Division VII. Environmentally Sensitive Areas

CHAPTERS:

Chapter 15.700
Environmentally Sensitive Areas

SECTIONS:

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 sensitive 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 sensitive areas by regulating alterations in or near sensitive 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;

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 sensitive areas; and

J. Providing City officials with sufficient information to protect sensitive 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; and

C. 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 environmentally sensitive 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

Base Flood
A flood having a one percent (1%) chance of being equaled or exceeded in any given year, often referred to as the "100-year flood."

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

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.

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 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 some of the major areas of flood hazard.

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
The total area subject to inundation by the base flood.

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, 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 .01 foot, resulting from a comparison of existing conditions and changed conditions directly attributable to development in the floodplain. This definition is broader than that of the FEMA floodway, but always includes the FEMA 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 sensitive area special study.

Mitigation of Environmental Impacts
The use of any or all of the following actions, listed in descending order of preference:

A. Avoiding the impact by not taking a certain action;

B. Minimizing the impact by limiting the degree or magnitude of the action by using appropriate technology or by taking affirmative steps to avoid or reduce the impact;

C. Rectifying the impact by repairing, rehabilitating or restoring the affected sensitive area or buffer;

D. Reducing or eliminating the impact over time by preservation or maintenance operations during the life of the development proposal;

E. Compensating for the impact by replacing, enhancing or providing substitute sensitive areas and environments; and

F. Monitoring the impact and taking appropriate corrective measures.

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.

Regulated Wetland
A wetland that meets one or more of the following criteria:

A. Serves significant biological functions;

B. Serves significant drainage and sedimentation functions;

C. Shields other areas from wave action, erosion or storm damage;

D. Serves as valuable storage area for storm and flood waters;

E. Is a prime natural recharge area;

F. Serves significant water purification functions.

Although a site specific wetland may not meet the criteria described above, it will be considered a regulated wetland if it is functionally related to another wetland that meets the criteria. Within the wetlands classification process there are the following classes: Class I, Class II, and Class III (See "Wetland" definition,).

Restoration
Returning a stream, wetland, other sensitive area or any associated buffer to a state in which its stability and functions approach its unaltered (or original) state as closely as possible.

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
(Denoted on critical areas maps.) 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.

Sensitive 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. Sensitive 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 and wetlands.

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 ten (10) 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 sensitive 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 in the City which are inundated or saturated by ground or surface water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. According to the 33 CFR 328.3 (1988), wetlands generally include swamps, marshes, bogs and similar areas. Where the vegetation has been removed or substantially altered, a wetland shall be determined by the presence or evidence of hydric or organic soil, as well

as by other documentation, such as aerial photographs of the previous existence of wetland vegetation. When the areas of any wetlands are hydrologically connected to each other, they shall be added together to determine which of the following categories of wetlands apply:

A. Class I Wetland. Only includes wetlands assigned the Unique/Outstanding #1 rating in the 1983 King County Wetlands Inventory (or the most recent City inventory) or which meet any of the following criteria:

1. Are wetlands which have present species listed by the Federal or State government as endangered or threatened or outstanding actual habitat for those;

2. Are wetlands which have forty percent (40%) to sixty percent (60%) permanent open water in dispersed patches with two (2) or more classes of vegetation;

3. Are wetlands equal to or greater than ten (10) acres in size and have three (3) or more wetland classes, one of which is open water;
4. Are wetlands which have present plant associations of infrequent occurrence;

5. Spaghnum or peat wetlands; or

6. Forested wetlands equal to or greater than one (1) acre in size.

B. Class II Wetland. Only includes wetlands assigned the Significant #2 rating in the 1983 King County Wetlands Inventory (or the most recent City inventory) or which meet any of the following criteria:

1. Are wetlands greater than one (1) acre in size; or

2. Are wetlands equal to or less than one (1) acre in size and have three (3) or more wetland classes; or

3. Are forested wetlands less than one (1) acre in size but are larger than two thousand five hundred (2,500) square feet; or

4. Are wetlands which have present heron rookeries or raptor nesting trees.

C. Class III Wetland. Only includes wetlands assigned the Lesser Concern #3 rating in the 1983 King County Wetlands Inventory (or most recent City inventory) or which are wetlands equal to or less than one (1) acre in size and have two (2) or fewer wetland classes. This does not include drainage ditches used as part of an approved public storm drainage system that may support wetland vegetation or retention/detention systems.

Wetland Edge
The line delineating the outer edge of a wetland established by using the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual in conjunction with the Washington Regional Guidance on the 1987 Wetland Delineation Manual dated May 23, 1994.

Wetland, Forested
A wetland which is characterized by woody vegetation at least twenty (20) feet tall.

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 which has a total size less than two thousand five hundred (2,500) square feet excluding buffers, which is hydrologically isolated from other wetlands or streams, and which does not have permanent 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 Chapter 15.700 Environmentally Sensitive Areas SMC may be appealed according to, and as part of, the appeal procedure for the permit or approval involved.

15.700.030 Sensitive Area Rules

Applicable City departments are authorized to adopt administrative rules and regulations as are necessary and appropriate to implement Chapter 15.700 Environmentally Sensitive Areas SMC, 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 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 systems to include retention/detention ponds, 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, on-going 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 of 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, sensitive 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 sensitive area or, if the existing residence is in the sensitive area, extends further in the sensitive 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 pursuant to this subsection:

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 Department shall prepare a recommendation to the Hearing Examiner;

2. The Hearing Examiner shall review the application and conduct a public hearing pursuant to the provisions of Chapter 15.115 Land Use Actions and Procedures SMC. The Hearing Examiner shall make a recommendation to the City Council based on the following criteria:

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

b. The proposal minimizes the impact on sensitive areas;

3. This exception shall not allow the use of the following sensitive 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.

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

1. The applicant shall apply to the Department who shall prepare a recommendation to the Hearing Examiner. The applicant may apply for a reasonable use exception without first having applied for a variance if the requested exception includes relief from standards for which a variance cannot be granted pursuant to the provisions of this code.

2. The Hearing Examiner shall review the application in consultation with the City Attorney and shall conduct a public hearing pursuant to the provisions of Chapter 15.115 Land Use Actions and Procedures SMC. The Hearing Examiner shall make a final decision based on the following criteria:

a. The application of this chapter would deny all reasonable use of the property;

b. There is no other reasonable use with less impact on the sensitive 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 sensitive area shall be the minimum necessary to allow for reasonable use of the property.

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

15.700.070 Sensitive Area Maps and Inventories

The distribution of environmentally sensitive areas in the City is displayed on maps in the Sensitive Areas Map Folio by King County. Many of the wetlands are inventoried and rated, and that information is published in the SeaTac Wetlands Inventory Notebooks. Flood hazard areas are mapped by the Federal Insurance Administration. 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 sensitive areas shall govern.

15.700.080 Disclosure by Applicant

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

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

A. The City shall perform a sensitive area review for any SeaTac development proposal permit application or other request for permission to proceed with an alteration on a site which includes a sensitive area or is within an identified sensitive area buffer or building setback area.

B. As part of the sensitive area review, the City shall:

1. Determine whether any sensitive area exists on the property and confirm its nature and type;

2. Determine whether a sensitive area special study is required;

3. Evaluate the sensitive area special study;

4. Determine whether the development proposal is consistent with this chapter;

5. Determine whether any proposed alteration to the sensitive area is necessary; and

6. 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 Sensitive Area Special Study Requirement

A. An applicant for a development proposal which includes a sensitive area or is within an identified sensitive area buffer 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) to provide a sensitive area special study to adequately evaluate the proposal and all probable impacts. The

selection of the consultant(s) hired by the City shall be at the sole discretion of the City.

B. The City may waive the requirement for a special study if the applicant shows, to the City's satisfaction, that:

1. There will be no alteration of the sensitive area or buffer;

2. The development proposal will not have an impact on the sensitive 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.

C. 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 (A) of this section.

15.700.110 Contents of Sensitive Area Special Study

A. The sensitive area special study shall be in the form of a written report and shall contain the following:

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

2. Assessment of the impacts of any alteration proposed for a sensitive 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.

B. A sensitive area special study may be combined with any studies required by other laws and regulations.

15.700.120 Mitigation, Maintenance, Monitoring and Contingency

A. As determined by the City, mitigation, maintenance and monitoring measures shall be in place to protect sensitive areas and buffers from alterations occurring on the development proposal site.

B. Where monitoring reveals a significant deviation from predicted impacts or a failure of mitigation or maintenance measures, the applicant shall be responsible for appropriate corrective action which, when approved, shall be subject to further monitoring.

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 sensitive 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 sensitive 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(28), the vegetation management plan shall include a description of proposed logging practices which demonstrates how all sensitive 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 Sensitive Area Markers and Signs

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

B. The boundary between a sensitive 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 sensitive 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 sensitive areas or buffers on the property, of the application of this chapter to the property, and that limitations on actions in or affecting such sensitive 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 Sensitive Area Tracts and Designation on Site Plans

A. Sensitive area tracts shall be used to delineate and protect those sensitive 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 sensitive 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 sensitive area buffers or from the edges of all sensitive areas if no buffers are required. The following may be allowed in the building setback area:

A. Landscaping;

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 sensitive areas.

The following Sensitive Areas Setback Requirements Chart specifies setback buffers and additional building setbacks. The setback buffers specified are minimum requirements, and may be increased based on special studies completed by qualified professionals pursuant to SMC 15.700.290, Wetlands – Permitted Alterartions.

	SETBACK BUFFER	**BUILDING SETBACK FROM BUFFER**
Class I Wetland	100 feet	15 feet
Class II Wetland	50 feet	15 feet
Class III Wetland	35 feet	15 feet
Class 1 Stream	100 feet	15 feet
Class 2 Stream with Salmonids	100 feet	15 feet
Class 2 Stream	50 feet	15 feet
Class 3 Stream	25 feet	15 feet
Slopes 40% or greater	50 feet from top, toe, or side of slope	N/A
Landslide Hazard Areas	50 feet from all edges of the landslide hazard area	N/A

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 Landscaping and Tree Retention SMC; 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 water quality standards to be established by administrative rules.

D. Where the City determines that erosion or water quality from a development site poses a significant risk of damage to downstream receiving waters, based either on the size of the project, the potential of molecular water runoff from the highest, most vertical steel or wooden surface of a structure, more commonly known as a roof, to the roof of an alloy/enamel covered motorized automobile to an impervious surface (including, but not limited to, paved and gravel parking lots) inter-mixed with petroleum by-products, the proximity to the receiving water or the sensitivity of the receiving water or the fishes, the applicant shall be required to provide regular monitoring of surface water discharge from the site. If the project does not meet water quality standards established by law or administrative rules, the City may suspend further development work on the site until such standards are met.

E. 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. A flood hazard area consists of the following components:

1. Floodplain;

2. Flood fringe;

3. Zero-rise floodway; and

4. Federal Emergency Management Agency (FEMA) floodway.

B. 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 (1) percent 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. 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;

2. 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. 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

4. 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:

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 following requirements:

1. The elevation requirement for residential structures contained in subsection (E)(1) 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. New and replacement utilities including, but not limited to, sewage treatment facilities shall be floodproofed to or elevated above the flood protection elevations;

2. 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;

3. Sewage and agricultural waste storage facilities shall be floodproofed to the flood protection elevation;

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

5. 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.

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. Floodproofing 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 SMC 15.700.220.

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. Storm water 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.

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 Engineer 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 floodproofed, 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 sensitive 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 special study, the City determines that the reduction will adequately protect the proposed development and the sensitive 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 the proposed development and the sensitive 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 run-off, 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.

15.700.280 Wetlands – Development Standards

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

A. The following minimum buffers shall be established from the wetland edge:

1. A Class I wetland shall have a one hundred (100) foot buffer;

2. A Class II wetland shall have fifty (50) foot buffer;

3. A Class III wetland shall have thirty-five (35) foot buffer;

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

5. Any wetland 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 wetland 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 wetland class; or

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

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

C. Increased buffer widths shall be required by the City when necessary to protect wetlands. Provisions for additional buffer widths shall be contained in administrative rules promulgated pursuant to this chapter including, but not limited to, provisions pertaining to critical drainage areas, location of hazardous substances, critical fish and wildlife habitats, landslide or erosion hazard areas contiguous to wetlands, groundwater recharge and discharge and the location of trail or utility corridors; and

D. The use of hazardous substances, pesticides and fertilizers in the wetland and its buffer may be prohibited by the City.

15.700.290 Wetlands – Permitted Alterations

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

A. If the City determines, based upon its review of special studies completed by qualified professionals, that:

1. The wetland does not serve any of the valuable functions of wetlands identified in this chapter including, but not limited to, biologic and hydrologic functions; or

2. 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 subsection (A), detailed studies may be required as part of the special study on habitat value, functions, hydrology, erosion, and/or water quality. Such detailed studies shall include at a minimum:

   a. Specific recommendations for mitigation;

   b. Existing and proposed wetland acreage;

   c. Vegetative, faunal and hydrologic conditions;

   d. Relationship within watershed and to existing waterbodies;

   e. Soil and substrate conditions, topographic elevations;

   f. Existing and proposed adjacent site conditions;

   g. Required wetland buffers;

   h. Property ownership; and

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

   The requirements in subsection (A)(2) of this section 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. There shall be no 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;

D. 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;

E. 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;

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

G. 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; and

4. 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 of the buffer or the wetland are not adversely affected;

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

I. Public and private trails may be allowed in wetland 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, multi-purpose 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;

J. A dock, pier, moorage, float or launch facility may be allowed, subject to the provisions of Shorelines 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;

K. 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;

L. 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;

M. Subject to a clearing and grading permit issued pursuant to Chapter 15.445 Landscaping and Tree Retention SMC 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;

N. 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 wetlands biologist, 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

3. 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 Area – 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 nonrevocable 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 .99 acres of fill within an altered wetland.

15.700.300 Wetlands – Mitigation Requirements

A. Restoration shall be required when a wetland or its buffer is altered in violation of law or without any specific permission or approval by the City. The following minimum requirements shall be met for the restoration of a wetland:

1. The original wetland configuration shall be replicated including its depth, width, length and gradient at the original location;

2. The original soil type and configuration shall be replicated;

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

4. The wetland, edge and buffer shall be replanted with vegetation native to the City and King County which replicates the original vegetation in species, sizes and densities; and

5. The original wetland functions shall be restored including, but not limited to, hydrologic and biologic functions;

B. The requirements in subsection (A) may be modified if the applicant demonstrates that greater wetland functions can otherwise be obtained;

C. Enhancement shall be required when a wetland or buffer will be altered pursuant to a development proposal. Minimum requirements for enhancement shall be established in the SEPA process but must maintain or improve the wetland's biologic and/or hydrologic functions;

D. Replacement may be allowed when a wetland or buffer is altered pursuant to an approved development proposal if no reasonable opportunities exist for enhancement;

E. All alterations of wetlands shall be replaced or enhanced on the site using the following formulas: Class I and II wetlands on a two (2) to one (1) basis and Class III on a one (1) to one (1) basis with equivalent or greater biologic functions including, but not limited to, habitat functions and with equivalent hydrologic functions, including, but not limited to, storage capacity;

F. Replacement or enhancement off the site may be allowed if the applicant demonstrates to the satisfaction of the City that the off-site location is in the same drainage sub-basin as the original wetland and that greater biologic and hydrologic functions will be achieved. The formulas in subsection (E) shall apply to replacement and enhancement off the site; and

G. Surface water management or flood control alterations including, but not limited to, wetponds shall constitute replacement or enhancement unless other functions are simultaneously improved.

15.700.320 Wetlands – Limited Exemption

Isolated wetlands less than one thousand (1,000) square feet may be exempted from the provisions of SMC 15.700.280 , Wetlands – Development Standards through 15.700.310 , Wetlands – Mitigation Requirements and may be altered by filling or dredging if the City determines that the cumulative impacts do not unduly counteract the purposes of this chapter and are mitigated pursuant to an approved mitigation plan.

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 sensitive area shall have the buffer required for the stream class involved or the buffer which applies to the wetland or other sensitive area, whichever is greater;

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) 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, presettlement 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 multi-purpose 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 15.445.140 through 15.445.148, 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) 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) 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 sub-basin 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 Critical Recharging Areas for Aquifers Used for Potable Water

A. Purpose. Potable water is an essential life sustaining element. Once groundwater is contaminated, it is difficult, costly, and sometimes impossible to clean. Preventing contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm to the public. It is the City's intent, through this section, to recognize the importance of aquifers and to acknowledge a responsibility common to all governmental agencies to ensure, as much as possible through each jurisdiction's powers, the protection of health, safety and welfare of the public, the continued quantity and quality of groundwater supplies through the regulation of land uses which may contribute contamination that may degrade groundwater quality and/or quantity in recharge areas of vulnerability. The extent of regulation shall be based on the degree of vulnerability of an identified recharge area and the contaminant loading potential of the proposed land use.

B. Where it is determined through special studies or City mapping projects that soil and geologic formation permeability exists such that the presence of a groundwater recharge area is likely, the City Manager, or designee, may require further investigation by the applicant of the existence of recharge areas when the proposed land use involved is considered to be of a type or intensity that has a high contamination potential. Such uses may include, but are not limited to, planned unit developments, waste disposal sites, or agriculture activities.

C. Any additional required special studies shall address, but are not limited to, the following:

1. Depth of groundwater;

2. Aquifer properties such as hydraulic conductivity and gradients;

3. Soil texture, permeability, and contaminant attenuation properties;

4. Characteristics of the vadose zone (the unsaturated tip layer of soil and geologic material) including permeability and attenuation properties; or

5. Other relevant factors.

D. Based upon information provided in any required special report or study, the Department shall determine conditions of development which will ensure, to the extent possible, no degradation of groundwater quantity or quality. Such conditions shall be attached to any permit required by the project proposal.

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 sub-populations 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 have a primary association;

2. Habitats and species of local importance (i.e., herons);

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.

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

B. Fish and wildlife habitat conservation areas may, and probably will, include one (1) or more of other sensitive areas identified in this chapter. The following classification system is based on the presence of one (1) or more of these sensitive 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 Wildlife (DOW) 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 DOW 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 DOW and

which is characterized by single-family residential areas immediately adjacent to multifamily 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 DOW and which is characterized by nonresidential land uses.

C. Buffers. For any fish and wildlife habitat conservation areas which include other sensitive areas as identified and regulated in this chapter, the buffer for those sensitive areas shall apply except where species identified by the DOW 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 special study identifying such species, their required habitat, and recommend appropriate buffers based on the DOW priority habitat and species management recommendations as well as any other proposed mitigation measures considered appropriate to the protection of said species and habitat.