffer;
- 3. A Class 2 stream not used by salmonids shall have a fifty (50) foot buffer;
- 4. A Class 3 stream shall have a twenty-five (25) foot buffer;

5. Any stream restored, relocated, replaced or enhanced because of a stream alteration shall have the minimum buffer required for the stream class involved;

6. Any stream with an OHWM within twenty-five (25) feet of the toe of a slope thirty percent (30%) or steeper, but less than forty percent (40%), shall have:

a. The minimum buffer required for the stream class involved or a twenty-five (25) foot buffer beyond the top of the slope, whichever is greater, if the horizontal length of the slope including small benches and terraces is within the buffer for that stream class; or

b. A twenty-five (25) foot buffer beyond the minimum buffer required for the stream class involved if the horizontal length of the slope including small benches and terraces extends beyond the buffer for that stream class; and

7. 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 critical area, whichever is greater;

B. Buffer width averaging may be allowed by the City if it will provide additional protection, as long as the total area contained in the buffer on the development proposal site does not decrease; and

C. The use of hazardous substances, pesticides and fertilizers in the stream corridor and its buffer is prohibited unless specifically allowed by the City.

15.700.340 Streams – Permitted Alterations

Alterations to streams and buffers may be allowed only as follows:

A. Alterations may only be permitted if based upon a special study;

B. The applicant shall notify affected communities and native tribes of proposed alteration(s) prior to any alteration if the stream is in a flood hazard area. The applicant shall submit evidence of such notification to the Federal Insurance Administration;

C. There shall be no introduction of any plant or wildlife which is not indigenous to the City or King County into any stream or buffer unless authorized by a State or Federal permit or approval by the City;

D. Utilities may be allowed in stream buffers if:

1. No practical alternative location is available;

2. 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;

3. The requirements for sewer utility corridors (SMC 15.700.290, Wetlands – Permitted Alterations and Allowed Uses) shall also apply to streams; and

4. Joint use of an approved sewer utility corridor by other utilities may be allowed;

E. The following surface water management activities and facilities may be allowed in stream buffers as follows:

1. 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 Surface Water Design Manual;

2. A Class 2 stream or buffer may be used for a regional retention/detention facility if:

a. A public agency and utility exception is granted pursuant to SMC 15.700.060, Exceptions;

b. Designed in accordance with the requirements of the Surface Water Design Manual;

c. The use will not alter the rating or the factors used in rating the stream;

d. There are no significant adverse impacts to the stream; and

3. A Class 3 stream or buffer may be used as a regional retention/detention facility if the alteration will have no lasting adverse impact on any stream and if designed in accordance with the requirements of the Surface Water Design Manual;

F. Public and private trails may be allowed in the stream buffers only upon adoption of administrative rules consistent with the following:

1. The trail surface shall not be made of impervious materials, except that public multipurpose trails may be made of impervious materials if they meet all other requirements including water quality; and

2. Buffers shall be expanded, where possible, equal to the width of the trail corridor including disturbed areas;

G. Stream crossings may be allowed if:

1. All road crossings use bridges or other construction techniques 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 Class 2 and 3 streams if the applicant demonstrates that such methods and their implementation will pose no harm to the stream or inhibit migration of fish;

2. All crossings are constructed during the summer low flow and are timed to avoid stream disturbance during periods when use is critical to salmonids;

3. Crossings do not occur over salmonid spawning areas unless the City determines that no other possible crossing site exists;

4. Bridge piers or abutments are not placed within the FEMA floodway or the ordinary high water mark;

5. Crossings do not diminish the flood-carrying capacity of the stream;

6. Underground utility crossings are laterally drilled and located at a depth of four (4) feet below the maximum depth of the scour for the base flood predicted by a civil engineer licensed by the State of Washington; and

7. Crossings are minimized and serve multiple purposes and properties whenever possible;

H. Stream relocations may be allowed only for:

1. Class 2 streams as part of a public road project for which a public agency and utility exception is granted pursuant to SMC 15.700.060, Exceptions; and

2. Class 3 streams for the purpose of enhancing resources in the stream if:

a. Appropriate floodplain protection measures are used; and

b. 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 impractical, 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;

I. For any relocation allowed by this section, the applicant shall demonstrate, based on information provided by a civil engineer and a qualified biologist, that:

- 1. The equivalent base flood storage volume and function will be maintained;
- 2. There will be no adverse impact to local groundwater;
- 3. There will be no increase in velocity;
- 4. There will be no interbasin transfer of water;
- 5. There will be no increase in the sediment load;
- 6. Requirements set out in the mitigation plan are met;
- 7. The relocation conforms to other applicable laws; and
- 8. All work will be carried out under the direct supervision of a qualified biologist;
- J. A stream channel may be stabilized if:

1. 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

2. The stabilization is done in compliance with the requirements of SMC 15.700.140, Vegetation Management Plan, through 15.700.240, Flood Hazard Areas – Certification by an Engineer or Surveyor, and administrative rules promulgated pursuant to this chapter;

K. 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;

L. A minor stream restoration project or fish habitat enhancement may be allowed if:

1. The restoration is accomplished by a public agency with a mandate to do such work;

2. The restoration is unassociated with mitigation of a specific development proposal;

3. The restoration does not cost more than twenty-five thousand dollars (\$25,000);

4. The restoration is limited to placement of rock weirs, log controls, spawning gravel and other specific salmonid habitat improvements;

5. The restoration only involves the use of hand labor and light equipment; and

6. The restoration is performed under the direct supervision of a qualified biologist;

M. Roadside and agricultural drainage ditches which carry streams with salmonids may be maintained through use of best management practices developed in consultation with relevant County, State, and Federal agencies. These practices shall be adopted as administrative rules; and

N. Subject to a clearing and grading permit issued pursuant to tree retention requirements in SMC 15.445.400 through 15.445.450, the cutting of up to one (1) cord of firewood may be permitted in buffers of five (5) acres or larger in any year if the overall function of the buffer is not adversely affected. Removal of brush may also be permitted for the purpose of enhancing tree growth if the area of removal is limited to the diameter of the tree canopy at the time of planting.

15.700.350 Streams – Mitigation Requirements

A. Restoration shall be required when a stream or its buffer is altered in violation of law or without any specific permission or approval by the City. A mitigation plan for the restoration shall demonstrate that:

1. The stream has been degraded and will not be further degraded by the restoration activity;

2. The restoration will reliably and demonstrably improve the water quality and fish and wildlife habitat of the stream;

3. The restoration will have no lasting, significant, adverse impact on any stream functions; and

- 4. The restoration will assist in stabilizing the stream channel;
- B. The following minimum requirements shall be met for the restoration of a stream:
 - 1. All work shall be carried out under the direct supervision of a qualified biologist;

2. Basin analysis shall be performed to determine hydrologic conditions;

3. The 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;

4. The bottom shall be restored with identical or similar materials;

5. The bank and buffer configuration shall be restored to its original condition;

6. The channel, bank and buffer areas shall be replanted with vegetation native to the City and King County which replicates the original vegetation in species, sizes and densities; and

7. The original biologic functions of the stream shall be recreated;

C. The requirements in subsection (B) of this section may be modified if the applicant demonstrates to the satisfaction of the City that a greater biological function can otherwise be obtained;

D. 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;

E. The requirements which apply to the restoration of streams in subsection (B) of this section shall also apply to the relocation of streams, unless the applicant demonstrates to the satisfaction of the City that a greater biological function can be obtained by modifying these requirements;

F. Replacement or enhancement for approved stream alterations shall be accomplished in streams and on the site unless the applicant demonstrates to the satisfaction of the City:

- 1. Enhancement or replacement on the site is not possible;
- 2. The off-site location is in the same drainage subbasin as the original stream; and
- 3. Greater biological and hydrological functions will be achieved; and

G. Surface water management or flood control alterations shall not be considered "enhancement" unless other functions are simultaneously improved.

15.700.360 Wellhead Protection Areas and General Groundwater Resources

The aquifer identified as Q(A)c by the U.S. Geological Survey is considered the major aquifer underlying SeaTac and other cities west of the Green River Valley (the "Des Moines Upland"), and is generally encountered between one hundred (100) feet above and one hundred (100) feet

below sea level. A deeper aquifer identified as Q(B)c is generally encountered between sea level and two hundred (200) feet below sea level. These aquifers are the source of water for the wells in SeaTac operated by the Highline Water District and Seattle Public Utilities.

A. **Purpose and Intent.** It is the purpose and intent of the regulations in this section to protect from contamination the areas around wellheads serving as sources of potable water, as identified by the water districts operating those wells; to limit activities that may adversely affect groundwater resources more generally; and to prevent contaminants from entering the aquifers underlying the City.

B. **Application of Regulations in This Section.** This section regulates uses and/or activities in the following areas:

1. Wellhead protection areas (WHPA) as delineated on the wellhead protection areas map (see Map 9.2 in the SeaTac Comprehensive Plan's Environment Element).

The wellhead protection areas delineated on the referenced map were established by the water districts that operate these wells: Highline Water District and Seattle Public Utilities.

The wellhead protection areas map is intended as a guide for the City, project applicants and/or property owners and may be updated as new information becomes available.

2. All other areas of the City.

C. **Prohibited Uses.** The following activities and uses are prohibited in wellhead protection areas and all other areas of the City:

1. Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition landfills;

2. **Underground Injection Wells.** All underground injection wells as defined in Chapter 173-218 WAC with the exception of those listed in subsections (C)(2)(a) through (i) of this section. All underground injection wells shall comply with the requirements of Chapter 173-218 WAC.

a. Surface water management facilities pursuant to the Surface and Storm water Management Code (Chapter 12.10 SMC).

b. Drainage wells such as those used to drain storm water such as a French drain or infiltration trench containing perforated pipe.

c. Heat pump or cooling water return flows wells.

d. Aquifer recharge wells.

e. Septic systems serving an individual residential property, or as otherwise approved by Public Health-Seattle and King County.

f. Injection wells used to control flooding of residential basements or as part of a reclaimed water project as allowed under a permit.

g. Injection wells used for remediation wells receiving fluids intended to clean up, treat or prevent subsurface contamination.

h. Injection wells used as part of a reclaimed water project as allowed under a permit.

i. Injection wells used to inject carbon dioxide for geologic sequestration;

3. Mining.

- a. Metals and hard rock mining; and
- b. Sand and gravel mining;

4. **Wood Treatment Facilities.** Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);

5. **Dry Cleaning Establishments.** Dry cleaning establishments using the solvent perchloroethylene;

6. **Storage, Processing, or Disposal of Radioactive Substances.** Facilities that store, process, or dispose of radioactive substances; and

7. Other Prohibited Uses or Activities.

a. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source;

b. Activities that would significantly reduce the recharge to aquifers that are a source of significant base flow to a regulated stream.

D. General Performance Standards.

1. The proposed activity must be designed and constructed to employ all known, available and reasonable (AKART) methods of prevention, control and treatment of pollutants associated with a discharge;

2. The proposed activity must comply with the water source protection requirements and recommendations of the U.S. Environmental Protection Agency, Washington State Department of Health, and Public Health-Seattle and King County;

3. The proposed activity must be designed and constructed in accordance with the requirements of the Surface and Storm water Management Code (Chapter 12.10 SMC), the Clearing and Grading Code (Chapter 13.190 SMC) and the International Building Code (Chapter 13.110 SMC);

4. If applicable, the proposed activity must comply with the requirements of the International Fire Code (Chapter 13.150 SMC).

E. Development Within a Wellhead Protection Area.

1. Any proposed non-residential development located in a wellhead protection area shall submit a hazardous materials inventory sheet (HMIS) with any permit, land use, or business license application. Ongoing operation and maintenance activities of public wells by public water providers are exempt from these requirements.

2. The City will review the HMIS along with the permit, land use, or business license application to determine whether hazardous substances will be used, stored, transported or disposed of in connection with the proposed activity. The City shall make the following determinations and apply the appropriate measures:

a. No hazardous substances are involved; or

b. Hazardous substances are involved; however, existing laws or regulations adequately mitigate any potential impact, and documentation is provided to demonstrate compliance; or

c. Hazardous substances are involved and the proposal has the potential to significantly impact wellhead protection areas or other groundwater resources. The City may require a critical area report in order to determine the potential impacts of contamination on aquifers or other groundwater resources.

3. The critical area report shall be prepared by a qualified professional, as specified in SMC 15.700.015, Definitions, and shall include the following site and proposal-related information:

a. Available information regarding geologic and hydrogeologic characteristics of the site including the permeability of the unsaturated zone;

b. Ground water depth, flow direction, and gradient based on available information;

c. Currently available data on wells and springs within one thousand three hundred (1,300) feet of the project site;

d. Location of other critical areas, including surface waters, within one thousand three hundred (1,300) feet of the project site;

e. Available historic water quality data for the area to be affected by the proposed activity; and

f. Best management practices proposed to be utilized.

g. Upon receipt of the critical area report the Department shall forward a copy of the critical area report to the appropriate water district for review and comment.

F. Performance Standards, Specific – Applicable to Specific Uses.

1. **Storage Tanks.** All storage tanks must comply the terms of subsection (D) of this section and either subsection (F)(1)(a) or (b) of this section:

a. **Underground Tanks.** All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

i. Prevent releases due to corrosion or structural failure for the operational life of the tank;

ii. Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and

iii. Use material in the construction or lining of the tank that is compatible with the substance to be stored.

b. **Above Ground Tanks.** All new above ground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

i. Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;

ii. Have a primary containment area enclosing or underlying the tank or part thereof; and

iii. A secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.

2. Vehicle Repair and Servicing. For the purposes of this subsection the term "vehicle repair and servicing" shall include, as defined in Chapter 15.105 SMC, Automotive Service Center, Fueling/Service Station, Vehicle Repair, Small, and Vehicle Repair, Large.

a. 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 contains leaks should one (1) occur.

b. No dry wells shall be allowed on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment shall be abandoned using techniques approved by the State Department of Ecology prior to commencement of the proposed activity.

3. **Residential Use of Pesticides and Nutrients.** Application of household pesticides, herbicides, and fertilizers shall not exceed times and rates specified on the packaging.

4. Use of Reclaimed Water for Surface Percolation or Direct Recharge. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the State Departments of Ecology and Health.

a. Use of reclaimed water for surface percolation must meet the ground water recharge criteria given in RCW 90.46.010(10) and 90.46.080(1). The State Department of Ecology may establish additional discharge limits in accordance with RCW 90.46.080(2).

b. Direct injection must be in accordance with the standards developed by authority of RCW 90.46.042.

5. **State and Federal Regulations.** The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable State and Federal regulations.

Activity	Statute – Regulation – Guidance
Above Ground Storage Tanks	WAC 173-303-640

Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

Activity	Statute – Regulation – Guidance
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (Washington Department of Ecology WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and Disposal Facilities	Chapter 173-303 WAC
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)	Chapter 173-303 WAC
Junk Yards/Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Storm water Pollution at Vehicles Recycler Facilities (Washington State Department of Ecology 94-146)
Oil and Gas Drilling	Chapter 332-12 WAC, Chapter 173- 218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272A WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.58 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, Chapter 173- 304 WAC, Best Management Practices to Prevent Storm water Pollution at Log Yards (Washington State Department of Ecology, 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Wastewater Application to Land Surface	Chapter 173-216 WAC, Chapter 173- 200 WAC, Washington State Department of Ecology Land Application Guidelines, Best

Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

Activity	Statute – Regulation – Guidance
	Management Practices for Irrigated Agriculture
Maintain Groundwater Quality	WAC 173-200-030, Washington Antidegradation Policy

15.700.370 Fish and Wildlife Habitat Conservation Areas

A. **Purpose.** Fish and wildlife habitat conservation means land management for maintaining species in a wild state in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. This does not mean maintaining all individuals of all species at all times. It does mean that cooperative and coordinated land use planning is critically important among counties and cities in a region. In some cases, it may be sufficient to assure that a species will usually be found in certain regions across the State. In other cases, it may be necessary to assure protection to each individual species. Protection needs to be species specific and goal-oriented. Fish and wildlife habitat conservation areas include:

1. Areas with which endangered, threatened, and sensitive species, including anadromous fish, have a primary association;

2. Habitats and species of local importance;

3. Naturally occurring lakes or ponds under twenty (20) acres and their submerged aquatic beds that provide fish or wildlife habitat;

- 4. Waters of the State;
- 5. Lakes, ponds, and streams planted with game fish by a governmental or tribal entity.

"Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company.

B. Fish and wildlife habitat conservation areas may, and probably will, include one (1) or more of other critical areas identified in this chapter. The following classification system is based on the presence of one (1) or more of these critical areas as well as species identified as endangered, threatened, sensitive, or priority, the area's proximity to developed areas, and the area's existing use.

1. Category 1 habitat is classified as including any wetland or stream or their buffer areas or any area identified as habitat for endangered, threatened, sensitive or priority species by the State Department of Fish and Wildlife (DFW) or heron, and which is characterized by agricultural or low density residential use (one (1) unit or less per acre) and which is not within two hundred (200) feet of more intense land uses.

2. Category 2 habitat is classified as including any wetland or stream or their buffer areas or any area identified as habitat for endangered, threatened, sensitive, or priority species by the DFW and which is characterized by residential uses of greater density than one (1) unit per acre or which lies within two hundred (200) feet of more intense land uses.

3. Category 3 habitat is classified as an area which does not include a wetland or stream or their buffer areas or any area identified as habitat for endangered, threatened, sensitive or priority species by the DFW and which is characterized by single-family residential areas immediately adjacent to multi-family or nonresidential land uses.

4. Category 4 habitat is classified as an area which does not include a wetland or stream or their buffer areas or any area identified as habitat for endangered, threatened, sensitive, or priority species by the DFW and which is characterized by nonresidential land uses.

C. **Buffers.** For any fish and wildlife habitat conservation areas which include other critical areas as identified and regulated in this chapter, the buffer for those critical areas shall apply except where species identified by the DFW as endangered, threatened, sensitive, or priority, or where herons are found to have a primary association. If such species are present, the applicant shall provide a critical area report identifying such species, their required habitat, and recommend appropriate buffers based on the DFW priority habitat and species management recommendations as well as any other proposed mitigation measures considered appropriate to the protection of said species and habitat.