CITY OF KIRKLAND
PLANNING AND BUILDING DEPARTMENT
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MEMORANDUM

Date: January 05, 2017

To: Houghton Community Council

From: Teresa Swan, Senior Planner
Joan Lieberman-Brill, AICP, Senior Planner
Jeremy McMahan, Development Review Manager
Paul Stewart, AICP, Deputy Director
Eric Shields, AICP, Director

Subject: Resolution 2017-2: Chapter 90 KZC Amendments (Critical Area Ordinance/Wetlands, Streams, Fish and Wildlife Conservation Areas, Minor Lakes and Frequently Flooded Areas) and related minor code amendments (CAM15-01832)

RECOMMENDATION

Staff recommends that the Houghton Community Council approve, by motion, Resolution 2017-2 to approve amendments to the Zoning Code Chapter 90 and related minor code amendments.

BACKGROUND DISCUSSION

On December 13, 2016, the Kirkland City Council adopted O-4551 (see Attachment 1) approving the amendments to Chapter 90 KZC and the minor code amendments to the Zoning Code and Municipal Code.

The City Council made two minor changes to KZC 90.160.5 concerning maintenance of the vegetative buffer:

1) Homeowners are allowed to do the maintenance of the re-vegetated buffer themselves during the life of the monitoring program if they chose rather than hire a landscape contractor. However, if the vegetation is not maintained in any growing season based on the required annual monitoring report, a landscape contractor must be hired.

2) Commercial, multifamily and institutional uses may use their existing landscape contractor to maintain the buffer vegetation and do not need to hire a separate contractor.

The Houghton Community Council (HCC) and Planning Commission (PC) held a joint public hearing on September 29, 2016, followed by deliberations on October 24, 2016. Both the

Planning Commission and Houghton Community Council voted to recommend approval of amendments to Chapter 90 KZC along with related minor code amendments to the Zoning Code and Municipal Code.

The amendments to Chapter 90 KZC are consistent with the Growth Management Act, Best Available Science and the Department of Ecology Guidance.

Attachment 1: Ordinance 4551 including Attachment A (Chapter 90 KZC) and Attachment B (minor code amendments to the Zoning Code and Municipal Code)

cc:
CAM16-01832
Planning Commission via email

ORDINANCE O-4551

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO ZONING, PLANNING, AND LAND USE AND AMENDING CHAPTER 90 OF THE KIRKLAND ZONING CODE REGARDING CRITICAL AREAS: WETLANDS, STREAMS, MINOR LAKES, FISH AND WILDLIFE CONSERVATION AREAS AND FREQUENTLY FLOODED AREAS ALONG WITH MINOR CODE AMENDMENTS TO CHAPTERS 1, 5, 20, 30, 53, 70, 75, 85, 95, 113, 114, 115, 120, 125, 162 AND 180 OF THE KIRKLAND ZONING CODE AND SECTION 7.61.160 AND TITLE 22 OF THE KIRKLAND MUNICIPAL CODE TO IMPLEMENT CHAPTER 90 TO ENSURE CONTINUED COMPLIANCE WITH THE GROWTH MANAGEMENT ACT, AND APPROVING A SUMMARY ORDINANCE FOR PUBLICATION, FILE NO. CAM15-01832.

WHEREAS, the Growth Management Act (GMA), specifically RCW 36.70A.130, mandates that the City of Kirkland takes legislative action to review, and if needed, revise its Comprehensive Plan and development regulations to ensure continued compliance with GMA (also known as "periodic review"); and

WHEREAS, on December 8, 2015, the City Council adopted Ordinance 4493 amending its Comprehensive Plan in compliance with the GMA; and

WHEREAS, on November 2, 2016, the Planning Commission and the Houghton Community Council did transmit its recommendation to adopt the amendments to Chapter 90 of the Kirkland Zoning Code and related minor code amendments as set forth in Attachments A and B of this ordinance so as to bring the Code into compliance with the GMA; and

WHEREAS, by adoption of this ordinance the City has met its periodic review and update requirements under the GMA, RCW 36.70A.130.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Kirkland as follows:

Section 1. Findings of Fact to Support the City's Process for Conducting Periodic Review.

A. Based on the analysis of the recommendation in the transmittal memo from the Planning Commission and Houghton Community Council dated November 2, 2016, and the proposed amendments recommended for approval by the Planning Commission and the Houghton Community Council, the City Council finds that the City's review of the development regulations of Chapter 90 of the Kirkland Zoning Code and related minor code amendments, the identification of needed amendments, and the public participation process which was followed, comply with the City's requirement to conduct periodic review under the Growth Management Act, RCW 36.70A.

B. Amendments to the development regulations of Chapter 90 of the Kirkland Zoning Code and related minor code amendments as adopted by this ordinance are consistent with the Growth Management Act, Best Available Science, and the Washington State Department of Ecology's guidance.

C. The existing development regulations of Chapter 85 of the Kirkland Zoning Code relating to Critical Areas: Geologically Hazardous Areas are consistent with the Growth Management Act and Best Available Science.

D. The City, in reviewing and revising its development regulations, established procedures and schedules for early and continuous public participation pursuant to RCW 36.70A.130(2). Public participation included mailed notice to potentially affected property owners, emailed notice to the development community, emailed listserv announcements, information on web pages, public open houses, and public meetings before the Planning Commission and Houghton Community Council, and staff memoranda on related issues to the code amendments.

E. Amendments to Chapter 90 of the Kirkland Zoning Code and related minor code amendments were transmitted to the Washington State Department of Commerce on September 15, 2016, at least 60 days prior to adoption as required.

F. Amendments to Chapter 90 of the Zoning Code were sent as a courtesy to the Washington State Department of Ecology, Washington State Fish and Wildlife, the Muckleshoot Tribe, Federal Emergency Management Agency, Puget Sound Energy and Sound Transit.

Section 2. Additional Findings of Fact to Support the City's Amendments to Chapter 90 of the Kirkland Zoning Code.

A. The Planning Commission and Houghton Community Council held eight study sessions, open to the public, on proposed revisions to Chapter 90 of the Kirkland Zoning Code and related minor code amendments to consider public comments.

B. Public open houses on the proposed revisions to Chapter 90 of the Kirkland Zoning Code and related minor code amendments were held before the study sessions on February 25, 2016, March 31, 2016, and April 28, 2016; and before the public hearing on September 29, 2016.

C. The Planning Commission and Houghton Community Council reviewed and considered the Best Available Science Report and Gap Analysis dated December 2015 prepared by The Watershed Company, in addition to the requirements of the Growth Management Act and the Department of Ecology's guidance in preparation of their proposed revisions to Chapter 90 of the Kirkland Zoning Code and related minor code amendments.

D. The criteria of Section 135.25 of the Kirkland Zoning Code, regarding amending the text of the Kirkland Zoning Code, were also considered and are found to have been met.

E. The Planning Commission held a joint public hearing on proposed revisions to Chapter 90 of the Kirkland Zoning Code and related minor code amendments with the Houghton Community Council on September 29, 2016, following notice as required by RCW 36.70A.035, to receive public comments, and deliberated on the amendments on October 24, 2016.

F. The City Council has received a recommendation from the Kirkland Planning Commission and the Houghton Community Council for amendments to Chapter 90 of the Kirkland Zoning Code and certain related minor code amendments to the Kirkland Zoning Code and Municipal Code as set forth in the transmittal memo and recommendation from the Planning Commission and Houghton Community Council dated November 2, 2016, and bearing Kirkland Planning and Building Department File No. CAM15-01832.

G. The City Council held a study session on November 15, 2016, to consider the proposed amendments, the recommendation from the Planning Commission and Houghton Community Council, and public comments.

H. Pursuant to the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, a SEPA Addendum to Existing Environmental Documents was issued by the responsible official pursuant to WAC 197-11-625 on September 22, 2016.

I. In a regular public meeting on December 13, 2016, the City Council considered the environmental documents received from the responsible official, together with the recommendation of the Planning Commission and Houghton Community Council dated November 2, 2016, and a report from staff.

Section 3. Based upon the Findings of Fact set forth in Sections 1 and 2 above, Chapter 90 of the Kirkland Zoning Code is amended as set forth in Attachment A attached to this ordinance and incorporated herein by reference.

Section 4. Based upon the Findings of Fact set forth in Sections 1 and 2 above, the following list of chapters of the Kirkland Zoning Code and the Municipal Code are amended as set forth in Attachment B attached to this ordinance and incorporated herein by reference:

Kirkland Zoning Code:

Chapter 1 User Guide; Chapter 5 Definitions; Chapter 20 Medium Density Residential Zones; Chapter 30 Offices Zones; Chapter 53 Rose Hill Business District (RHBD) Zones; Chapter 70 Holmes Point Overlay Zone; Chapter 75 Historic Landmark Overlay Zone and Historic Residence Designation; Chapter 85 Geologically Hazardous Areas; Chapter 95 Tree Management and Required Landscaping; Chapter 113

Cottage, Carriages and Two/Three-Unit Homes; Chapter 114 Low Impact Development; Chapter 115 Miscellaneous Use Development and Performance Standards; Chapter 120 Variances; Chapter 125 Planned Unit Development; Chapter 162 Nonconformance; and Chapter 180 Plates.

Kirkland Municipal Code:

Section 7.61.160 Tree Trimming; and Title 22 Subdivisions.

Section 5. If any section, subsection, sentence, clause, phrase, part or portion of this ordinance, including those parts adopted by reference, is for any reason held to be invalid or unconstitutional by any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 6. To the extent the subject matter of this ordinance is subject to the disapproval jurisdiction of the Houghton Community Council, this ordinance shall become effective within the Houghton Community Municipal Corporation only upon approval of the Houghton Community Council or the failure of said Community Council to disapprove this ordinance within 60 days of the date of the passage of this ordinance.

Section 7. Except as provided in Section 6, this ordinance shall be in full force and effect on March 1, 2017, from and after its passage by the Kirkland City Council and publication, pursuant to Kirkland Municipal Code 1.08.017, in the summary form attached to the original of this ordinance and by this reference approved by the City Council, as required by law.

Section 8. A complete copy of this ordinance shall be certified by the City Clerk, who shall then forward the certified copy to the King County Department of Assessments.

Passed by majority vote of the Kirkland City Council in open meeting this 13th day of December, 2016.

Signed in authentication thereof this 13th day of December, 2016.

MAYOR

Attest:

City Clerk

Approved as to Form:

City Attorney

Chapter 90 – CRITICAL AREAS: WETLANDS, STREAMS, MINOR LAKES, FISH AND WILDLIFE HABITAT CONSERVATION AREAS, AND FREQUENTLY FLOODED AREAS

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90.170 Subdivisions and Maximum Development Potential
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90.185 Non-Conformances
90.190 Critical Area Markers, Fencing and Signage
90.195 Pesticide and Herbicide Use
90.200 Critical Area Buffers and Structure Setbacks from Buffers Under Prior Approvals
90.205 Code Enforcement
90.210 Dedication and Maintenance of Critical Area and Buffer
90.215 Liability
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90.05 User Guide

The regulations in this chapter apply to activities, uses, alterations, work, and conditions in or near any wetland, stream, minor lake, fish and wildlife habitat conservation areas, or frequently flooded area. These regulations add to and in many cases supersede other City regulations. Anyone interested in conducting any development activity on or near one of these critical areas; wanting to participate in the City's decision on a proposed development under this chapter; or wishing to have a determination made as to the presence of one of these areas on their property, should read these regulations.

For properties within jurisdiction of the Shoreline Management Act, the regulations in Chapter 83 KZC shall be met. Chapter 83 KZC contains wetland, stream and flood hazard reduction regulations for properties located within its jurisdiction. However, regulations contained in this chapter that are not addressed in Chapter 83 KZC continue to apply, such as performance security, dedication and liability.

90.10 Purpose

These regulations were prepared to comply with the Growth Management Act and implement the goals and policies of the City' Comprehensive Plan. The purpose of these regulations is to protect the environment, human life, and property. This purpose will be achieved by preserving the important ecological functions of wetlands, streams, minor lakes, fish and wildlife habitat conservation areas, and frequently flooded areas using best available science. The designation, classification, and regulation of critical areas are intended to protect property rights while assuring preservation and protection of critical areas from loss or degradation, ensuring no net loss of ecological functions and restricting incompatible land uses.

These critical areas perform a variety of valuable biological, chemical, and physical functions that benefit the City and its residents. The functions of these critical areas include, but are not limited to, the following:

1. Wetlands – Wetlands help store and convey flood and storm water, support base stream flow and recharge groundwater, provide erosion control and shoreline protection, maintain and improve water quality, provide fish and wildlife habitat, and provide cultural and socioeconomic values. Wetland functions for flood and stormwater control, erosion protection, and water quality improvement are particularly valuable to protect infrastructure and to limit the effects of development on water quality in Kirkland's streams and lakes.

   Wetland buffers protect wetlands from or reduce the impacts of adjacent land uses. Buffers

serve to moderate runoff volume and flow rates and stormwater inputs (hydrology maintenance), remove sediment, excess nutrients, synthetic organic chemicals (e.g., pesticides, oils, and greases) and other toxic substances (water quality improvement), provide shade for surface water temperature (moderate temperature), and deter harmful intrusion into wetlands by humans and pets (disturbance barrier). Buffers provide terrestrial habitat for wetland-dependent species that need both aquatic and terrestrial habitats for their life cycle maintain habitat connectivity (wildlife habitat).

The primary purpose of wetland regulations is to achieve a goal of no net loss of wetland function, value, and acreage, which, where possible, includes enhancing and restoring wetlands.

2. Streams – Streams and their associated buffers provide important fish and wildlife habitat and travel corridors; help maintain water quality; store and convey storm and flood water; recharge groundwater; and serve as areas for recreation, education, scientific study, and aesthetic appreciation.

   Stream buffers serve an important role in maintaining stream functions that are important for supporting diverse and productive fish population. These include water quality (i.e. protection from sediment, nutrients, metals, pathogens, herbicides, and pharmaceuticals), water temperature and microclimate, bank stability, invertebrate communities, inputs of organic detritus, instream habitat complexity, including large woody debris, and habitat travel corridors.

   The primary purpose of stream regulations is to avoid damage to stream and riparian corridor functions, and where possible, to enhance and restore streams and riparian areas.

3. Minor Lakes – Minor Lakes provide important fish and wildlife habitat; store and convey storm and flood water; recharge, storage, and discharge of ground water;; and serve as areas for recreation, education, scientific study, and aesthetic appreciation. Because the shallow perimeter of minor lakes often meets the definition of a wetland, many uses and activities in and around lakes are regulated under the wetland regulations.

   The primary purpose of minor lake regulations is to avoid impacts to lakes and contiguous stream and wetland areas, and where possible, to enhance and restore minor lakes.

4. Fish and Wildlife Habitat Conservation Areas – Fish and wildlife habitat conservation areas provide important nesting territory as well as spawning and protection areas for state and federally listed endangered, threatened, and sensitive species that have a primary association with that habitat area and state priority habitat that include species of local importance. These habitat areas help maintain long-term viability of these species and contribute to the state's biodiversity. Preservation of the vegetation, faunal, and hydrologic characteristics of these habitat areas is critical to maintaining these species.

   The primary purpose of fish and wildlife habitat conservation area regulations is to protect habitats from impacts of adjacent urban uses by minimizing fragmentation of native habitat, controlling invasive species, maintaining or providing habitat connectivity with vegetated corridors between habitat patches, preserving habitat features including native vegetative, snags and downed wood, and providing buffers of adequate width adjacent to the habitat areas.

5. Frequently Flooded Areas – Frequently flooded areas are areas of special flood hazard that help

to store and convey storm and flood water; recharge ground water; provide important riparian habitat for fish and wildlife; protect the functions and values of floodplains and serve as areas for recreation, education, and scientific study. Development within these areas can be hazardous to those inhabiting such development, and to those living upstream and downstream. Flooding also can cause substantial damage to public and private property that result in significant costs to the public as well as to private individuals.

The primary purpose of frequently flooded areas regulations is to manage potential risks to public safety and damage to public and private property due to flooding, and to protect instream habitat areas. The City of Kirkland uses the Federal Emergency Management Agency (FEMA) maps as a basis for a determination of the location of frequently flooded areas.

90.15 Applicability

1. General – These regulations apply to land within the City of Kirkland that contains any of the following:

   a. Wetlands;

   b. Streams;

   c. Minor Lakes;

   d. Fish and Wildlife Habitat Conservation Areas;

   e. Frequently Flooded Areas; and

   f. Vegetative buffers required for the above.

2. Conflicting Provisions – The regulations in this chapter supersede any conflicting regulations in the Kirkland Zoning Code. For properties within jurisdiction of the Shoreline Management Act, the regulations in Chapter 83 KZC supersede any conflicting regulation in this chapter. If more than one regulation applies to the subject property, then the regulation that provides the greatest protection to critical areas shall apply.

3. Modifications to Provisions in this Chapter – The regulations in this chapter may not be modified using other provisions in this code, such as but not limited to historic overlay (Chapter 75 KZC), variances (Chapter 120 KZC), or planned unit developments (Chapter 125 KZC), unless as specified in Reasonable Use Exception Section 90.170 of this Chapter.

4. Other Jurisdictions – Nothing in these regulations eliminates or otherwise affects the responsibility of an applicant or property owner to comply with all other applicable local, state, and federal regulations and permits that may be required.

5. SEPA Compliance – Nothing in these regulations or the decisions made pursuant to these regulations affects the authority of the City to review, condition, and deny projects under the State Environmental Policy Act, Chapter 43.21C RCW.

90.20 Critical Areas Maps and Other Resources

The City maintains general mapping of known critical areas. These maps and other available resources (such as topographic maps, soils maps, and aerial photos) are intended only as guides. They depict the approximate location and extent of known critical areas. Some critical areas depicted in these resources may no longer exist and critical areas not shown in these resources may occur. The provisions of this Chapter and the findings of a critical areas report and review of the report by the City take precedence over the City's mapping. It is strongly advised that property owners and project applicants to retain qualified critical area professionals to conduct site-specific studies for the presence of critical areas and related buffers.

The City's map relating to Chapter 90 KZC is entitled "Wetlands, Streams and Minor Lakes" map.

90.25 Regulated Activities

Regulated activities have the potential to adversely impact a critical area or its established buffer. This chapter shall regulate the following activities:

1. Removal, excavation, grading or dredging of material of any kind;
2. Dumping of, discharging of, or filling with any material;
3. Draining, flooding, or disturbing the water level or water table;
4. Driving pilings or placing obstructions;
5. Construction or reconstruction, or expansion of any structure;
6. Destruction or alteration of vegetation through clearing, pruning, topping, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated critical area;
7. Activities that result in significant changes of water temperature and physical or chemical characteristics of water sources to the critical area, including quantity and pollutants;
8. Any other development activity; and
9. Application of herbicides and pesticides.

90.30 City Review Process

1. Activities regulated by this chapter shall be considered using the following decision processes:

Table 90.30.1 City Review Process

Type of Action	City Review Process	Section
Exemptions	Activities permitted outright with no review process (or reviewed with underlying development or land surface modification permit - no review fee)	KZC 90.35
Permitted Activities, Improvements and Uses Subject to Development Standards	Planning Official Decision	KZC 90.40
Exception - Public Agency and Public Utility	Planning Director - Process I, Chapter 145 KZC	KZC 90.45
Programmatic Permits - Public Agency and Public Utility	Planning Official Decision or Planning Director - Process I,	KZC 90.50

	Chapter 145 KZC depending on scope of project	
Wetland Modification	Planning Director - Process I, Chapter 145 KZC	KZC 90.60
Category IV Wetland Exceptions	Planning Official Decision	KZC 90.60
Stream Modification	Planning Director - Process I, Chapter 145 KZC	KZC 90.70
Daylighting of Streams	Planning Official Decision	KZC 90.75
Stream Channel Stabilization	Planning Director - Process I, Chapter 145 KZC –	KZC 90.85
Moorage Facilities and Other Improvements on Minor Lakes	Planning Director - Process I, Chapter 145 KZC	KZC 90.90
Critical Area Determination	Planning Official determination	KZC 90.105
Buffer Averaging	Planning Official Decision	KZC 90.115
Interrupted Buffer	Planning Official Decision	KZC 90.120
Reasonable Use Exception	Planning Director - Process I, Chapter 145 KZC	KZC 90.180

2. If a development, use or activity requires approval through Planning Official or Process I pursuant to this Chapter is part of a proposal that requires additional approval through Process IIA or Process IIB, the entire proposal shall be decided upon using that other process.
   a. The decisional criteria for a permit reviewed under a Process I in this chapter shall be used for the Process IIA or Process IIB decision.
   b. The decisional criteria, standards and/or requirements for a decision reviewed under a Planning Official Decision in this chapter shall be used for the Process IIA or Process IIB decision.

90.35 Exemptions

The following activities, improvements and uses have little or no environmental impact, are temporary in nature, or are an emergency and are therefore exempt from the provisions of KZC 90.40 through KZC 90.225 of this chapter, unless otherwise determined by the Planning Official.

An exemption does not give permission to degrade a critical area or ignore risk from natural hazards. All exempted activities shall use reasonable methods to avoid impacts to critical areas or their buffers. Any temporary damage to, or alteration of a critical area or buffer, shall be restored, rehabilitated, or replaced to prior condition or better at the responsible party's expense. Revegetation shall occur during the wet season, but no later than 180 days after the damage or alteration of the critical area or buffer occurred. All other restoration or rehabilitation shall be completed within 60 days of the damage or alteration, unless otherwise approved by the Planning Official.

The following activities, improvements and uses are exempt:

1. Repair and Maintenance of Structures. Repair and maintenance of existing legally established, functioning structures. This provision excludes public streets and utilities. [1]

2. Public Streets. Repair, maintenance, reconstruction and minor expansion of existing public streets, including associated appurtenances, bike lanes, and sidewalks. [2, 5, 6]

3. Utilities. Repair and maintenance of utility structures and conveyance systems and their associated facilities including service lines, pipes, mains, poles, equipment and appurtenances - both above and below ground. Replacement, installation, or construction of new utility structures and conveyance systems and their associated facilities within existing improved rights-of-way, existing legally improved private roadways, utility corridors or the Cross Kirkland Corridor and Eastside Rail Corridor. This provision does not include upgrading electric facilities that exceed 115 KV or replacement of hazardous liquid pipelines that increase existing pipeline circumference, or installation of additional hazardous liquid pipelines.[3, 5, 6]

4. Demolition. Removal of structures in critical area buffers, provided that all disturbed soils are stabilized and revegetated with appropriate native vegetation and at spacing intervals listed in the City's Critical Area Plant List using the Vegetative Buffer Standards in KZC 90.130 as a guideline for plant diversity and type.

5. Existing Non-Motorized Trails. Repair and maintenance of existing, legally established non-motorized trails, including the Cross Kirkland Corridor and Eastside Rail Corridor. [1, 5]

6. Existing Landscaping. Landscape maintenance of legally established lawns and gardens; including mowing, pruning, weeding, and planting; provided that such activities do not expand any further into critical areas or buffers, excludes removal of significant trees, and the use and application of chemical fertilizers, herbicides and insecticides comply with provisions in KZC 90.195.

7. HVAC Equipment. Addition of HVAC equipment with a footprint of less than nine (9) square feet, provided that:
   a. There is no feasible alternative location available;
   b. It does not expand the area of beyond legally established landscaping or improvements;
   c. It is not located in the critical area and is as far as possible from the critical area;
   d. Noise minimization techniques are provided. HVAC equipment shall be baffled, shielded, and enclosed to ensure compliance with the noise provisions of KZC 115.95, except that the receiving property shall also include the upland edge of the critical area buffer; and
   e. It must meet the setback requirements in KZC 115.115.

8. Site Investigative Work and Studies. Site investigative work and studies necessary for development permits, including geotechnical tests, water quality studies, wildlife studies, and critical area investigations; provided, that any disturbance of the critical area or its buffer shall be the minimum necessary to carry out the work or studies and the area must be restored with native vegetation after testing is done. Use of any mechanized equipment requires prior approval of the Planning Official.

9. Public Restoration. [6]
   Restoration of a critical area and its buffer through the removal of non-native plant species provided all of the following apply:
   a. The entire area cleared of plants must be revegetated with appropriate native vegetation and at spacing intervals listed in the City's Critical Area Plant List using the Vegetative Buffer Standards in KZC 90.130 as a guideline for plant diversity and type;
   b. The subject property is not located in a high landslide hazard area;
   c. No grading or filling is required to remove non-native invasive plants or revegetate with native species;
   d. Restoration work shall be restricted to hand removal. Hand removal equipment includes shovels, tillers, clippers, loppers, weed wrenches, and brush cutters and any hand held gas or electric

equipment; except that machinery can be used if machinery can access the buffer from an abutting paved roadway without encroaching into the buffer;

e. Replanting with native vegetative must take place immediately following removal of invasive species;
f. Goats may be used to remove invasive species only, provided their use does not adversely affect stream or wetland functions and they are restricted from access to the wetland or stream. Use of goats may be limited or prohibited by the Planning Official in areas where native vegetation is present and could be damaged;
g. In all cases, non-native, invasive species removal shall avoid impacts to native species; and
h. Citizen volunteers doing restoration must be under the direct supervision of City staff.

10. Private Restoration. [6]
Restoration of a critical area and its buffer through the removal of non-native invasive plant species listed in the King County Noxious Weed List provided all of the following apply:
    a. The entire area cleared of invasive plants shall be revegetated with appropriate native vegetation and at spacing interval and plant size listed in the City's Critical Area Plant List using the Vegetative Buffer Standards in KZC 90.130 as a guideline for plant diversity and type
    b. The subject property is not located in a high landslide hazard area;
    c. No grading or filling is required to remove non-native invasive vegetation or revegetate with native species;
    d. A planting restoration plan must be submitted to the Planning Official for review and approval prior to any disturbance to the buffer. The plan must include the area to be restored, method of removal, a detailed native planting plan with a plant list and schedule for commencement and completion of the project;
    e. Restoration work shall be restricted to hand held equipment. Hand held equipment includes shovels, tillers, clippers, loppers, weed wrenches, and brush cutters and any hand held gas or electric equipment; machinery such as excavators and bulldozers is not allowed;
    f. Replanting with native vegetative must take place immediately following removal of invasive species;
    g. All removed plant material shall be taken away from the site; and plants that appear on the King County Noxious Weed List must be handled and disposed of according to a noxious weed control plan appropriate to that species; and
    h. In all cases, non-native, invasive species removal shall avoid impacts to native species.

11. Storm Water Dispersion Flow Path. Creation of a vegetated flow path from a dispersion device that is located outside the critical area buffer that flows into the critical area buffer provided the buffer meets the Vegetative Buffer Standards in KZC 90.130, and the design is part of an approved development permit.

12. Other. Educational activities, scientific research, and passive outdoor recreational activities such as bird watching, fishing, and hiking, not including trail building or clearing.

13. Emergency Activities. Emergency activities necessary to prevent an immediate threat to public health, safety, or welfare. Alterations shall be reported to the City within seven (7) days and include evidence of threat or imminent danger. The City may require a permit to be obtained after-the-fact and require the critical area and its buffer to be fully restored in accordance with a critical area report and mitigation/maintenance plan.[4]

Notes:

[1] Repair and maintenance shall not increase the previously approved structure footprint or

impervious area, including paving and previously approved private roadways and driveways and parking areas within a critical area or its buffer, and shall not include foundation replacement. Foundation and complete structure replacement is regulated under KZC 90.185 of this chapter.

[2] Public street activities shall not increase the impervious area in the right-of-way, or reduce flood storage capacity in the critical area or critical area buffer. Public street activities in this provision also include expansion of pavement into existing impervious street shoulders.

[3] Utility activities shall not increase the impervious area in the right-of-way or private roadway or utility corridor or the Cross Kirkland and Eastside Rail Corridors, (except utility poles), or reduce flood storage capacity in the critical area or critical area buffer. Replaced overhead electric utilities and their associated facilities shall not be exempt if the work results in additional vegetation disturbance of the critical area or its buffer because of ongoing required vegetation maintenance due to wider vegetation clearance requirements. Utility activities in this provision also include expansion of existing structures such as substations into existing impervious areas.

[4] All restoration and mitigation shall occur within the timeframe established with the underlying permit, but in no case more than one year from the date of the emergency.

[5] The construction drawings shall show the edge of the right-of-way, private roadway or utility corridor, and the existing impervious shoulder area. The drawings shall also specify that all affected critical areas and buffers shall be restored to their pre-project condition or better, including soil stabilization and revegetation.

[6] All activities shall be undertaken using best management practices as determined by the Planning Official and adhere to the fish and wildlife seasonal restrictions on construction activities as determined by the Washington State Department of Fish and Wildlife.

90.40 Permitted Activities, Improvements or Uses Subject to Development Standards

1. Permitted Activities, Improvements and Uses. Activities, improvements and uses identified in this section are permitted subject to the following approval and development standards. Those activities and uses not identified or not meeting the standards in this section may be proposed under other sections of this chapter.

2. Process. The Planning Official shall review and decide on an application for a permitted activity or use. The general and specific standards in subsections 5 and 6 below along with the mitigation plan shall be conditions of approval.

3. Decisional Criteria. the Planning Official may approve a permitted activity or use if it is determined that:
   a. There is no practical alternative location with less adverse impact on the critical area or its buffer based on a critical area report and mitigation sequencing pursuant to KZC 90.145.
   b. The mitigation plan pursuant to KZC 90.145 sufficiently mitigates impacts; and
   c. The project plans meet the general and specific standards in subsections 5 and 6 below.

4. Critical Area Determination and Report. The applicant shall submit a critical area determination pursuant to KZC 90.105 and a critical area report pursuant to KZC 90.110.

5. Standards.

a. Application for permitted activities, improvements or uses identified in this section shall demonstrate that they meet the following standards except as noted in subsection 6 below.
   1) General mitigation requirements including mitigation sequencing pursuant to KZC 90.145;
   2) If located in a wetland or wetland buffer, requirements for wetland compensatory mitigation, pursuant to KZC 90.150;
   3) Implement a mitigation plan pursuant to KZC 90.145 and/or KZC 90.150;
   4) If located in a fish or wildlife habitat conservation area, requirements of KZC 90.95;
   5) Monitoring and maintenance requirements pursuant to KZC 90.160;
   6) Financial security requirements pursuant to KZC 90.165;
   7) Critical area markers, fencing and signage requirements pursuant to KZC 90.190.
   8) Dedication of critical area and buffers requirements pursuant to KZC 90.210;
   9) No adverse impact on water quality or conveyance or degradation of critical area functions and values;
   10) Structures and improvements located to minimize removal of significant trees;
   11) Restoration of temporary disturbance areas associated with the work to pre-project conditions or better shown on construction drawings and expeditiously done; and

b. Except as provided in subsection 5a above, the list of permitted activities, improvements or uses are not subject to General Standards pursuant to KZC 90.105 through KZC 90.225.

6. <u>List of Permitted Activities, Improvements and Uses</u>. The following activities and uses may be permitted, provided that the specific standards applicable to each activity or use and the general standards in subsection 5 above are met.

   a. <u>Private Repair and Maintenance of Culverts</u>.

      1) Work limited to removing impediments to improve flow conveyance,
      2) Work must be done by hand; and
      3) Shall comply with Washington State Fish and Wildlife's seasonal restrictions on in stream work.

   b. <u>Private Roadways</u> – New private driveway or easement road through a buffer if there is no other option available to access a property that is both a legal building site and a buildable site, provided:

      1) The driveway or easement road is the minimum width and length necessary to access the buildable site;
      2) Buffer disturbance for installation of the driveway or easement road is the minimum necessary;
      3) Buffer area and function are equal or better than pre-project condition;
      4) The buffer vegetation is at a minimum equal to the width of the roadway and disturbed areas using KZC 90.130 as a guideline for plant diversity and type; and
      5) The project does not include a Wetland Modification or Stream Modification pursuant to KZC 90.60 or KZC 90.70, or a Reasonable Use Exception pursuant to KZC 90.180.

   c. <u>Private and Public Non-motorized Trails, Stream Crossings, and Benches and Public Wildlife Viewing Structures.</u>

      1) The improvement shall be located only in the outer 25% of the buffer area. Exceptions are stream crossings, and trail access to Forbes Lake and Totem Lake which may require access through a buffer or wetland to get to the lake, and public wildlife viewing structures,
      2) Stream crossings are not permitted in Type F streams under this section. See KZC 90.70 for

proposing stream crossing of Type F streams,

3) Trails shall be limited to the least impactful pervious surfaces. Raised boardwalks utilizing approved non-treated pilings are acceptable if found to be the least impacting alternative,
4) Private trails shall be no more than three (3) feet in width. Public trails shall be no more than five (5) feet in width,
5) Stream crossings shall meet the standards for crossings in KZC 90.70 and Washington State Department of Fish and Wildlife's Water Crossing Guidelines, and other state and federal permits; and
6) Vegetative buffers shall be provided where possible equal to the width of the trail corridor and disturbed areas using KZC 90.130 as a guideline for plant diversity and type.
7) For public improvements, financial security standards of KZC 90.165 and dedication of critical area and buffer requirements of KZC 90.210 are waived.

d. Private and Public Utilities.

1) New sewer and stormwater lines in critical area buffers where necessary to allow for gravity flow, provided they shall be located as far as possible from the critical area edge.
2) New utilities in critical area buffers, other than addressed in 1. above, provided that:
   (a) The facility shall be only located in the outer 25% of the buffer area;
   (b) The facility is not a hazardous liquid or gas pipeline; and
   (c) The facility is not a substation.
3) New stormwater outfalls and associated dissipation devices, such as flow spreaders and rock pads, within critical area buffers, provided:
   (a) Discharge of stormwater outside of the buffer is not feasible as determined by the City, or;
   (b) If property adjoining the buffer is greater than 15% slope, a specific study by a geotechnical engineer or engineering geologist must show that discharge outside of the buffer will cause slope instability or excessive erosion, and therefore the discharge needs to be in the buffer, and
   (c) The outfall is located as far as possible from the critical area.
4) Boring for utilities/utility corridor under a critical area, provided:
   (a) Not permitted in a Category I Wetland,
   (b) Entrance/exit portals must be located in the outer 25% of the critical area buffer,
   (c) Boring does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column; and
   (d) A specific study by a hydrologist is required to determine whether the ground water connection to the critical area or percolation of surface water down through the soil column will be disturbed.
5) For City utility projects, financial security standards of KZC 90.165 are waived.
6) For public utility projects, dedication of critical area and buffers requirements pursuant to KZC 90.210 may be waived if the planning official determines that they are not warranted; and
7) For private and public utility projects, critical area markers, permanent fencing and signage requirements pursuant to KZC 90.190 may be waived if the planning official determines that they are not warranted.

e. Private and Public In-Stream Maintenance.

1) Work limited to removing inorganic debris, sediment, invasive vegetation and replanting of streambank with native vegetation to improve in-stream fish habitat, fish passage and flow conveyance;

2) Work must be done by hand. Hand removal equipment may include shovels, tillers, clippers, loppers, weed wrenches, and brush cutters and any hand held gas or electric equipment;
3) Public work may include machinery if it can access the buffer from an abutting paved roadway without encroaching into the buffer; and
4) Maintenance shall comply with Washington State Fish and Wildlife's seasonal restrictions on stream work, including state permit approvals.
5) For public in-stream maintenance, financial security standards of KZC 90.165 are waived; and
6) For public in-stream maintenance, dedication of critical area and buffers requirements pursuant to KZC 90.210 may be waived if the planning official determines that they are not warranted; and
7) For private and public in-stream maintenance, critical area markers, permanent fencing and signage requirements pursuant to KZC 90.190 may be waived if the planning official determines that they are not warranted.

f. Private and Public Restoration.

Restoration of a critical area and its buffer in high landslide hazard areas and/or where grading is necessary for the removal of non-native plants, provided:

1) The entire area cleared of invasive plants shall be revegetated with appropriate native vegetation and at spacing intervals listed in the City's Critical Area Plant list, using the Vegetative Buffer Standards in KZC 90.130 as a guideline for plant diversity and type;
2) The City shall require a geotechnical investigation in high landslide hazard areas pursuant to Chapter 85 KZC, and if determined to be necessary based on the investigation, a geotechnical report with recommendations on special mitigation techniques or measures, along with an erosion control plan;
3) Removal of invasive plant species and other restoration work shall be restricted to work by hand, including use of shovels, tillers, clippers, loppers, weed wrenches, and brush cutters and any hand held gas or electric equipment;
4) Replanting with native vegetative must take place immediately following removal of invasive species;
5) For public restoration, machinery may be used if the use of such equipment is determined acceptable by the geotechnical investigation and/or report;
6) For public restoration, citizen volunteers doing restoration must be under the direct supervision of City staff;
7) For private restoration, removed invasive plant material shall be taken off the site; and plants that appear on the King County Noxious Weed List must be handled and disposed of according to a noxious weed control plan appropriate to that species; and
8) For public restoration, financial security standards of KZC 90.165 are waived.

g. Private and Public Demolition. Removal of structures in critical areas provided that:

1) All disturbed soils are stabilized and revegetated with appropriate native vegetation and at spacing intervals listed in the City's Critical Area Plant List using the Vegetative Buffer Standards in KZC 90.130 as a guideline for plant diversity and type;
2) Replanting with native vegetative must take place immediately following the clearing activity;
3) For public demolition, financial security standards of KZC 90.165 are waived; and
4) For public demolition, dedication of critical area and buffers requirements pursuant to KZC 90.210 and critical area markers; and
5) For private and public demolition, permanent fencing and signage requirements pursuant to KZC 90.190 may be waived if the planning official determines they are not warranted.

h. Public Streets - Widening of existing public streets in critical area buffers, provided:

1) The street shall only be located in the outer 25% of the buffer area,
2) Any necessary culvert modification or extension is designed to meet the Washington Department of Fish and Wildlife's Water Crossing Guidelines,
3) Financial security standards of KZC 90.165 and dedication of critical area and buffers requirements pursuant to KZC 90.210 are waived; and
4) Critical area markers, permanent fencing and signage requirements pursuant to KZC 90.190 may be waived if the planning official determines that they are not warranted.

i. Improvements Associated with the Cross Kirkland Corridor and Eastside Rail Corridor.

New, modified or relocated public non-motorized trails within the Cross Kirkland Corridor and Eastside Rail Corridor and connecting to either corridor approved under the City's Cross Kirkland Corridor Master Plan or as amended. Financial security standards of KZC 90.165 and dedication of critical area and buffers requirements pursuant to KZC 90.210 are waived.

j. Improvements Associated with City Park, Transportation, and Utility Master Plans.

Any new or modified City projects, other than those associated with the Cross Kirkland Corridor or Eastside Rail Corridor, approved under a master plan approved by the City Council, for which a critical area determination and delineation pursuant to KZC 90.105 and location of critical areas have been considered as part of the master plan process. Financial security standards of KZC 90.165 and dedication of critical area and buffers requirements pursuant to KZC 90.210 are waived.

90.45 Public Agency and Public Utility Exceptions -

If strict application of this chapter would prohibit a development proposal by a public agency or public utility, the agency may apply for an exception pursuant to this section.

1. General: Prior to seeking approval through this section, the Planning Official in conjunction with a public agency or public utility shall first determine that:

a. The project scope cannot be approved under KZC 90.60 for Wetland Modifications; KZC 90.70 for Stream Modifications; KZC 90.85 for Stream Channel Stabilization, and KZC 90.95 for Wildlife Habitat Conservation Areas; and

b. The project cannot meet the requirements under KZC 90.130 Vegetative Buffer Standards, and KZC 90.140 Structure Setback from Critical Area Buffer; or any other provision in this chapter.

2. Process. A critical area exception for public agencies and public utilities shall be reviewed and decided upon using Process I, pursuant to KZC Chapter 145.

3. Decisional Criteria. The Planning Director shall make a decision based on the following criteria:

a. There is no other practical alternative to the proposed project with less impact on the critical areas or buffer;
b. Strict application of this chapter would unreasonably restrict or prohibit the ability to provide

public utilities or public agency services to the public;

c. The proposal minimizes impacts to the critical area or buffer through mitigation sequencing, and through type and location of mitigation, pursuant to KZC 90.145 and KZC 90.150 if applicable, including such installation measures as locating facilities in previously disturbed areas, boring rather than trenching, and using pervious or other low impact materials; and
d. The proposal protects and/or enhances critical area and buffer functions and values, consistent with the best available science and with the objective of no net loss of critical area functions and values.

4. Submittal Requirements: The application shall include the City's critical area determination pursuant to KZC 90.105 and a critical area report pursuant to KZC 90.110, a mitigation plan pursuant to KZC 90.145, and KZC 90.150 if a wetland is to be modified, a response to the decisional criteria in subsection 3 above, and the following documents based upon the type of exception proposed in order to determine that the strict application of this chapter would otherwise prohibit a development proposal:

   a. Wetland Modifications.
      1) The public agency or public utility shall submit a wetland modification assessment pursuant to KZC 90.60.6; and
      2) The public agency or public utility shall demonstrate that the requirements in KZC 90.60.8 through 10 cannot be met.

   b. Stream Modifications.
      1) The public agency or public utility shall submit a stream modification assessment pursuant to KZC 90.70.5; and
      2) The public agency or public utility shall demonstrate that the requirements in KZC 90.70.6 and 7 cannot be met.

   c. Daylighting of Stream. The public agency or public utility shall submit a stream daylighting plan demonstrating that the requirements in KZC 90.75.3 cannot be met.

   d. Stream Channel Stabilization. The public agency or public utility shall submit a streambank assessment and stream channel stabilization plan demonstrating that the requirements in KZC 90.85.5 and 6 cannot be met.

   e. Wildlife Habitat Conservation Area Modifications.
      1) The public agency or public utility shall submit an assessment of a habitat conservation area pursuant to KZC 90.95.3, a habitat management plan pursuant to KZC 90.95.6 ; and
      2) The public agency or public utility shall demonstrate that the requirements in KZC 90.95.7 cannot be met.

   f. Buffer Averaging. The public agency or public utility shall demonstrate that the standards in KZC 90.115.2 cannot be met.

   g. Vegetative Buffer Standards. The public agency or public utility shall demonstrate that the standards in 90.130.2 through 4 cannot be met.

   h. Structure Setback. The public agency or public utility shall demonstrate that the standards in KZC 90.140 cannot be met.

5. Waiver. Planning Official may waive a specific submittal requirement if it is determined not to be applicable or necessary.

90.50 Programmatic Permit– Public Agency and Public Utility

1. General. A public programmatic permit may be issued for either a permitted activity subject to the submittal requirements and development standards of Permitted Activities, Improvements and Uses with Standards in KZC.90.40 or Public Agency or Public Utility Exception in KZC 90.45, if it meets the requirements of this section, as determined by the Planning Official. Exempted activities pursuant to KZC 90.35 do not require a programmatic permit.

2. Criteria for a Programmatic Permit. The activity shall:
   a. Be repetitive and part of a maintenance program or other similar program;
   b. Have the same or similar identifiable impacts, as determined by the City, each time the activity is repeated at all sites covered by the programmatic permit; and
   c. Be suitable to having standard conditions that will apply to all sites.

3. Process.
   a. For an activity that would otherwise be approved as a permitted activity subject to development standards, the Planning Official shall make the decision on the programmatic permit.
   b. For an activity that would otherwise be approved as a public agency or public utility exception, the programmatic permit shall be reviewed and decided upon pursuant to a Process I described in Chapter 145 KZC.

4. Required Conditions. The City shall uniformly apply conditions to each activity authorized under the programmatic permit at all locations covered by the permit. The City may require that the applicant develop and have uniformly applicable conditions as part of the programmatic permit application, subject to City approval. The City shall not issue a programmatic permit until applicable conditions are developed and approved by the City.

5. Inspections. Activities authorized under a programmatic permit shall be subject to inspection by the Planning Official and pre-arranged in advance. The Planning Official may require that the applicant submit periodic status reports. The frequency, method and contents of the inspection notifications and reports shall be specified as conditions in the programmatic permit.

6. Revisions and Modifications to Permit. The Planning Official may subsequently require revisions, impose new conditions or otherwise modify the programmatic permit or withdraw the permit and require that the applicant undergo review for a new permitted activity approval or new exception for a public agency and public utility, if the Planning Official determines that:
   a. The programmatic permit or activities authorized under the permit no longer comply with this chapter;
   b. The programmatic permit does not provide adequate regulation of the activity;
   c. The programmatic permit conditions or the manner in which the conditions are implemented are not adequate to protect against the impacts resulting from the activity; or
   d. A site requires site-specific regulation.

7. Other Agency Requirements. If an activity covered by a programmatic permit also requires other county, state and/or federal approvals, to the extent feasible, the City shall reference those conditions of other approvals in the programmatic permit.

WETLANDS

90.55 Wetlands and Associated Buffer Standards

Wetlands and associated buffer standards are provided in this section. The table below is a summary of the wetland regulations. More details are provided for some of the regulations elsewhere in this chapter.

Table 90.55.1 Wetlands and Associated Buffer Standards

<table>
<tr><td>Wetland Classification and Rating</td><td>In accordance with the 2014 Department of Ecology Washington State Wetland Rating System for Western Washington, as revised. Wetland category and rating shall be determined through a survey and field investigation by a qualified critical area professional approved by the City as part of a critical area report in KZC 90.110. Wetland rating categories shall not change due to illegal modification.</td></tr>
<tr><td>Wetland Delineation</td><td>In accordance with the approved federal delineation manual and applicable regional supplements described in WAC 173-22-035 and based on field investigation and a survey. See KZC 90.110.</td></tr>
<tr><td>Wetland Determination</td><td>Planning Official makes determination if a wetland and/or a buffer exist on the subject property, and if so, its category, rating, boundaries and buffer width based on a required critical area report pursuant to KZC 90.110. In addition, the Planning Official makes determination if the standard buffer meets the buffer vegetative standards in KZC 90.130.</td></tr>
<tr><td>Wetland Buffer Width Standard</td><td>Wetland Buffer Widths
<table>
<tr><td rowspan="2">Wetland Category</td><td colspan="4">Buffer width based on habitat points</td></tr>
<tr><td>3-4 habitat pts.</td><td>5 habitat pts.</td><td>6-7 habitat pts.</td><td>8-9 habitat pts.</td></tr>
<tr><td>Category I: Bogs and High Conservation Areas</td><td>190 feet</td><td>190 feet</td><td>190 feet</td><td>225 feet</td></tr>
<tr><td>Category I: Others</td><td>75 feet</td><td>105 feet</td><td>165 feet</td><td>225 feet</td></tr>
<tr><td>Category II</td><td>75 feet</td><td>105 feet</td><td>165 feet</td><td>225 feet</td></tr>
<tr><td>Category III</td><td>60 feet</td><td>105 feet</td><td>165 feet</td><td>225 feet</td></tr>
<tr><td>Category IV</td><td colspan="4">40 feet</td></tr>
<tr><td></td><td colspan="4">See KZC 90.130 for buffer vegetation requirements</td></tr>
</table></td></tr>
<tr><td>Wetland Buffer Width Alternative</td><td>Applicant can choose not to comply with the Vegetative Buffer Standards in KZC 90.130 by complying with the following requirements: 1.) Increase buffer width listed above in Wetland Buffer Widths by 33% within entire buffer. 2.) Remove all structures and improvements within the buffer 3) Discontinue any maintenance of lawn and non-native vegetation within the buffer. 4) Cease all activities in the buffer, except those permitted under KZC 90.35.12 and 13. In no case shall a standard and an alternate buffer standard be combined for a development proposal.</td></tr>
<tr><td>Other Standards</td><td>• Buffer averaging is permitted for both the standard buffer and the alternative buffer if criteria are met. See KZC 90.115.
• Increased buffer width may be required if wetland or its buffer contains or is adjacent to severe erosion area, habitat of certain species or frequently flooded area based on critical area report. See KZC 90.125.
• Wetlands that are degraded must be restored if the project is subject to KZC 90.130.3.a for the vegetative buffer standard and/or a wetland modification is proposed. A critical area report shall address any needed restoration due to degraded vegetation, habitat, water quality and hydrologic functions.
• Standard buffers must meet the vegetative buffer standards. See KZC 90.130.</td></tr>
</table>

	• Measures to minimize impact to wetlands must be implemented for standard buffers. See KZC 90.155. • Fencing and signage are required along the entire upland edge of buffer both during construction and upon completion of the project. See KZC 90.190. • For voluntary restoration, see KZC 90.35 and 90.40. • For code enforcement to correct an illegal modification to a wetland or buffer, see KZC 90.205. • Wetlands and buffers shall be placed in recorded critical area easements or tracts for perpetual protection and maintenance. See KZC 90.210.
Structure Setback from Buffer	10-foot wide structure setback is required from upland edge of the entire buffer. Improvements listed in KZC 90.140 are permitted in the setback.
Activities, Improvements and Uses in Wetlands	Activities, improvements and uses are prohibited within wetlands and associated buffers, except those exempted or permitted subject to development standards in KZC 90.35 and KZC 90.40, or those approved under a City review process in this chapter.
Modification to Wetlands related Impacts to associated Buffers	• Modification to a wetland and related impacts to buffers require approval pursuant to a Process I, Chapter 145 KZC along with a critical area report, mitigation sequencing, and compensatory mitigation plan. See KZC 90.110, 90.145 and 90.150. • Buffer standard may be modified for vehicular access to a property that is both a legal building site and a buildable site pursuant to KZC 90.40 and for an interrupted buffer pursuant to See KZC 90.120. Also, see Nonconformances pursuant to KZC 90.185. • Isolated Category IV wetlands less than 4,000 square feet and wetlands less than 1,000 square feet pursuant to KZC 90.60 are not required to meet mitigation sequencing, but compensatory mitigation is required pursuant to KZC 90.150.

90.60 Wetland Modification

1. Modifications to Wetlands. Modifications to wetlands and related impacts to associated buffers shall be prohibited, except as permitted as part of a wetland modification approved under this section. Wetland modifications and the associated buffers may also be approved in certain circumstances under a Reasonable Use Exception pursuant to KZC 90.180, Permitted Activities, Improvements and Uses Subject to Development pursuant to KZC 90.40, Exception - Public Agency and Public Utility pursuant to KZC 90.45 or Programmatic Permit – Public Agency and Public Utility pursuant to KZC 90.50.

   The following modifications may be proposed:
   a. Fill of a wetland;
   b. Structures and improvements in a wetland and
   c. Removal and/or alteration of vegetation in wetland; and
   d. Impacts to associated buffer as part of wetland modification

2. Exception. The following limited types of wetlands are not required to meet mitigation sequencing pursuant KZC 90.145 and may be filled if the impacts are fully mitigated. The applicant shall submit a critical area report pursuant to KZC 90.105 and KZC 90.110 verifying that the following criteria are met.

   a. Category IV isolated wetlands less than 4,000 square feet that:
      1) Are not associated with streams or their buffers;
      2) Are not part of a wetland mosaic;
      3) Do not score 5 or more points for habitat function; and
      4) Do not contain designated state or federal designated endangered, threatened or sensitive species or their habitats or state priority habitats, including species of local importance identified in KZC 90.95.

The Planning Official may approve an application under this exception only if the applicant provides compensatory mitigation for both wetland and buffer loss pursuant to KZC 90.150. Impacts shall be mitigated through an in-lieu fee or mitigation bank program if a program is available otherwise, preference for mitigation location shall be pursuant to KZC 90.145.

It is the applicant's responsibility to arrange a jurisdictional determination by the U.S. Army Corps of Engineers on whether a wetland is isolated but regulated by the Department of Ecology for filling a Category IV isolated wetland.

b. Category IV isolated wetlands less than 1,000 square feet that meet subsection 2a above are exempt from buffer requirements. The Planning Official may approve an application under this exception only if the applicant provides compensatory mitigation pursuant to KZC 90.150 for the wetland loss. No compensatory mitigation is required for the buffer loss.

3. Limited Buffer Modification. A wetland buffer may not be modified or otherwise reduced, except if part of an approved wetland modification in this section. Wetland buffer modifications may be approved in limited circumstances under Permitted Activities Improvements and Uses Subject to Development Standards pursuant to KZC 90.40, under Exception - Public Agency and Public Utility pursuant to KZC 90.45, under Programmatic Permits - Public Agencies pursuant to KZC 90.50, or under a Reasonable Use Exception pursuant to KZC 90.180.

   The following wetland buffer modifications may be proposed:
   a. Vehicular access to a legal developable site if no other option is possible pursuant to KZC 90.40;
   b. Buffer averaging permitted pursuant to KZC 90.115; or
   c. Interrupted buffer waiver permitted pursuant to KZC 90.120.

4. Process. Unless otherwise specified in KZC 90.40, KZC 90.115 or KZC 90.120, any proposal to modify a wetland and its buffer shall be reviewed and approved pursuant to Process I, described in Chapter 145 KZC.

5. Decisional Criteria. In addition to the criteria of a Process I, the Planning Director shall only approve a modification to a wetland and buffer if:
   a. Mitigation sequencing requirements have been met. See KZC 90.145;
   b. Compensatory mitigation and mitigation plan requirements are approved. See KZC 90.150;
   c. It will not adversely affect fish, wildlife, or their habitat, including habitat for endangered, threatened or sensitive species, or species of local significance. See KZC 90.95;
   d. It will not adversely affect water quality;
   e. It will not have an adverse effect on drainage and/or storm water detention capabilities either on-site or to the adjacent area;
   f. It will not result in unstable geologic and soil conditions or create an erosion hazard;
   g. It will not have fill material that contains organic or inorganic material that would be detrimental to water quality or fish and wildlife habitat; and
   h. All exposed areas will be stabilized with native vegetation normally associated with wetlands and/or buffers, as appropriate.

   The wetland compensatory mitigation plan, additional requirements in subsection 9 below and any conditions of approval for the modification shall be conditions for all related land surface modification and/or building permit approvals.

6. Wetland Modification Assessment. As part of the application for a wetland modification, the applicant shall submit a wetland modification assessment prepared by a qualified critical area professional

approved by the City, and also fund the City's peer review of the assessment. The assessment shall contain:

a. The City's final critical area determination and critical area report along with the survey of the wetland and/or buffer on the subject property pursuant to KZC 90.105;
b. Description of the proposed modification to the wetland and associated impact to the buffer if applicable;
c. Analysis of mitigation sequencing for the proposal and mitigation as required in KZC 90.145. If the vegetative buffer standards are required under KZC 90.130, the required enhanced buffer may not be used towards mitigating a modified buffer;
d. Evaluation of the effects of the proposed modification on the functions and values of the wetland and the buffer. The assessment shall look at impacts to water quality, storm water detention, erosion protection, functions of the wetland and wildlife habitat and frequently flooded areas and any other potential impact determined by the Planning Official; and
e. Any other information or studies determined necessary by the Planning Official.

7. Wetland Compensatory Mitigation Plan. As part of the application for a wetland modification, the applicant shall submit a compensatory mitigation plan pursuant to KZC 90.150 that is prepared by a qualified critical area professional approved by the City. The applicant shall also fund City peer review of the plan. The plan shall include mitigation for lost or affected functions; type, location, and approach of compensation; timing of the mitigation; a monitoring and maintenance plan and financial security estimate as required in KZC 90.160 and KZC 90.165.

8. Buffers for Mitigation Sites. A wetland that is created, restored, or enhanced as on-site or off-site compensation within Kirkland for an approved wetland modification shall have a buffer width that is applicable to the wetland category for the created, restored, or enhanced wetland.

9. Additional Requirements for Approved Wetland Modification.

a. All work shall be carried out under the direct supervision of a qualified critical area professional approved by the City and paid for by the applicant during all phases of the project;
b. The requirements for wildlife habitat conservation areas in KZC 90.95 and frequently flooded areas in KZC 90.100 shall be met if applicable;
c. If a proposed wetland modification will result in the creation or expansion of a wetland or its buffer on any property other than the subject property, a statement signed by the owners of all affected properties, in a form approved by the City Attorney, shall be submitted with the modification application and recorded in the King County Recorder's Office. The statement shall consent to the critical area and/or buffer creation or increase on their property; and
d. Any required state and federal permits and authorizations shall be obtained prior to conducting site work.

STREAMS

90. 65 Streams and Associated Buffer Standards

Stream and associated buffers standards are provided in the section. The table below is a summary of the stream regulations. More details are provided for some of the regulations elsewhere in this chapter.

Table 90.65.1 Streams and Associated Buffer Standards

<table>
<tr><td>Stream Classification</td><td>In accordance with WAC 222-16-030, as amended. The Planning Official makes final determination. Stream classification shall not change due to illegal modifications.</td></tr>
<tr><td>Stream Determination</td><td>Planning Official makes determination if a stream and/or a buffer exist on the subject property, and if so, a stream's classification and boundary, and width of buffer based on required critical area report pursuant to KZC 90.110. In addition, the Planning Official makes determination if the standard buffer meets the vegetative buffer standards in KZC 90.130.</td></tr>
<tr><td>Stream Buffer Width Standard</td><td>Stream Buffer Widths
<table>
<tr><th>Stream Type</th><th>Buffer Width</th></tr>
<tr><td>F (Fish bearing)</td><td>100 feet</td></tr>
<tr><td>Np (Perennial non-fish bearing)</td><td>50 feet</td></tr>
<tr><td>Ns (Seasonal non-fish bearing)</td><td>50 feet</td></tr>
<tr><td></td><td>See KZC 90.130 for buffer vegetation requirements</td></tr>
</table></td></tr>
<tr><td>Stream Buffer Width Alternative</td><td>Applicant may choose not to comply with the Vegetative Buffer Standards in KZC 90.130 by complying with the following requirements: 1.) Increase buffer width listed above in Stream Buffer Widths by 33% within entire buffer. 2.) Remove all structures and improvements within the buffer 3) Discontinue any maintenance of lawn and non-native vegetation within the buffer. 4) Cease all activities in the buffer, except those permitted under KZC 90.35.12 and 13. In no case shall a standard and an alternate buffer standard be combined for a development proposal.</td></tr>
<tr><td>Other Standards</td><td>
Buffer averaging is permitted for both the standard buffer and the alternative buffer if criteria are met. See KZC 90.115. The Planning Official makes decision.
Increased buffer width may be required if the stream or its buffer contains or is adjacent to a severe erosion area, habitat of certain species or frequently flooded area based on critical area report. See KZC 90.125.
Streams that are degraded must be restored if the project is subject to KZC 90.130.3.a for a vegetative buffer and/or a stream modification is proposed. A critical area report shall address any needed restoration due to degraded vegetation, habitat, water quality and hydrologic functions with specific consideration for anadromous salmon.
Standard buffers must meet vegetative buffer requirements pursuant to KZC 90.130.
Buffers shall be provided where a stream abuts an inlet and outlet of culverted streams as shown in Chapter 180 KZC, Plate 16A.
Fencing and signage are required along the entire upland edge of buffer both during construction and upon completion of a project. See KZC 90.190.
Voluntary restoration of streams and buffers or in-stream maintenance, see KZC 90.35 and KZC 90.40.
For code enforcement to correct an illegal modification to a stream or buffer, see KZC 90.205.
Streams and buffers shall be placed in recorded critical area easements or tracts for perpetual protection and maintenance. See KZC 90.210.
</td></tr>
<tr><td>Structure Setback from Buffer</td><td>10-foot wide structure setback is required from upland edge of the entire buffer. Improvements listed in KZC 90.140 are permitted within the setback.</td></tr>
<tr><td>Activities, Improvements and Uses in Streams</td><td>Activities, improvements and uses shall be prohibited within streams and associated buffers, except those exempted or as permitted with development standards as found in KZC 90.35 and KZC 90.40, or those approved under another City review process in this chapter.</td></tr>
<tr><td>Modifications to Stream and Impacts to associated Buffer</td><td>
Modifications to stream and related impacts to buffers require approval pursuant to Process I, Chapter 145 along with a critical area report, mitigation sequencing and mitigation plan. See KZC 90.70, KZC 90.110 and KZC 90.145.
Buffer standards may be modified for vehicular access to a property that is both a legal building site and a buildable site pursuant to KZC 90.40, for daylighting a stream pursuant to KZC 90.75, and for an interrupted buffer pursuant to KZC 90.80. Also, see KZC 90.185 Nonconformances.
Impacts to stream buffers shall be mitigated at a minimum of a 1:1 ratio.
</td></tr>
</table>

	• Daylighting of a stream is encouraged. The Planning Official makes decision unless it is part of approval pursuant to Process I, Chapter 145 KZC. See KZC 90.75.

90.70 Stream Modification

1. Stream Modification. Modifications to streams and associated impacts to buffers are prohibited, except as approved as part of a stream modification in this section. Stream modifications may also be approved in certain circumstances under Permitted Activities; Improvements and Uses Subject to Development Standards pursuant to KZC 90.40; Public Agency and Public Utility Exception - pursuant to KZC 90.45; Programmatic Permit - Public Agency and Public Utility pursuant to KZC 90.50, or Reasonable Use Exception pursuant to KZC 90.180.

   The following stream modifications may be considered:
   a. Stream crossings for Type F steams; (see KZC 90.40 for Type NP and NS)
   b. Culverts and bridges;
   c. Change in meandering course of a stream;
   d. Relocation of a Type NS or NP stream. Relocation of a Type F stream is not permitted; and
   e. Impacts to buffers associated with a stream modification.

2. Limited Buffer Modification. A stream buffer may not be modified or otherwise reduced, except if part of an approved stream modification in this section. Stream buffer modifications may also be approved in limited circumstances under Permitted Activities, Improvements and Uses Subject to Development Standards pursuant to KZC 90.40; Public Agency and Public Utility Exception pursuant to KZC 90.45; Programmatic Permits - Public Agencies pursuant to KZC 90.50, or Reasonable Use Exception pursuant to KZC 90.180.

   The following stream buffer modifications may also be proposed in conjunction with the following sections:
   a. Change to meandering course of a stream pursuant to KZC 90.80;
   b. Daylighting of a stream pursuant to KZC 90.80;
   c. Buffer averaging permitted pursuant to KZC 90.115; or
   d. Interrupted buffer waiver permitted pursuant to KZC 90.120.

3. Process. Any proposal to modify a stream and buffer shall be reviewed and decided upon pursuant to Process I, described in Chapter 145 KZC.

4. Decisional Criteria. In addition to criteria of Process I, the Planning Director shall only approve a modification to a stream and impact to the buffer if:
   a. Mitigation sequencing requirements have been met. See KZC 90.145; and
   b. The applicant has demonstrated where applicable, based on information provided by a civil engineer and a qualified critical area professional approved by the City, that:
      1) It will not be detrimental to fish habitat, including fill material that contains organic or inorganic material;
      2) It will not have an adverse effect on drainage, storm water detention capabilities and base flood storage volume and function;
      3) It will not have an adverse effect on water quality or frequently flooded areas;
      4) It will not increase velocity upstream or downstream;
      5) It will not increase sediment load upstream or downstream;

6) It will not result in unstable geologic and soil conditions and slope conditions or create an erosion hazard or contribute to scouring actions;
7) All exposed areas are stabilized with vegetation normally associated with native stream buffers, as appropriate;
8) Existing native trees and other native vegetation are retained to the maximum extent feasible given site conditions and the proposal;
9) The stream modification plan is sufficient to mitigate identified impacts;
10) For streams placed in culverts or stream crossings, fish passage will not be impaired and the Washington State Department of Fish and Wildlife's design criteria for road culverts for fish passage are met;
11) For change in meandering course for the stream, demonstrate that the change is the only feasible option to stop excessive erosion to protect legally established buildings that cannot be achieved through streambank stabilization and will improve the overall functions and value of the stream;
12) For stream crossings, demonstrate that crossings shall have no adverse impact on in-stream habitat and flow conveyance;
13) For relocation of a Type Ns or Np stream, demonstrate that relocation would improve stream functions; and
14) With the exception of meandering a stream, submit a statement signed by each owner of all adjacent affected properties consenting to the modification if it results in creation or expansion of a stream or stream buffer on their properties.

The stream and/or associated buffer modification plan, the additional requirements in subsection 7 below and any conditions of approval shall be conditions for all related land surface modification and/or building permit approvals.

5. Stream Modification Assessment. As part of the application for a modification, the applicant shall submit a stream modification assessment prepared by a qualified critical area professional approved by the City. The applicant shall also fund the City's peer review of the assessment. The assessment shall contain:

   a. The City's final stream determination decision pursuant to KZC 90.105 and critical area report pursuant KZC 90.110 including the vegetative buffer assessment, and a survey of the stream and its buffer;
   b. Description of the proposed modification to the stream and impact to the associated buffer if applicable;
   c. Analysis of mitigation sequencing and proposed mitigation as required in KZC 90.145. If the vegetative buffer standards are required under KZC 90.130, the enhanced buffer may not be used towards mitigating a proposed impacted buffer;
   d. Modeling of impacts to stream;
   e. Evaluation of the effects of the proposed modification on the functions and values of the stream and the buffer, including on water quality and fish and wildlife habitat pursuant to KZC 90.95; and
   f. Any other information or studies determined necessary by the Planning Official.

6. Stream Modification Plan. As part of the application for a modification, the applicant shall submit a stream modification plan prepared by a qualified critical area professional approved by the City. Also,

the applicant shall fund the City's peer review of the plan. The plan shall contain:

a. A topographic survey showing existing and proposed topography and improvements;
b. Schedule of the project for all work;
c. Written description of how the proposed modification plan will mitigate any adverse impacts identified in the stream modification assessment and any associated impact to the buffer if applicable in subsection 5 above.
d. Written description of how the proposed modification plan will improve water quality, conveyance, fish and wildlife habitat, wetland recharge (if hydrologically connected to a wetland), and storm water detention capabilities of the stream;
e. Detailed vegetation plan for stream channel if applicable and stream buffer vegetation meeting the vegetative buffer standard in KZC 90.130.
f. For an impacted stream buffer, propose mitigation at a minimum of 1:1 ratio depending on the location and functions of impacts and proposed mitigation, including consideration of vegetation structure, slope and flow paths;
g. Demonstrate that flow and velocity of the stream after modification shall not be increased or decreased at the points where the stream enters and leaves the subject property, unless the change has been approved by the City to improve fish and wildlife habitat or to improve storm water management;
h. Protective measures needed, such as siltation prevention measures and scheduling the construction activity to avoid interference with fisheries rearing and spawning activities;
i. Description of performance standards for post-installation, a monitoring and maintenance schedule along with a financial security estimate for the entire mitigation plan that meet the standards in KZC 90.160 and KZC 90.165;
j. For stream channel relocation or meandered stream, a survey of the new location of the stream;
k. For stream channel relocation, meandered stream, a new or replacement stream crossing or culvert, demonstrate that the stream channel, or crossing or culvert can accommodate flow and velocity of 100-year storm events;
l. For stream channel relocation, prior to diverting water into a new stream channel, a qualified critical area professional approved by the City shall inspect the completed new channel and issue a written report to the City stating that the new stream channel complies with the requirements of this section prior to diverting the stream. Cost of the inspection and report shall be funded by the applicant;
m. For stream crossings and culverts:
    1) Demonstrate that there is no other feasible alternative route for the crossing with less impact on the environment;
    2) Designed shall meet Department of Fish and Wildlife design standards for fish passage projects;
    3) For crossings over Type F streams, only bridge structures, bottomless culverts or other appropriate methods shall be used that provide fisheries protection and fish passage;
    4) For crossings for all other streams, bridge or bottomless culvert is preferred over traditional pipe-style culvert. Where culverts are applicable, single barrels shall be used;
    5) Roads and associated crossings shall be perpendicular to the stream to the maximum extent feasible;
n. For changing the meandering course of the stream or relocating a stream, show that the design achieves:
    1) Creation of natural meander patterns;
    2) Formation of gentle and stable side slopes, no steeper than two (2) feet horizontal to one (1) foot vertical, and the installation of both temporary and permanent erosion-control features

that includes native vegetation on stream banks. The steepness of the slope of the stream may be modified given existing conditions;

3) Native vegetation normally associated with streams, emphasizing native plants with high food and cover value for fish and wildlife and approved by the City;
4) Restoration of water flow characteristics compatible with fish habitat areas; and

o. For changing the meandering of a stream course, see buffer reduction option in KZC 90.80.

7. Additional Requirements for Stream Modification.

a. All work shall be carried out under the direct supervision of a qualified critical area professional approved by the City and paid for by the applicant during all phases of the project;
b. Work must be done during the summer low flow and timed to avoid stream disturbance during periods when use of the stream is critical to fish consistent with the Department of Fish and Wildlife construction window; if applicable;
c. For stream crossings and culverts, record a perpetual maintenance agreement on a form approved by the City for continued maintenance of the stream crossing and culvert;
d. For changing the meandering of a stream course, a survey must be provided of the new stream course;
e. If a proposed stream modification will result in the creation or expansion of a stream or its buffer on any adjacent property other than the subject property, a statement signed by the owners of all affected properties, in a form approved by the City Attorney, shall be submitted with the modification application and recorded in the King County Recorder's Office. The statement shall consent to the critical area and/or buffer creation or increase on the other property. Exempt from this provision is a meandering stream. See buffer reduction option in KZC 90.80; and
f. Any required state and federal permits and authorizations shall be obtained prior to conducting site work.

90.75 Daylighting of Streams

1. Daylighting. The City encourages opening up a stream that is located in a culvert to restore the stream to a more natural and open condition. The purpose is to improve the values and functions of the stream, including maintaining water quality, reducing storm and flooding water flow, and providing wildlife habitat.

2. Process. The Planning Official may approve removal of a stream from a culvert based on a critical area report pursuant to KZC 90.110 and an approved stream daylighting plan prepared by a qualified critical area professional approved by the City.

3. Stream Daylighting Plan. The plan shall include the following:
   a. Detailed site plan of existing improvements and utilities in relationship to the daylighting, topography, daylighted stream course, hydrologic flow before and after daylighting and where the daylighted stream will connect once the culvert is removed;
   b. Demonstrate that the design achieves:
      1) Creation of natural meander patterns;
      2) Formation of gentle and stable side slopes, no steeper than two (2) feet horizontal to one (1) foot vertical, and the installation of both temporary and permanent erosion-control features that includes native vegetation on stream banks. The steepness of the slope of the stream may be modified given existing conditions;
      3) Native vegetation normally associated with streams, emphasizing native plants with high food and cover value for fish and wildlife and approved by the City;

4) Restoration of water flow characteristics compatible with fish habitat areas; and

c. Prior to placing the stream into a new stream channel, a qualified critical area professional approved by the City shall inspect the completed new channel and issue a written report to the City stating that the new stream channel complies with the requirements of this section prior to daylighting the stream. Cost of the inspection and report shall be funded by the applicant;
d. A survey of the daylighted stream;
e. Stream channel planting plan using appropriate native stream vegetation;
f. Vegetative buffer plan meeting KZC 90.130, except as permitted to be reduced pursuant to KZC 90.80; and
g. Any other information deemed necessary by the Planning Official. See requirements for stream modification plan pursuant to KZC 90.70.

4. Requirement to Daylight a Stream. The City may require a stream to be daylighted as part of a Process IIA pursuant to Chapter 150 KZC or IIB permit pursuant to Chapter 152 KZC if the required daylighting is proportionate to the scope and nature of the Process IIA or IIB permit. Where stream daylighting is required, the applicant shall submit a plan as outlined in subsection 3.

90.80 Buffer Reduction for Meandering or Daylighting of Stream

1. On-Site Stream Buffer Reduction.
   a. A reduction to the required stream buffer standard may only be approved as part of approval for:
      1) Changing the course to create a meandering stream if the modification improves in-stream habitat and flow conveyance; or
      2) Daylighting a stream.
   b. The buffer width reduction shall be the minimum necessary to accommodate existing and proposed improvements and/or site conditions; and
   c. For any reduction in the buffer, the required vegetative standards in KZC 90.130 shall be increased proportionally to the extent feasible based on an appropriate planting density within the reduced buffer to mitigate the impact to the critical area.

2. Off-Site Stream Buffer Waiver.
   a. The buffer standard requirements for adjacent properties shall not increase due to the deliberate change in the meandering course of the stream or daylighting of a stream;
   b. The City shall record the buffer waiver on the title of those affected properties with King County Recorder Office. The City shall contact any affected property owners in writing to notify them of the buffer waiver notice and the applicable survey, and to determine if the property owner chooses to opt out having the notice and survey recorded on their property title;
   c. The applicant shall pay for the fees to record the buffer waiver notice and the survey; and
   d. There is no waiver to the existing buffer requirement prior to the change in the adjacent stream, or to any future change to the City's buffer standards.

90.85 Stream Channel Stabilization

1. When Permitted. Stream channel stabilization may be permitted if demonstrated to be necessary for the following:
   a. Protecting existing legal structures and/or utilities that serve the structure(s), public facilities or improvements, unique natural resources determined by the City or where erosion results from the stream channel itself, rather than from unregulated stormwater flows to its banks; or
   b. Providing the only feasible vehicular access to a property.

2. Stabilization Measures Options.
   a. Measures including vegetation enhancement, upland drainage control, or protective walls or embankments placed outside of the stream and buffer shall be considered and utilized where feasible.
   b. Soft-bank stabilization measures may only be used if it is demonstrated that the measures in subsection 2a above are not a feasible alternative due to site-specific soil, geologic, and/or hydrologic conditions, or location of existing primary structures, utilities or public facilities. The soft-bank stabilization measures may include bank enhancement, anchor trees, gravel placement, stepped back rockeries, vegetative plantings and similar measures that use natural materials engineered to preserve functions and values of the stream.
   c. Hard-bank stabilization measures may only be used if it is demonstrated first that the measures in subsection 2a and 2b above are not feasible due to site-specific soil, geologic and/or hydrologic conditions. Hard-bank measures may include rock revetments, gabions, retaining walls, bulkheads and similar measures that present a vertical or nearly vertical interface with the water.

3. Process. Any proposal for stream channel stabilization shall be reviewed and decided upon pursuant to a Process I, described in Chapter 145 KZC.

4. Decisional Criteria. In addition to criteria of Process I, the Planning Director shall only approve stream channel stabilization if:
   a. Mitigation sequencing found in KZC 90.145 has been met;
   b. There is a demonstrated risk to legal primary structures and/or utilities due to erosion or slope failure and that stabilization is necessary to prevent damage to these improvements;
   c. Stream channel stabilization plan will prevent stream bank erosion while minimizing impacts to the stream and the buffer; and
      1) For proposed hard-bank measures, show evidence that soft-bank measures cannot be used, consistent with subsection 2b above;
      2) The ability of both permanent and temporary impacts to the stream can be mitigated.
   d. There will be no adverse impact to water quality;
   e. There will be no adverse impact to fish, wildlife, and their habitat;
   f. There will be no increase in the velocity of stream flow, unless approved by the City to improve fish habitat;
   g. There will be no decrease in flood storage volumes; and
   h. The installation of the stabilization measure will not lead to unstable earth conditions, create erosion hazards or contribute to scouring actions.

   The stream channel stabilization plan, the additional requirements in subsection 7 below and any conditions of approval shall be conditions for all related land surface modification and/or building permit approvals.

5. Streambank Assessment. As part of the application for stream channel stabilization, the applicant shall submit a streambank assessment prepared by a qualified critical area professional approved by the City. The applicant shall also fund the City's peer review of the assessment. The assessment shall contain the following:
   a. The City's stream determination decision pursuant to KZC 90.105 and the critical area report pursuant to KZC 90.110, including the vegetative buffer assessment, and a survey of the stream and its buffer;
   b. Level and extent of risk to a primary structure and/or utilities due to erosion or slope failure and

the ability of the proposed measure to mitigate that risk;

c. Description of the proposed modification to the streambank;
d. Analysis of mitigation sequencing in KZC 90.145;
e. Description of the proposed method to stabilize a streambank and why the method must be used. If soft or hard stabilization is proposed, justify its use;
f. Whether the level and extent of risk of damage from erosion is substantially more compared to the environmental impact of the proposed disturbance to the stream, including any continued impacts on functions and values over time;
g. Evaluation of the effects of the proposed stream channel stabilization on the functions and values of the stream and the buffer, including on water quality and fish habitat, and suitability of the proposed stabilization;
h. The ability of both permanent and temporary impacts to the stream and fish passage can be mitigated; and
i. Any other information or studies determined necessary by the Planning Official.

6. Stream Channel Stabilization Plan. The plan shall include the following:
   a. Detailed site plan and cross elevation of the stabilization measure in relationship to the stream, topography, soil conditions and existing improvements; and
   b. Explanation on how the stream channel stabilization measure is consistent with Washington Department of Fish and Wildlife's guidelines on streambank protection;

7. Additional Requirements for Stream Channel Stabilization.
   a. All work shall be carried out under the direct supervision of a qualified critical area professional approved by the City and paid for by the applicant during all phases of the project;
   b. Work must be done during the summer low flow and timed to avoid stream disturbance during periods when use of the stream is critical to fish consistent with the Department of Fish and Wildlife construction window; if applicable; and
   c. Any required state and federal permits and authorizations shall be obtained prior to conducting site work.

90.90 MINOR LAKES - TOTEM LAKE AND FORBES LAKE

The majority, if not the entirety, of the perimeters of Totem Lake and Forbes Lake are wetlands. All activities in the shallow areas of the lakes relating to contiguous wetlands located above the high waterline are regulated pursuant to KZC 90.55 and KZC 90.60.

Activities and uses waterward of the lakes' perimeter wetlands and outside of the wetland shall be regulated as follows:

1. General Standards. As part of a permit or approval under this chapter, the City may require maintenance or rehabilitation of the lake as part of a project by removing material detrimental to the lake, such as inorganic debris, sediment, or non-native vegetation. Rehabilitation is required when an existing condition is detrimental to water quality or habitat.

2. Moorage Facilities. Moorage facilities may be constructed, expanded or replaced using the process and meeting the standards below.

   a. Process. Any proposal for a moorage facility shall be reviewed and decided upon pursuant to a Process I, described in Chapter 145 KZC.

b. Decision Criteria. A new, expanded or replaced moorage structure may be approved if the standards in subsection c. below are met.

c. Standards.
   1) Moorage structure shall not extend farther than 25 feet waterward of the high waterline;
   2) Only one (1) moorage structure may be located on a subject property;
   3) It is accessory to an allowed use on the subject property;
   4) Moorage structure associated with a dwelling unit shall be for the exclusive use of the residents and guests of the associated dwelling unit. Structures shall not be leased, rented or sold;
   5) Moorage structure shall not be treated with creosote or oil base or toxic substances;
   6) Any existing in-water structures abandoned or in disrepair must be removed as part of a new permit;
   7) A critical area determination shall be made pursuant to KZC 90.105 and a critical area report shall be prepared pursuant to KZC 90.110 to assess impacts to wetlands and streams and any wildlife habitat area due to construction and use of the moorage structures. If any impacts are identified, a mitigation plan shall be prepared and implemented pursuant to KZC 90.145 and KZC 90.150; and.
   8) For pedestrian access trails or boardwalks, see KZC 90.40.

3. Repair of Moorage Facilities. Moorage facilities may be repaired and maintained as an exempted activity pursuant to KZC 90.35, but they may not be reconstructed or expanded under repair and maintenance.

4. Viewing Platforms.
   a. Public viewing platforms in a lake associated with a public park may be approved as part of a Park Master Plan process, pursuant to KZC 90.40.6.
   b. If the platform would be located in a wetland, the final critical area determination and critical report is required pursuant to KZC 90.105 and KZC 90.110, and mitigation is required pursuant to KZC 90.145 and KZC 90.150.
   c. The platform shall not be treated with creosote or oil base or toxic substances.
   d. Private viewing platforms are not permitted.

5. Public Park. Construction of a park associated with a minor lake shall be reviewed through a Park Master Plan process, pursuant to KZC 90.40.6.

90.95 FISH AND WILDLIFE HABITAT CONSERVATION AREAS

1. Location of Fish and Wildlife Habitat Areas.

   a. Fish and wildlife habitat conservation areas can be found in or near critical areas, forested areas or Lake Washington.
   b. Fish habitat is protected under the provisions of KZC 90.65, Streams. Thus, the provisions in subsections 3 through 7 of this section do not apply to fish habitat.

2. Criteria. Fish and wildlife habitat conservation areas are those that meet one or more of the following species listed and habitat criteria:

   a. State or federally designated endangered, threatened, and sensitive species that have a primary

association with the habitat area.

b. State priority habitats and habitats with which State priority species have a primary association that are located in the City. Those in Kirkland are deemed to be Habitats and Species of Local Importance.

3. Wildlife Habitat Conservation Area Assessment. As part of a critical area report pursuant to KZC 90.110, a determination shall be made if a wildlife habitat conservation area exists on the subject property or near the property by a qualified critical area professional approved by the City with experience preparing reports for the relevant type of habitat. The assessment shall include the following information:

   a. Evaluation. Evaluation of the presence or absence of potential wildlife habitat on the subject property or within the vicinity. A wildlife habitat assessment shall include the following information:
      1) Identification of state priority species, or state or federally listed endangered, threatened or sensitive species that have a primary association with habitat on or in the vicinity of the property;
      2) Extent of wildlife habitat areas, including acreage, and required buffers based on the species;
      3) Vegetative, faunal, and hydrologic characteristics;
      4) Evaluation of direct and indirect potential impacts on habitat by the project, including potential impacts to water quality; and
      5) A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations that have been developed for the species or habitats.

   b. Maps. The following maps shall be used in the evaluation:
      1) Department of Fish and Wildlife priority habitat and species maps; and
      2) Federal and state information and maps related to those species and habitat identified in subsection 2 above.

4. Process. Modification to wildlife habitat conservation areas shall be proposed as part of the required critical area approval under this chapter for a project.

5. Decisional Criteria. Modification to wildlife habitat conservation areas may only be approved if the following criteria are met:
   a. Mitigation sequencing is met pursuant to KZC 90.145;
   b. It can be demonstrated that required habitat areas can be protected through implementation of protection measures in accordance with a management plan; and
   c. It can be demonstrated that the management plan and requirements in subsections 6 and 7 can be met with the proposed project.

6. Wildlife Habitat Management Plan.
   a. A wildlife habitat management plan shall be prepared by a qualified critical area professional with experience preparing reports for the relevant type of habitat and approved by the City and based on recommendations from the Washington State Department of Fish and Wildlife;
   b. The applicant shall fund the cost and implementation of the management plan, and also fund peer review by the City of the management plan;
   c. The plan shall establish:
      1) Seasonal restriction of construction activities as determined by the Washington State Department of Fish and Wildlife;
      2) Duration and timetable for periodic review of mitigation activities;

3) Vegetative buffer widths that reflect the sensitivity of the habitat and the type and intensity of activity or use proposed to be conducted nearby. The buffer widths shall be consistent with the management recommendations issued by the Washington Department of Fish and Wildlife and U.S Fish and Wildlife Services;
4) Measures to provide appropriate wildlife corridor for the conservation of the species if a wetland scoring 5 or greater is within 300 feet of the habitat area;
5) Limitations on pesticide and herbicide use in conservation area; and
6) Monitoring and maintenance program for the mitigating measures. The applicant shall fund the monitoring and maintenance program and also fund peer review by the City. Installation of vegetation shall follow the monitoring and maintenance schedule for a 5-year program pursuant to KZC 90.160;

d. Clustering of a development shall be considered in the plan if a project contains more than one dwelling unit or building if it would provide less impact and/or greater protection of the conservation area; and
e. Consultation with the Washington State Department of Fish and Wildlife, affected tribes or other appropriate agency regarding the effectiveness of any proposed mitigating measures shall occur if the Planning Official determines that it is needed.

7. Standard Requirements for Wildlife Habitat Conservation Area. Improvements, structures or activities located in or near wildlife habitat conservation areas shall meet the following standards:
   a. Preservation of critically important vegetation and/or habitat features, such as large trees, snags and downed wood;
   b. Buffers shall consist of an undisturbed area of native vegetation or areas identified in a management plan for restoration to protect the integrity, functions, and values of the affected habitat;
   c. Limitation of access to the wildlife habitat area, including fencing and signage, to deter unauthorized access;
   d. Introduction of any plant or wildlife not indigenous to the region shall be prohibited unless authorized by a state or federal approval;
   e. A performance, monitoring and maintenance security shall be submitted pursuant to KZC 90.165 to ensure completion and success of proposed mitigation; and
   f. The management plan shall be implemented through the life of the use or activity.

8. Designation of Wildlife Habitats or Species of Local Importance. The City may designate additional habitat or species of local importance as an amendment to the definition in Chapter 5 KZC through Chapter 160 KZC.

90.100 FREQUENTLY FLOODED AREAS

No disturbance or land surface modification may take place and no improvements or activities may be located in frequently flooded areas that are areas of special flood hazard, except as specifically provided in Chapter 21.56 KMC, Flood Damage Prevention. See Federal Emergency Management Agency (FEMA) for flood maps.

GENERAL STANDARDS

90.105 Critical Area Determination

1. Initial Determination. Either prior to or during review of a development application, the Planning Official shall make an initial assessment based on a site inspection and other information as to

whether:

a. A wetland is present on any portion of the subject property or surrounding area within 300 feet of the subject property. If a site inspection does not indicate the presence of a wetland on the subject property or within 300 feet of the subject property, no additional wetland assessment will be required.

b. If the initial determination indicates that a wetland exists or may exist on the subject property or within 300 feet of the subject property and/or a stream exists on the subject property or within 125 feet of the subject property, then the applicant shall have a critical area report prepared pursuant to KZC 90.110.

c. A stream is present on any portion of the subject property or surrounding area within 125 feet of the subject property. If a site inspection does not indicate a stream on or within 125 feet of the subject property, no additional stream assessment will be required.

d. If the Planning Official is not able to determine the classification of a stream or is uncertain if a watercourse is classified as a stream, a critical area report shall include a recommendation on a stream determination as to whether the site does contain a stream and if so, its classification. If the critical area report determines that no stream exists on or within 125 feet of the subject property, no further assessment is need.

2. Final Determination. The Planning Official shall make a final determination based on the critical area report. As part of the critical area determination, the Planning Official shall determine:
   a. The critical area boundaries, wetland category and rating and/or stream classification;
   b. The location of the buffer and buffer width standards for the critical area;
   c. Whether the wetland or stream needs to be restored due to degraded vegetation, wildlife habitat, water quality and hydrologic functions, and if so, what measures are needed.
   d. Whether the required buffer meets the vegetative standards found in KZC 90.130. If not, what changes need to be made to the buffer to meet the standard;
   e. Whether the subject property contains or is within the vicinity of a known habitat for species that are federally or state listed pursuant KZC 90.95; and
   f. Whether the standard buffer width must be increased due to severe erosion area, fish and wildlife habitat conservation area or frequently flooded area on or adjacent to the subject property pursuant to KZC 90.125.

3. Development Review. The determination shall apply to any development permit application or request that would modify a site that includes a critical area or associated buffer, other than those exempted pursuant to KZC 90.35.

4. Validity of Determination. The critical area determination is valid for five (5) years from the date of the decision. However, the Planning Official may modify the final critical area determination whenever physical circumstances have markedly and demonstrably changed on the subject property or within 300 feet of the subject property for wetlands and 125 feet for streams because of natural processes or authorized human activity.

90.110 Critical Area Report

1. General. An application for a development permit that includes a critical area and/or its buffer, except those exempted pursuant to KZC 90.35, shall provide a critical area report that uses the best available

science to evaluate the proposal and all probable impacts.

2. Preparation of Report.
   a. The critical area report shall be prepared by a qualified critical area professional.
   b. The applicant shall either:
      1) Fund a report prepared by the City or the City's consultant; or
      2) Submit a report prepared by a qualified critical area professional approved by the City. In addition, fund a peer review of the critical area report by the City or the City's consultant.

3. Report Format. The critical area report shall be provided in electronic form. The City may establish specific administrative requirements for the format of the report.

4. Report Content – General. A critical area report shall evaluate the subject property and critical areas within 300 feet of the subject property for wetlands and 125 feet for streams. A critical area report shall include the following information:

   a. The name and contact information of the applicant; the name, qualifications, and contact information from the primary author(s) of the report;
   b. Documentation of any fieldwork performed on the site, including field data sheets for wetland delineation and rating system forms, stream classification, baseline hydrologic data;
   c. A description of the methodologies used to conduct the wetland delineations and rating system forms, stream classification if done as part of the critical area report, and impact analyses including references;
   d. Identification, characterization and boundaries of all critical area, and buffers on or adjacent to the subject property. For areas off site of the subject property, estimated conditions within 300 feet of the subject property boundaries for a wetland and 125 feet of a stream using the best available information;
   e. A vicinity map and a site plan of the property, drawn to scale, with existing improvements and site features, including significant trees;
   f. Project narrative describing the proposal; anticipated temporary and permanent impacts to critical area or its buffer, construction activities and sequencing of construction, and other relevant information;
   g. A description of existing native, ornamental or invasive vegetation, fauna, and hydrologic characteristics found in the critical area and its buffer both on-site and on adjacent properties;
   h. An assessment of existing vegetation in the required buffer and whether it meets the vegetative buffer standards found in KZC 90.130.2 if the development threshold of KZC 90.130.a is met. If the vegetation in the buffer does not meet the vegetative standards, submit a detailed preliminary re-vegetation plan meeting KZC 90.130.2. If re-vegetation of the buffer is part of a stream or wetland modification proposal, the plan must be a detailed final re-vegetation plan;
   i. An assessment of whether the wetland or stream needs to be restored due to degraded vegetation, wildlife habitat, water quality and hydrologic functions, and if so, what measures are needed.
   j. An assessment of whether the standard buffer width must be increased due to severe erosion area, fish and wildlife habitat conservation area or frequently flooded area on or adjacent to the subject property pursuant to KZC 90.125;
   k. An assessment of any existing habitat for species that are federally or state listed or priority species, including species of local importance pursuant to KZC 90.95 on the subject property or in the vicinity;
   l. A professional survey as specified in subsection 7 below;
   m. A statement specifying the accuracy of the report and all assumptions made and relied upon; and

n. Any other information deemed necessary by the Planning Official.

5. Additional Report Content – Wetlands. In addition to the requirements for the General Report Content pursuant to subsection 4. above, the critical area report shall include:

   a. Identification of wetlands and delineation of their boundaries in accordance with the current approved federal delineation manual and applicable regional supplements described in WAC 173-22-035, as amended. All determinations and delineations of wetlands shall be based on the entire extent of the wetland, irrespective of property lines, ownership patterns, existing improvements or features;
   b. Wetland rating and category including the rationale for the proposed rating and the required buffer based on the regulations in this code;
   c. A completed Army Corps of Engineers Wetland Field Data Form;
   d. Existing wetland acreage that may be approximated if the wetland extends onto adjacent properties;
   e. Soil and substrate conditions;
   f. A description of historical hydrologic, vegetative, habitat, topographic, and soil modifications, if any; and
   g. Description of the water sources entering and leaving the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year – drift lines, algal layers, water marks, and sediment deposits).

6. Additional Report Content – Streams. In addition to the requirements for the General Report Content pursuant to subsection 4 above, the critical area report shall include the stream classification and rationale, based on WAC 222-16-030, as amended. Best available information shall be used to determine if fish are present in the stream given know fish barriers and other conditions.

7. Professional Survey and Measuring Buffer Boundary.

   a. The survey shall be based on the King County Datum (NAVD 88 vertical, NAD 83/91 horizontal) and shall indicate the temporary or permanent benchmark used in the survey depicting:

      1) The approved delineation marking of a wetland and/or buffer boundary on the subject property and an estimate of the location of off-site wetlands and buffers within 300 feet of the subject property, based on the determined wetland category and rating, and the buffer standards in this chapter; and/or
      2) The ordinary high water mark (OHWM) of any stream or the opening of a pipe where any stream enters or exits a pipe and/or any buffer surveyed on the subject property and an estimate of the location of any off-site stream and buffer within 125 feet of the subject property based on the stream classification determination and the buffer standards in this chapter.

   b. For wetlands, buffer widths shall be measured along the outer edge of the entire wetland.

   c. For streams, buffer widths shall be measured outward in each direction on the horizontal plane from the OHWM or from the top of the bank if the OHWM cannot be identified (see Chapter 180

KZC, Plate 16). Where a stream enters or exits a pipe, the buffer shall be measured perpendicular at the pipe opening (see Chapter 180 KZC, Plate 16A).

8. Site and Construction Plans. For a site proposed to be developed, the critical area report shall include general plans showing the following:

   a. Site plan-view cross-sectional drawings;
   b. Slope gradients, and existing and final grade elevations at two-foot intervals;
   c. The type and extent of all critical areas and buffers on the subject property and an estimate of any offsite critical areas and buffer within 300 feet of any wetland and 125 feet of any stream measured from the subject property;
   d. An approximate location of springs, steeps, surface water runoff features, or other surface expressions of groundwater on or within 300 feet of a wetland and 125 feet of a stream from the subject property;
   e. Proposed development, including the location of existing and proposed structures, fill, grading clearing limits with dimensions indicating distances to the critical area, areas of proposed impacts to the critical areas and/or buffers (include square footage estimates), and storage of construction materials and equipment if available;
   f. A depiction of the proposed stormwater management facility and outlets for the project, including estimated areas of permanent and temporary intrusion into the critical area buffer;
   g. Other drawings to demonstrate construction techniques; and
   h. Any other information deemed necessary by the Planning Official.

9. Waiver. The Planning Official may waive the requirement of certain information for the report if it is determined that:
   a. The information is not needed to evaluate a critical area or requirement of this chapter; or
   b. If the development proposal will affect only a part of the subject property, the Planning Official may limit the scope of the required report to include only that part of the site that would be affected by the development.

90.115 Buffer Averaging

1. Applicability. Buffer averaging may be applied to wetland and stream buffers. Both the standard buffer and the alternative buffer may use buffer averaging pursuant to this section.

2. Standards. Averaging of buffer widths for either the standard buffer or alternative buffer may only be allowed if all of the following criteria are met as demonstrated in a critical area report:
   a. The applicable standard buffer or alternative buffer width is not reduced below 75% of the required width in any location;
   b. The total area contained in the buffer area after averaging is no less than that which would be contained within the applicable standard buffer or alternative buffer and must be contiguous to the buffer;
   c. Buffer averaging will provide additional protection to the critical area and result in a net improvement of the critical area habitat, functions, and values; and
   d. The critical area contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland or stream would benefit from a wider buffer in one area and would not be adversely impacted by a narrower buffer in another area.

3. Process. The Planning Official makes the decision based on the standards of subsection 2 above and review of the critical area report described in KZC 90.110.

90.120 Limited Buffer Waivers

1. Interrupted Buffer Waiver.

   a. The Planning Official may waive the required critical area buffer in that portion of the buffer isolated from the critical area where an existing legally established and improved public right-of-way or improved easement road interrupts a portion of the critical area buffer from the portion of the buffer adjacent to the critical area, The Planning Official may require a critical area report be prepared to address the criteria in KZC 90.120.1.d below.
   b. The Planning Official may waive the required critical area buffer in that portion of the buffer isolated from the critical area where an existing legally established building, detached garage, accessory dwelling unit, driveway, commercial parking area or retaining wall over six feet in height divides a portion of the critical area buffer from the portion of the buffer adjacent to the critical area. For the buffer wavier to be approved, the applicant must demonstrate conclusively in a critical area report that all of the criteria in KZC 90.120 1.d below are met.
   c. A wavier may not be requested for such improvements as fences, sheds, patios, decks or other minor structures and impervious surfaces.
   d. The Planning Official may waive the buffer requirement if the waiver request is found to meet the following criteria (see Chapter 180 KZC, Plate 25):
      1) The existing legal improvement creates a substantial barrier to the buffer function;
      2) The interrupted buffer does not provide additional protection of the critical area from the proposed development; and
      3) The interrupted buffer does not provide significant hydrological, water quality and wildlife buffer functions relating to the portion of the buffer adjacent to the critical area.
   e. If the applicant's consultant prepares the critical area report, the applicant shall also fund peer review of the report by the City's consultant.

90.125 Increase in Buffer Width Standard

1. Criteria to Require Increase in Buffer Width. The City shall determine if a critical area buffer must be increased beyond the standards in this chapter based on best available science and the recommendation of a critical area report for a project. The increase in buffer width may be required when a larger buffer is necessary to protect critical area functions and values either on the subject property or on an adjacent property. This determination shall be based on one or more of the following criteria:

   a. Severe Erosion Areas. If the critical area buffer abuts land that contains a slope with severe erosion, has minimal vegetative cover and is designated as hazardous in Chapter 85. KZC, and erosion control measures will not effectively prevent adverse impacts on the critical area based on a geotechnical study, a larger buffer shall be required;

   b. Fish and Wildlife Habitat Conservation Areas. If the wetland or stream contains documented habitat for state or federally listed endangered, threatened, and sensitive species or state priority species, including species of local importance, a larger buffer may be required to protect the habitat consistent with the management recommendations issued by the Washington Department of Fish and Wildlife or the United States Fish and Wildlife Services; or

c. Frequently Flooded Areas. If a site contains a frequently flooded area and the frequently flooded area is wider than the buffer standard required for a wetland or stream, the buffer shall be increased to incorporate the entire frequently flooded area.

2. Process. The Planning Official shall make a determination if a buffer width must be increased beyond the standard buffer width based on the critical area report as part of the final critical area determination in KZC 90.105.

90.130 Vegetative Buffer Standards

1. General. The entire Wetland Buffer width of KZC 90.55 and Stream Buffer width of KZC 90.65, referred hereafter, as the "buffer" shall be vegetated pursuant to the requirements of this section.

2. Vegetative Buffer Standard.
   The following vegetative buffer standards shall be met:
   a. Native cover of at least 80% on average throughout the buffer area. Additionally, the first two of the following strata of native plant species each must compose of at least 20% areal cover, and the third may compose no more than 20% areal cover:
      1) Multi-age forest canopy (combination of existing and new vegetation);
      2) Shrubs; and
      3) Woody groundcover (such as kinnikinnick, salal and sword fern) or unmowed herbaceous groundcover;
   b. At least three (3) native species each making up a minimum of 10% coverage (for diversity);
   c. Less than 10% noxious weeds cover using King County weed list and permanent removal of all knotweed; and
   d. Removal of lawn and any illegal fill as determined by the City.

3. When Vegetative Buffer Standard Applies.
   a. The complete vegetative buffer standard shall be installed either when:
      1) The total new net impervious area on the entire subject property exceeds 1,000 square feet, or
      2) The cost of new or replacement improvements exceeds 50 percent of the assessed or appraised value of the existing improvements on the entire subject property, whichever is greater. This 50% threshold shall not apply to detached dwelling units approved for expansion pursuant to KZC 90.185.
   b. A partial vegetative buffer shall be installed when:
      1) The total new net impervious area is between 50 square feet and 1,000 square feet on the subject property.
         a) The buffer shall be vegetated at a minimum 1:1 ratio (new net impervious area is equal to the total square feet of buffer vegetation) meeting the vegetated buffer standard at the proportional rate of the standard;
         b) If the new net impervious area results in removal of a significant tree in a buffer, the tree shall be replaced with two (2) native trees in the buffer. The replacement trees shall be six (6) foot tall for a conifer and 2-inch caliper for deciduous or broadleaf. For a removed significant tree in a buffer that is 24" in diameter, the tree shall be replaced with three (3) native trees;
         c) The vegetated buffer area shall be located in the buffer abutting or nearest to the critical area at a minimum width of 10 feet;
         d) The location of the vegetation in the buffer shall be across from the new structure footprint and approved by the Planning Official;

2) When a new net impervious surface on the subject property totals less than 50 square feet, no vegetation is required to be planted in the buffer; and
3) For new utility poles the buffer shall be calculated based on the combined area of all new utility pole footprints and be vegetated at a minimum 1:1 ratio (net new impervious area equals total square feet of buffer vegetation), meeting the vegetated buffer standard at a proportional rate.

c. For Permitted Activities, Improvements and Uses Subject to Development Standards pursuant to KZC 90.40, vegetative buffer requirements will be determined as part of mitigation sequencing.
d. For Nonconformances, see KZC 90.185.

4. Additional Standards.
   a. All existing improvements and structures in a buffer must be removed when the vegetative buffer installation is required pursuant to subsection 3.a above;
   b. All activities in the buffer must cease, except those permitted under KZC 90.35.12 and 13;
   c. Native vegetation appropriate for wetlands and streams shall be used based on the City's Critical Areas Plant List. Other vegetation may be proposed if appropriate for the site and approved by the City;
   d. Trees and shrubs in the buffer shall be located along the bank of streams to provide effective shading of the stream to lower water temperature;
   e. Existing healthy native vegetation may count towards meeting the requirements if the overall standard is met;
   f. The City may require amended soil if needed to provide a well-functioning buffer;
   g. The City may require supplemental mulch to meet the Planning and Building Department standards;
   h. A reliable temporary irrigation source must be available while the vegetation is being established and the source must be indicated on the planting plan;
   i. Installation shall be done by hand unless use of mechanical equipment is specifically authorized due to site conditions. By hand includes any hand held equipment that is gas or electric powered;
   j. A Perpetual Landscape Maintenance Agreement, in a form approved by the City, shall be recorded over the vegetated buffer prior to final inspection; and
   k. Buffers shall not be mowed and animals may not be used to remove weeds, except goats may be used to remove invasive species for only public restoration projects pursuant to KZC 90.35 and KZC 90.40.

5. Process. The Planning Official shall determine whether an existing buffer meets the standards in KZC 90.130.2 above as part of the final critical area determination based on information in the critical area report.

6. Submittal of Vegetative Buffer Plan - Timing and Contents.

   a. When an existing buffer does not meet the standards in subsection 2 above, the applicant shall submit a final vegetative buffer plan with the development permit application;
   b. The vegetative buffer plan shall be prepared by a qualified critical area professional. The applicant shall also submit funds to the City for peer review of the vegetative buffer plan; and
   c. The Planning Official shall approve the plan only if it meets the vegetative buffer standard in this section.
   d. If a modification is proposed to a wetland or stream pursuant to KZC 90.60 or 90.70, a detailed planting plan shall be submitted with the wetland or stream modification plan.

7. Maintenance, Monitoring and Financial Security. A maintenance and monitoring program pursuant to

KZC 90.160 and a financial security pursuant to KZC 90.165 for the vegetative buffer shall be submitted prior to issuance of a building permit or before commencement of an activity.

8. Protection and Maintenance of Vegetative Buffer. Critical areas and buffers shall be placed in recorded critical area easements or tracts pursuant to KZC 90.210 and shall be maintained in perpetuity.

90.135 Trees in Critical Areas and Critical Area Buffer

1. Removal of Trees.
   a. Other than as specifically approved as part of a critical area approval under this chapter, no trees shall be removed from a critical area of critical area buffer unless determined to be nuisance or hazardous trees. Any removal shall be authorized in advance through a tree removal permit pursuant to Chapter 95 KZC unless tree removal is an emergency to prevent immediate damage to a structure. In case of an emergency, documentation to the City must be provided within seven (7) days of removal that supports that the tree was a nuisance or hazardous.
   b. If a tree in a critical area or its buffer meets the criteria of a nuisance or hazard based on this code at the determination of the Planning Official, then a snag tree shall be created;
   c. If creation of a snag is not feasible, then the felled tree shall be left in place unless the Planning Official approves tree removal in writing; and
   d. Any tree approved to be removed or created as a snag or felled must be replaced with one (1) to three (3) native trees at a minimum height of six (6) feet in the buffer depending on the size, quality and species of removed tree. The Planning Official shall determine the required number of replacement trees.

2. Pruning of Trees. Pruning or topping of trees in critical areas or buffers is prohibited other than City approved creation of snags for nuisance or hazard trees.

90.140 Structure Setback from Critical Area Buffer

1. Buildings and other structures shall be set back at least 10 feet from the edge of the wetland or stream buffer to ensure adequate width for construction staging, maintenance and repair of primary buildings and accessory structures, and use of improvements without disturbing the critical area buffer or critical area. This section does not apply to:
   a. Category IV wetlands that are less than 1,000 square feet that do not have a buffer requirement and thus no building setback requirement.
   b. Those linear utility improvements associated with either Permitted Activities, Improvements or Uses or Public Agency and Utility Exceptions that have been approved to be located in a critical area or buffer and therefore can traverse the structure setback.

2. The following improvements may extend into the structure setback, provided that they do not necessitate encroachment into the critical area buffer for construction, maintenance and use. No other improvements are permitted.

Table 90.140.1 Structure Setback from Critical Area Buffers

Structure Setback	Improvement	Location within Setback:
10 feet in width from edge of buffer	Chimneys, bay windows, greenhouse windows, eaves, cornices, awnings and canopies, and decks above the ground floor	May extend no more than 18 inches into structure setback

		May extend no more than 5 feet into structure setback
	Uncovered improvements less than 18 inches above finished grade to 4 inches above finished grade, such as ground floor decks, and railings less than 4 feet above finished grade	
	Uncovered play structures	
	Rockeries and retaining walls that are not more than 4 feet above finished grade	
	Uncovered improvements less than 4 inches above finished grade, such as patios, driveways and parking areas, including curbing	May extend no more than 9 feet into structure setback
	Garden sculpture, light fixtures, trellises and similar decorative structures	
	Benches, walkways, paths and pedestrian bridges	
	Bio-retention, such as rain gardens, and dispersion techniques that result in sheet flow such as level spreaders, dispersion trenches, splash blocks and similar techniques	
	Fence perpendicular to the structure setback at up to 6 feet in height above finished grade	May extend to the upland edge of the critical area buffer
	Split rail, open slatted with at least 18" spacing, wrought iron and chain link, or similar non-solid fence parallel to the structure setback up to 6 feet in height above finished grade. Solid fencing is not permitted. Except for split rail, a gate is required for access to the buffer.	Along the entire upland edge of the buffer

90.145 Mitigation - General

1. General. If a modification is proposed to a critical area or buffer, as part of the application the applicant must have the proposal evaluated using mitigation sequencing and then submit a mitigation plan that addresses the impacts to the critical area.

2. Mitigation Sequencing. The intent of mitigation sequencing is to evaluate and implement opportunities to avoid, minimize, eliminate or compensate for impacts to critical areas while still meeting the objectives of the project. When a modification to a critical area and buffer is proposed, the modification shall be avoided, minimized, or compensated for, as outlined by WAC 197-11-768, in the following order of preference:
   a. Avoiding the impact altogether by not taking a certain action or parts of actions;
   b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
   c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
   d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
   e. Compensating for the impact by replacing or providing substitute resources or environments; and/or

f. Monitoring the impacts and compensation projects and taking appropriate corrective measures.

3. Location of Mitigation.

a. Preference. Preference shall be given to the location of the mitigation in the following order unless it can be demonstrated that off-site in-kind mitigation is ecologically preferable:
   1) On-site in-kind
   2) Off-site in City in-kind
   3) Off-site in-kind within the Lake Washington/Cedar/Sammamish Watershed

b. On-Site versus Off–Site Mitigation.
   1) Mitigation shall occur on-site except when the City determines that the following criteria have been met as part of a proposal under this chapter:
      a) There is no opportunity for on-site mitigation or on-site opportunities do not have a high likelihood of success due to the size of the property, site constraints, or size and quality of the wetland or location and quality of the stream;
      b) Off-site mitigation has a greater likelihood of providing equal or improved critical area functions than the impacted critical area;
      c) Off-site locations shall be in the same Water Resource Inventory Area (WRIA) 8 Lake Washington/Cedar/Sammamish Watershed as the impacted critical area; and
      d) The off-site critical area mitigation will best meet formally established watershed goals for water quality, flood or conveyance, habitat, or other wetland functions that have been established and strongly justify location of mitigation at another site.
   2) When considering mitigation outside of the City, preference should be given to using mitigation banking or an in-lieu fee program pursuant to subsection 4 below.

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

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

b. Non-Applicant Responsible Mitigation – Mitigation Bank and In-lieu Fee Mitigation.

   1) Funds are collected from the applicant by the sponsoring agency, non-profit, private party or jurisdiction. The sponsor is responsible from that point forward for the completion and success of the mitigation. The applicant's fee is based on the project impact and includes all costs for the mitigation, including design, land acquisition, materials, construction, administration, monitoring, and stewardship.
   2) Credits purchased by an applicant from a mitigation bank or in-lieu program that is certified under Federal and State rules may be used as a method of mitigation if approved by the City to compensate for impacts when all of the following apply:
      a) The City determines as part of the critical area approval that it would provide appropriate compensation for the proposed impacts;
      b) Projects shall have debits associated with the proposed impacts calculated by the applicant's qualified critical area professional using the credit assessment method or appropriate method for the impact as specified in the approved instrument for the program. The assessment shall be reviewed and approved by the City;
      c) The proposed use of credits is consistent with the terms and conditions of the certified

mitigation bank or in-lieu fee program instrument; and

d) The record of payment for credits shall be provided to the City in advance of the authorized impacts but no later than issuance of the building or land surface modification permit.

c. City-Responsible Mitigation – Advance Mitigation.

The City does mitigation on City-owned property as mitigation credit either for City critical area projects or at the discretion of the City for other public agencies with critical area projects. The mitigation program shall be implemented pursuant to federal and state rules, and state water quality regulations.

5. Timing of Mitigation.

a. On-Site Mitigation.

1) On-site mitigation shall be completed immediately before or following disturbance and prior to use or final inspection of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife and flora; and.

2) The Planning Official may allow flexibility with respect to seasonal timing of excavation or planting for mitigation. If on-site mitigation must be completed after final inspection of a building or land surface modification permit or commencement of an activity, a performance financial security shall be required pursuant to KZC 90.165 along with a timeline commitment for completion.

b. Off-Site Mitigation.

1) For in-lieu fee, mitigation bank or advance mitigation programs:

a) Mitigation shall be completed based on the programs established timeline, except advance mitigation shall be completed prior to issuance of the development permit;

b) The applicant shall provide documentation of the proof of purchase of credits for in-lieu fee and mitigation banking in advance of the authorized impacts but no later than issuance of the building or land surface modification permit. However, if the program sponsor requires proof of development permit prior to credit purchase, the documentation may be provided to the City prior to final inspection; and

c) For advanced mitigation, the applicant shall submit documentation of completion of the advance mitigation prior to issuance of a land surface modification or building permit.

2) For all other off-site mitigation:

a) Mitigation shall be completed immediately before or following disturbance and prior to use or final inspection of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife and flora. The Planning Official may allow flexibility with respect to seasonal timing of excavation or planting for mitigation; and

b.) Documentation of the proof of purchase of off-site property shall be provided in advance of the authorized impacts but no later than issuance of the building or land surface modification permit.

6. Mitigation Plan Standards. All critical area mitigation plans, except mitigation met through mitigation bank or an in-lieu fee program, shall meet the following standards. In addition, for wetlands the

standards for Wetland Compensatory Mitigation pursuant to KZC 90.150 shall be followed.

a. A mitigation plan shall be prepared by a qualified critical area professional, approved by the City that:
   1) Addresses the impacts to a critical area and buffer based on best available science;
   2) Is designed to maintain and enhance ecological functions and values, and to prevent risk from hazards posed to the critical area; and
   3) Provides a description of the mitigation site, including location and vicinity map, and rationale for selection of the mitigation site.

b. The plan shall show that:
   1) The vegetative buffer standards and requirements in KZC 90.130 are met. If the buffer does not currently meet the vegetative buffer standards, a detailed final revegetation plan shall be submitted including specification on size and type of each native species of plants, and number and spacing of the plants meeting the City of Kirkland's Critical Area Plant List and standards;
   2) Seed source must be as local as possible, and plants must be nursery propagated unless transplanted from on-site areas approved for disturbance. These requirements must be included in the mitigation plan specifications;
   3) Plant materials may be supported with material (e.g. stakes, guy wires) only when necessary. Staking and ties shall follow the International Society of Arboriculture standards. Where support is necessary, stakes, guy wires, or other measures must be removed as soon as the plant can support itself, usually after the first growing season;
   4) The stream buffer mitigation area replacement at a minimum ratio of 1:1 pursuant to KZC 90.65 is met;
   5) Proposed erosion control measures comply with the City's Public Works Pre-Approved Plans;
   6) Mitigation is consistent with other requirements in this code, including site distance requirements at intersection pursuant to Chapter 115 KZC; and
   7) All planted areas of the mitigation project have a temporary, above ground sprinkler system set to automatic timers. Temporary sprinkler systems shall be removed in the final year of monitoring once vegetation is well established. When public or private water is not available, a plan for reliable watering by truck or hand shall be included.

90.150 Wetland Compensatory Mitigation

1. General. Compensatory mitigation for modifications to wetlands and related impacts to buffers shall be used for impacts that cannot be avoided or minimized and shall achieve equivalent or greater wetland functions. Approved modifications to a wetland and related impacts to the buffer require compensatory mitigation based on mitigation ratios in subsection 2 below so that the goal of no net loss of wetland functions and values is achieved.

2. Compensatory Wetland Mitigation Ratios.

   a. Acreage Replacement Ratios.

      The following ratios shall apply to creation, re-establishment, rehabilitation, and enhancement of wetlands. These ratios do not apply to the use of credits from a state-certified wetland mitigation bank or in-lieu fee program pursuant to KZC 90.145.4. The first ratio number specifies the acreage

of replacement wetlands and the second number specifies the acreage of wetlands altered.

Table 90.150.1 Mitigation Ratios for Wetlands and Buffers

Category of Wetland Impacted	Creation	Re-establishment-Rehabilitation Only	Creation and Rehabilitation	Creation and Enhancement	Enhancement Only
Category IV	1.5:1	3:1	1:1 C and 1:1 RH	1:1 C and 2:1 E	6:1
Category III	2:1	4:1	1:1 C and 2:1 RH	1:1 C and 4:1 E	8:1
Category II	3:1	6:1	1:1 C and 4:1 RH	1:1 C and 8:1 E	12:1
Category I: Forested	6:1	12:1	1:1 C and 10:1 RH	1:1 C and 20:1 E	24:1
Category I: based on total functions	4:1	8:1	1:1 C and 6:1 RH	1:1 C and 12:1 E	16:1
Category - I: Bog	Not possible	6:1 RH of a bog 8:1	Not possible	Not possible	Case-by-case
Buffer (see additional requirements in subsection 2. c. below)	Minimum of 1:1	Minimum of 1:1	Minimum of 1:1	Minimum of 1:1	Minimum of 1:1

Legend: C = Creation, RH = Rehabilitation, E = Enhancement

b. Remedial Action: Remedial actions resulting from unauthorized alterations of a wetland or its buffer may require greater ratios depending on the extent of impact to the value and function of the wetland based on an analysis by a critical area professional and a final determination by the Planning Official.

c. Buffer Enhancement Ratio. The City may require a buffer enhancement ratio of greater than 1:1 for exceptional second growth forest or mitigation of an already functioning buffer based on the critical area report, buffer modification or consideration of vegetation structure slope and flow paths.

d. Credit/Debit Method. As an alternative to the mitigation ratios, the City may allow mitigation based on the "credit/debit" method developed by the Department of Ecology. This method may be appropriate where a wetland is not eliminated, but is otherwise modified.

3. Mitigation for Lost Values and Affected Functions. Compensating for lost values and affected functions must be addressed in the compensatory mitigation plan of subsection 6 below to achieve functional equivalency or improvement. The goal and preference shall be for the compensatory mitigation to provide in-kind wetland functions for those lost, except when:

a. The filled/impacted wetland provides minimal functions as determined by a site-specific function assessment, and the proposed mitigation action(s) will provide equal or greater functions or will

provide functions shown to be limited within Kirkland's watershed; or

b. Out-of-kind replacement will best meet formally identified Water Resource Inventory Area (WRIA) 8 Lake Washington/Cedar/Sammamish Watershed goals, such as replacement of historically diminished wetland types.

4. Preference of Compensation.

a. Compensation shall occur in the following order of preference based on in-kind mitigation:
   1) Restoring wetlands on upland sites that were formerly wetlands. This action includes re-establishment and rehabilitation;
   2) Creating/establishing wetlands on disturbed upland sites, such as those with vegetative cover consisting primarily of non-native species;
   3) Enhancing significantly degraded wetlands; or
   4) Preserving/maintaining a wetland to remove threat or prevent decline, such as purchasing land. Preservation does not result in gain of wetland acres.

b. Location of compensatory mitigation shall occur in the order of preference established in KZC 90.145.3.

5. Compensatory Mitigation Plan. A compensatory mitigation plan shall be prepared by a qualified critical area professional approved by the City consistent with state guidelines and submitted with the wetland modification assessment of KZC 90.60 for approval as part of the critical area permit using Process I. The plan shall contain the following:

a. A topographic survey showing existing and proposed topography and improvements. Surveys should be of sufficient quality to determine accurate 1-foot minimum contour intervals;
b. Description of the compensatory mitigation site, including location and vicinity map, rationale for selection of site and how it meets the required mitigation ratios of subsection 2 above;
c. Description of proposed actions for compensation of wetland and buffer areas affected by the project, overall goals and targets of the proposed mitigation plan, and proposed mitigation timing. Documentation if the compensatory mitigation will be done through a mitigation banking or fee-in-lieu program pursuant to KZC 90.145;
d. Protective construction measures that are necessary, such as siltation prevention measures and scheduling the construction activity to avoid interference with wildlife nesting activities;
e. Description of surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created or restored compensatory mitigation areas;
f. Schedule of the project for all work;
g. Description of performance standards for post-installation, a monitoring and maintenance schedule based on the time period required in KZC 90.160 along with a financial security estimate for the entire compensatory mitigation project that meet the standards in KZC 90.165;
h. Proof of title ownership for the wetlands and buffers, including the compensatory mitigation areas, when mitigation is done by the applicant;
i. If the applicant does not hold title ownership to the applicant-responsible mitigation site, proof of perpetual right to locate the mitigation shall be provided; and

j. List of all local, state and/or federal wetland-related permits required for the project.

6. Timing of Compensatory Mitigation. See KZC 90.145.5 for when an applicant must install the compensatory mitigation or document if a non-applicant responsible mitigation program is used to meet the mitigation requirement.

90.155 Measures to Minimize Impacts to Wetlands

The following measures must be incorporated into the design of a site containing a wetland and/or buffer. The Planning Official shall determine the applicability of each measure based on the uses, improvements and/or activities on the subject property.

Table 90.155.1 Measures to Minimize Impact to Wetlands and Associated Buffers

Disturbance	Required Measures to Minimize Impacts
Lights	- Shield exterior lights that face the wetland or buffer so that they are downcast and directed away from critical area and associated buffer pursuant to Chapter 115 KZC.
Noise	- Activities that generate noise, such as parking lots, drive thru facilities, generators and HVAC units shall be located away from the wetland or buffer to the maximum extent possible, or noise shall be minimized through use of design measures, insulation techniques and/or additional native vegetation. - Activities or uses that generate relatively continuous, potentially disruptive exterior noise, such as certain industrial, manufacturing and repair services shall provide an additional 10 feet in width of heavily vegetated buffer strip immediately adjacent to the outer wetland buffer that meets KZC 95.42, Buffer Standard 1.
Toxic runoff	- Treat all runoff from pollution generating surfaces prior to discharge to the wetlands. - Establish covenants for homeowner's associations and commercial developments where applicable for restriction of pesticide use within 150 feet of wetland. - Apply integrated pesticides management pursuant to KZC 90.195.
Stormwater runoff	- As part of redevelopment, replacement or expansion of an existing development, retrofit stormwater flow control and treatment for public streets when the value of all improvements, including interior improvements exceed 50% of the assessed value (or replacement value) of the existing site improvements. - Control stormwater flow and improve water quality from new and redevelopment, including to wetlands, through the requirements of the Western Washington Phase II Municipal Stormwater Permit, National Pollutant Discharge Elimination System (NPDES), administered by the Washington State Department of Ecology. - Use low impact development techniques per the City's standards.
Pets and human disturbance	- Install fence and signage pursuant to KZC 90.190 along the edge of the buffer. - Place wetland and buffer in a separate conservation easement or tract pursuant to KZC 90.210.
Dust	- Use best management practices to control dust.

90.160 Monitoring and Maintenance

1. Timing.
   a. After installation and acceptance by the Planning Official of the mitigation, the monitoring and maintenance program shall commence.
   b. A monitoring report shall be submitted to the Planning Official after each site visit, pursuant to subsection 3.b below.

2. Monitoring and Maintenance Program for Buffer. Requirements for a monitoring and maintenance program for revegetation of a buffer shall include the following, unless an alternative program is approved by the City.
   a. The goals and objectives of the monitoring and maintenance program;
   b. The performance standards by which the mitigation will be assessed. At a minimum, buffer vegetation mitigation shall include the following performance standards:
      1) Year-1: 100 percent survival of installed vegetation through a combination of survival and replacement;
      2) Year-2: 80 percent survival of installed vegetation;
      3) Year-3: At least 50 percent native vegetation coverage within the enhanced and created buffer for installed vegetation;
      4) Year-5:
         a) At least 80 percent native vegetation coverage on average throughout the mitigation area. Additionally, two out of three of the following strata of native plant species each must compose at least 20% areal cover;
            (1) Trees;
            (2) Shrubs; and
            (3) Woody groundcover (such as kinnikinnick, salal and sword fern);
         b) At least three native species each making up a minimum of 10 percent coverage;
      5) All years:
         a) Less than 10 percent noxious weeds cover using King County weed list, except less than 20 percent cover of reed canarygrass where a pre-existing or proximate monoculture occurred; and
         b) No presence of knotweed at any time during the duration of the program period.
   c. Contingency plan identifying a course of action, corrective measures and a timetable to be taken if monitoring indicates that the performance measures have not been met.

3. Monitoring and Maintenance Program for Critical Area Mitigation. A monitoring and maintenance program shall be established for restoration for a wetland or stream due to prior degradation or an approved modification project as part of the mitigation plan. The monitoring and maintenance plan shall address goals and objectives as well as performance standards and a contingency plan.

4. Duration and Schedule of Monitoring and Maintenance Program. Unless otherwise required by the Planning Official, the minimum duration of the program shall be as follows:

   a. Three growing seasons for new structures of less than 1,000 square feet of footprint approved pursuant to KZC 90.130 and for additions to nonconformances pursuant to KZC 90.185.
   b. Five growing seasons for mitigation projects and revegetating a buffer to meet the buffer standards in KZC 90.130, except for forested and scrub –shrub wetlands; and
   c. Ten growing seasons for forested or scrub -shrub wetland creation.
   d. The required schedule for site visits and reporting for monitoring and maintenance is as follows:

1) For three-year program: two site visits for each of the first two years;
2) For five-year program: two site visits for each of the first two years and one site inspection every 12 months for subsequent years; and
3) For ten-year program: visits in growing seasons 1, 2, 3, 5, 7 and 10.

e. The Planning Official may extend the duration of the program and the number of visits at the end of the established monitoring and maintenance period if the program requirements have not been met.

5. Maintenance Work. Prior to final inspection of the vegetation and any other mitigating measures required in this chapter, the applicant shall submit a signed contract with a landscape maintenance company to maintain the installed improvements over the period of the monitoring program that includes the required maintenance tasks and schedule, except for the following:

a. For commercial, multifamily or institutional uses, if a property owner has an existing contract with a landscape maintenance company and desires that company to maintain the installed improvements, a copy of the contract with that company shall be submitted. The contract shall clearly indicate the inclusion of the required maintenance tasks and schedule.

b. For single family residential uses, homeowners may maintain the installed improvements if they sign an agreement that runs with the property to maintain the improvements over the period of the monitoring program. If the improvements are not satisfactorily maintained based on the monitoring report at the end of the any growing season, then the homeowner shall submit a copy of a contract with a landscape maintenance company to have the company maintain the improvements. This option is not available to developers and builders where the property will be sold on completion of the construction.

c. A City department may choose to maintain the vegetated buffer and any other improvements and not hire a landscape maintenance company.

6. Options for Monitoring Work. The applicant may choose one of the following methods for who performs the monitoring work:

a. City Does Work. If the City will oversee the maintenance and monitoring through the City's consultant, the monitoring fee will be based on an actual cost estimate of the work. The applicant shall submit a cash prepayment for all work to the City prior to issuance of the development permit.

b. Applicant's Consultant Does Work.

1) If the City will not perform the monitoring, the applicant shall submit a signed contract to fund a qualified critical area professional, approved by the City, to monitor the maintenance and perform the monitoring over the life of the program. The cost of the work must be included in the performance security under KZC 90.165; and
2) In addition, the applicant shall submit a cash prepayment prior to final inspection of the development permit for the cost of the City to do peer review of the monitoring reports.

7. Financial Security. A financial security for performance, monitoring and maintenance is required pursuant to KCZ 90.165.

90.165 Financial Security for Performance, Maintenance and Monitoring

1. Performance or Maintenance Security Requirement.

   a. A security is required in the amount and form as the Planning Official deems necessary to assure that all work or actions are satisfactorily completed and maintained in accordance with the approved plans, specifications, and permit or approval requirements.
   b. State agencies and local government bodies, including school districts, shall not be required to provide a performance or maintenance security. The Planning Official may enforce compliance by not approving final inspection, by administrative enforcement action, or by any other legal means.
   c. The security shall be conditioned on the work being completed or maintained in accordance with requirements, approvals, or permits for the site being left or maintained in a safe condition. Also for on the site and adjacent or surrounding areas being restored in the event of damages or other environmental degradation from development or maintenance activities conducted pursuant to the permit or approval.

2. Submitted Documents.
   a. The security shall be in the form of a:
      1) Surety bond obtained from companies registered as surety in the state or certified as acceptable sureties on federal bonds;
      2) Assignment of funds or account;
      3) Escrow agreement;
      4) Irrevocable letter of credit; or
      5) Other financial security device.
   b. A completed security information form, security agreement and License to Enter Property document along with the required recording fee for that document shall be submitted. All forms shall as provided by the City.

3. When Submitted. A financial security for performance, monitoring and maintenance shall be submitted prior to issuance of a land surface modification or building permit for plantings, improvements and other mitigation measures required in this chapter. The performance portion of the security will be released upon City approval of the installed mitigation.

4. Determination of the Security Amount.

   a. Determination of the security amount shall be done using the City's security value worksheet based on the approved plans, specifications, permit or approval requirements, and applicable regulations. Construction, maintenance and monitoring costs shall be based on King County's or the City of Kirkland's Critical Areas Mitigation Bond Quantity Worksheet. The City may request changes in unit pricing if the worksheet is found to be out of date with respect to current market prices;
   b. The financial security shall be equal to or greater than 150 percent of the estimated cost of conformance to plans, specifications and permit or approval requirements of this chapter, including corrective work, compensation, enhancement, mitigation, monitoring, maintenance and restoration of critical areas; and
   c. Actual security costs shall include all labor, materials, erosion control and other general items, and sales tax associated with the required work. The security shall be sufficient to guarantee that all required improvements and measures will be completed in a timely manner and with sufficient funds in accordance with this chapter. The security shall cover all work or actions not satisfactorily

completed or maintained that need to be corrected to comply with the approved plans.

5. Cash Deposit. A cash deposit for the cost of City administration of the security shall be submitted with the financial security.

6. Duration of Performance, Monitoring and Maintenance Security.
   a. Duration of monitoring and maintenance security shall be consistent with the approved program pursuant to KZC 90.160;
   b. The performance or maintenance security may be released upon written notification by the Planning Official, following final site inspection or when the Planning Official is satisfied that the work or activity complies with permits or approved requirement;
   c. The Planning Official may require a security longer than stated in KZC 90.160 for complex mitigation projects, such as creation of wetlands, daylighting of a stream or relocating a stream channel, or to extend the length of a security for projects where vegetation or other improvements have been poorly maintained over several years or for code enforcement actions; and
   d. No portion of the security may be released early during the established monitoring and maintenance period to ensure that potential catastrophic failure of the plantings and other improvements that may occur in the future are covered.

7. Corrective Measures.
   a. If, during the term of the performance, maintenance and monitoring security, the Planning Official determines that conditions exist which do not conform with the plans, specification, approval or permit requirements, the Planning Official may issue a stop work order prohibiting any additional work or maintenance until the condition is correct;
   b. The Planning Official may call in all or a portion of a performance, maintenance and monitoring security to correct conditions that are not in conformance with plans, specifications, approval or permit requirements; and
   c. Where monitoring reveals a failure of mitigation or maintenance measures, the applicant shall be responsible for appropriate corrective action which, when approved by the Planning Official, shall be subject to further monitoring. The Planning Official shall determine the additional monitoring requirements as needed.

8. Transfer of Security. In the event that a performance, monitoring and maintenance security is transferred to a subsequent property owner or management entity:
   a. An additional City administrative fee shall be charged for transferring a security to a subsequent owner;
   b. The applicant and the subsequent owner must document the transfer authority of the security; and
   c. A written agreement from the subsequent owner shall be submitted agreeing to the costs and other responsibilities of the maintenance and monitoring program.

9. Obligation. Any inability of a security device to fund the cost of the security shall not discharge the obligation of an applicant or violator to complete the required mitigation, maintenance or monitoring.

90.170 Subdivisions and Maximum Development Potential

1. Subdivisions - The subdivision and/or short subdivision of land in a wetland, stream or related buffer is subject to the following criteria and subsections 2 through 4 below:

   a. Land that is located entirely within a wetland, stream or related buffer may not be subdivided.

b. Land that is located partially within a wetland, stream or related buffer may be subdivided if, as part of the short plat or subdivision application, the applicant demonstrates that :
   1) Each lot contains sufficient developable area to accommodate the allowed use(s) in that zone, including required vehicular access, parking, and stormwater management facilities outside of the critical area and its buffer; and
   2) Each lot meets all zoning requirements applicable to that zone, except for reduced Dimensional Design Standards for Residential Uses pursuant to KZC 90.175.

2. Calculating Allowed Number of Dwelling Units. The maximum potential number of dwelling units for a subject property that contains a wetland, stream, minor lake or their buffers is reduced from the maximum potential number of dwelling units that otherwise are allowed in the underlying zone.

3. Maximum Development Potential Calculation.

   a. The maximum potential number of dwelling units shall be the buildable area in square feet divided by the minimum lot area per unit or the maximum units per acre as specified by Chapters 15 through 56 KZC, plus the area of the required critical area buffer in square feet divided by the minimum lot area per unit, the maximum units per acre or as specified by Chapters 15 through 56 KZC, multiplied by the development factor derived from subsection 2 of this section as provided in the formula below:

      MAXIMUM DWELLING UNIT POTENTIAL = (BUILDABLE AREA/THE PRESCRIBED MINIMUM LOT AREA PER UNIT OR MAXIMUM UNITS PER ACRE) + [(BUFFER AREA/THE PRESCRIBED MINIMUM LOT AREA PER UNIT OR MAXIMUM UNITS PER ACRE) X (DEVELOPMENT FACTOR)]

   b. For purposes of this subsection only, "buildable area" means the total area of the subject property minus critical areas and their buffers.

   c. A professional survey of the approved delineation markings shall determine the area of critical area and buffer on the subject property pursuant to KZC 90.110.

   d. For multifamily development, and single family development in RSA zones, if application of the maximum development potential formula results in a fraction, the number of permitted dwelling units shall be rounded up to the next whole number (unit) if the fraction of the whole number is at least 0.50.

   e. For single family development in low density zones other than the RSA zones, the number of permitted dwelling units shall be rounded down to the previous whole number (unit) regardless of the fraction of the whole number.

   f. For developments providing affordable housing units pursuant to Chapter 112 KZC, or cottage, carriage or two/three unit homes pursuant to Chapter 113 KZC, or low impact development pursuant to Chapter 114 KZC, the maximum dwelling unit potential of this section establishes the base density allowed. The additional density or bonus units allowed by those chapters shall be in addition to the maximum dwelling unit potential.

   g. The provisions in KZC 125.30 for density under a Planned Unit Development shall not be applied to properties containing critical areas or buffers.

   h. The maximum development potential formula shall not be construed to preclude application of

Chapter 22.28 KMC (lot size reduction, low impact development, small lot single family, and historic preservation) to potentially achieve an increased number of single-family dwelling units for short plats and subdivisions.

i. Lot size and/or density may be limited by or through other provisions of this code or other applicable law, and the application of the provisions of this chapter may result in the necessity for larger lot sizes or lower density due to inadequate buildable area.

4. Development Factor – The development factor, consisting of a "percent credit," to be used in computing the maximum potential number of dwelling units for a site which contains a critical area buffer is derived from the following table:

Table 90.170.1 Maximum Development Potential

Percentage of Site in Critical Area Buffer			**Counted at**
< 1%	To	10%	100%
> 10%	To	20%	90%
> 20%	To	30%	80%
> 30%	To	40%	**70%**
> 40%	To	50%	60%
> 50%	To	60%	50%
> 60%	To	70%	40%
> 70%	To	80%	30%
> 80%	To	90%	20%
> 90%	To	100%	10%

90.175 Dimensional Design Standards for Residential Uses

1. Reduced Dimensional Standards for Residential Uses. The following dimensional requirements may be reduced for the non-critical area portion of the site to accommodate the constraints of the buildable area of the site, provided that the applicant shall demonstrate that:

a. The reduction is be the minimum necessary to allow avoidance of the critical area, critical area buffer and structure setback; and
b. The resulting development is compatible with other development or potential development in the immediate vicinity of the subject property in the same zone and with similar site constraints.

2. Standards. The reduced standards are as follows:

Table 90.175.1 Reduced Dimensional Standards for Residential Uses

Reduced Dimensional Standards for Residential Uses	
Minimum Required Yards	• 0' for interior side and rear yards within the proposed development to encourage clustering between dwelling units • 10' for front yards • 5' for side and rear yards that abut properties that are not part of the proposed development
Minimum Parking Pad	• width - 8.5 feet per required stall

Dimensions[1]	• depth - 18.5 feet per required stall
Tandem Parking	• allowed where stalls are shared by the same dwelling unit

Notes:

1. Any garage or other structure shall be set back a minimum of 18.5 feet from the property line to allow on-site parking on the driveway without blocking a sidewalk.

90.180 Reasonable Use Exception

1. Purpose. The purpose of the reasonable use exception is to:

   a. Provide the City with a mechanism to approve limited use and disturbance of a critical area and critical area buffer when strict application of this chapter would deny all economically viable use of the subject property;
   b. Establish guidelines and standards for the exercise of this authority adjusted to the specific conditions of each subject property; and
   c. Protect public health, welfare and safety of the citizens of Kirkland.

2. Reasonable Use. Reasonable use is a legal concept that has been articulated by federal and state courts in regulatory takings cases. In a takings case, the decision-maker must balance the public benefit against the owner's interests by considering the nature of the harm the regulation is intended to prevent, the availability and effectiveness of alternative measures, and the economic loss borne by the owner. Public benefit factors include the seriousness of the harm to be prevented, the extent to which the land involved contributes to the harm, the degree to which the regulation solves the problem, and the feasibility of less oppressive solutions.

3. Reasonable Use Process. If the strict application of this chapter would preclude all reasonable use of the subject property, an owner of the subject property may apply for a reasonable use exception. The application shall be considered under Process I of Chapter 145 KZC.

4. Submittal Requirements: As part of the reasonable use exception request application the applicant shall submit a critical area report pursuant to KZC 90.110, prepared by a qualified critical area professional approved by the City, and also fund peer review of this report by the City's consultant. The report shall include the following:

   a. For a wetland, the additional report information requirements specified in KZC 90.110.5. For a stream, the additional report information requirements specified in KZC 90.110.6;

   b. An analysis of whether any other reasonable use with less impact on the critical area and critical area buffer is possible;

   c. Site design and construction staging of the proposal shall have the least impact to the critical area and critical area buffer;

   d. A site plan showing:
      1) The critical area, critical area buffer and structure setback required by this chapter;
      2) The proposed area of disturbance both on and off the subject property pursuant to the disturbance area limitations of subsection 5.c below;
      3) The footprint of all proposed structures and improvements meeting the conditions of subsection 5 below, including;

a) buildings
b) garages and parking areas
c) driveways
d) paved surfaces, such as walking paths
e) patios, decks and similar structures
f) utility and storm water improvements
g) yard landscaping
h) retaining walls and rockeries

e. A description of protective measures that will be undertaken, such as siltation curtains, compost berms and other siltation prevention measures, and scheduling the construction activity, to avoid interference with wildlife and fisheries rearing, nesting or spawning activities;

f. An analysis of the impact that the proposed development would have on the critical area and the critical area buffer;

g. How the proposal mitigates for impacts to the critical areas and buffers;

h. How the proposal minimizes to the greatest extent possible net loss of critical area functions;

i. Whether the improvement is located away from the critical area and the critical area buffer to the greatest extent possible; and

j. Such other information or studies as the Planning Official may reasonably require.

5. Decisional Criteria: For purposes of this section, "site" means the area of disturbance on the subject property, on abutting lots, and/or within the right of way. The City shall approve applications for reasonable use exceptions only if all of the following criteria are met:

a. The following land uses may be proposed with a reasonable use exception:
1) Residential zones - one (1) single family dwelling
2) Commercial or Office zones:
a) An office use, except veterinary offices with outdoor facilities, and
b) A limited retail establishment, excluding restaurants and taverns, gas stations, vehicle or boat sales, service or repair, car washes, drive-thru, outdoor seating area and storage. In order to limit disturbance and impacts to the critical area and buffer these uses shall:
(1) Locate parking on the opposite side of the building from the critical area and
(2) Limit hours of operation to between 8:00 a.m. and 11:00 p.m.

b. There is no feasible alternative to the proposed activities and uses on the subject property, including reduction in size, density or intensity, phasing of project implementation, change in timing of activities, revision of road and lot layout, and/or related site planning considerations that would allow a reasonable economic use with less adverse impacts to the critical area and buffer;

c. Unless the applicant can demonstrate unique circumstances related to the subject property, the amount of site area that will be disturbed by structure placement and all land alteration associated with the proposed development activity, including but not limited to land surface modification, utility installation, decks, driveways, paved areas, and landscaping, shall not exceed the following limits:

1) If the subject property contains 6,000 square feet of area or less, no more than 50 percent of the site may be disturbed.
2) If the subject property contains more than 6,000 square feet but less than 30,000 square feet, no more than 3,000 square feet may be disturbed.
3) For the subject property containing 30,000 square feet or more, the maximum allowable site disturbance shall be between 3,000 square feet and 10 percent of the lot area, to be determined by the City on a case-by-case basis.
4) The amount of allowable disturbance shall be that which will have the least impact on the critical area and the critical area buffer given the characteristics and context of the subject property, critical area, and buffer.
5) Public improvements within the right-of-way required by Chapter 110 KZC, (for example required curb, gutter and sidewalk improvements), are not counted in the maximum allowable area of site disturbance. The City shall allow or require modifications to the public improvement standards that minimize the impact to the critical area and buffer and any impacts associated with required public improvements shall be mitigated by the applicant.
6) The portion of a driveway located within an improved right-of-way is not counted in the maximum allowable area of site disturbance. However, a driveway or any other private improvement located in an unimproved right-of-way shall be counted in the maximum allowable area of site disturbance. See subsection 6.a.2 below for modification to calculating on-site driveways.

The applicant shall pay for a qualified critical area professional, approved by the City, to assist with the City's determination of the appropriate limit for disturbance.

d. The proposal is compatible in design, scale and use with other legally established development in the immediate vicinity of the subject property in the same zone and with similar critical area site constraints.

e. The proposal utilizes to the maximum extent possible innovative construction, design, and development techniques that minimize to the greatest extent possible net loss of critical area functions and values, including pin construction, vegetated roofs, and pervious surfaces;

f. The proposed development does not pose an unacceptable threat to the public health, safety, or welfare on or off the subject property.

g. The proposal meets the mitigation, maintenance, and monitoring requirements of this chapter.

h. The proposed development is on a lot meeting the criteria of KZC 115.80 Legal Building Site.

i. The inability to derive reasonable use is not the result of the applicant's actions or that of previous property owners, such as by altering lot lines pursuant to Chapter 22 KMC that results in an undevelopable condition; and

j. The granting of the exception will not confer on the applicant any special privilege that is denied by this chapter to other lands, buildings, or structures under similar circumstances.

6. Modifications and Conditions: The City shall include any conditions and restrictions in the written decision that the City determines are necessary to eliminate or minimize any undesirable effects of approving the proposal. To provide reasonable use of the subject property and reduce the impact on the critical area and critical area buffer, the Planning Director pursuant to a Process I under Chapter

145 KZC is authorized to approve the following modifications:

a. Residential.

1) Where the applicant demonstrates that the residential development cannot meet the City's code requirements without encroaching into the critical area or critical area buffer:

   a) The required front yard may be reduced by up to 50 percent provided that a minimum of 18.5-foot-long parking pad between the structure and the lot line is provided; and
   b) The required side and rear yards may be reduced to 5 feet in width.

2) The portion of a driveway exceeding 30 feet in length may be exempt from the calculation of the permitted disturbance area, provided that the driveway length is the minimum necessary to provide access to the building.

3) The structure setback from a critical area buffer pursuant to KZC 90.140 may be reduced to 5 feet in width, provided that those improvements allowed in this area are limited to:
   a) Chimneys, bay windows, greenhouse windows, eaves, cornices, awnings and canopies, and decks above the ground floor extending no more than 18 inches into the structure setback;
   b) Benches, walkways, paths and pedestrian bridges extending no more than 4 feet into the structure setback;
   c) Garden sculpture, light fixtures, trellises and similar decorative structures extending no more than 4 feet in width into structure setback; and
   d) Non-native and native landscaping.

4) The garage width requirements of KZC 115.43 for detached dwelling units in low-density zones may be waived.

5) The maximum height of structures may be increased up to 5 feet if needed to reduce the slope a driveway to a structure based on existing grade. The applicant must demonstrate that the additional height is needed to reduce the steepness of the slope and no other option is available.

b. Commercial.

Where the applicant demonstrates that the commercial development cannot meet the City's code requirements without encroaching into the critical area or critical area buffer:

1) The required front yard may be reduced by up to 50%.

2) The structure setback from a critical area buffer may be reduced by 5 feet in width, provided that those improvements allowed in this area are limited to:
   a) Chimneys, bay windows, eaves, cornices, awnings and canopies;
   b) Benches, walkways, paths and pedestrian bridges extending no more than 4 feet into the structure setback;
   c) Light fixtures, trellises and similar decorative structures extending no more than 4 feet into the structure setback; and
   d) Non-native and native landscaping.

3) The maximum height of structures may be increased up to 5 feet if needed to reduce the slope of a driveway to a structure based on existing grade. The applicant must

demonstrate that the additional height is needed to reduce the steepness of the slope and no other option is available.

4) The portion of a driveway exceeding 30 feet in length may be exempt from the calculation of the permitted site disturbance area, provided that the driveway length is the minimum necessary to provide access to the building.

7. Lapse of Approval.

a. The reasonable use exception approval expires and is void if the applicant fails to file a complete building permit application within five (5) years of the final decision granting or approving the exception. However, in the event judicial review is initiated per KZC 145.110, the running of the five (5) years is tolled for any period of time during which a court order in said judicial review proceeding prohibits the required development activity, use of land, or other actions. "Final decision" means the final decision of the Planning Director; and

b. The applicant must substantially complete construction for the development activity, use of land, or other actions approved under this chapter and complete the applicable conditions listed on the notice of decision within seven (7) years after the final approval on the matter, or the decision becomes void.

8. Complete Compliance Required.

a. General. Except as specified in subsection 8.b below of this section, the applicant must comply with all aspects, including conditions and restrictions, of an approval granted under this chapter in order to construct the improvements authorized by the approval.

b. Exception: Subsequent Modification. The Planning Official may approve a subsequent modification to a specific use and site plan that has been approved through the reasonable use exception, provided the change meets the standards of this chapter. Otherwise, the applicant is required to apply for and obtain approval through a Process I pursuant to Chapter 145 KZC for a new reasonable use exception.

90.185 Nonconformances

1. General Provisions for Nonconforming Structures and Improvements in Critical Areas or Buffer.
The following general provisions apply to properties that contain nonconformances due to the existence of buffers and/or critical areas, until such times as redevelopment of the property is proposed that meets the threshold in KZC 90.130:

a. Legally established structures and improvements may remain and be repaired and maintained. See KZC 90.35 and KZC 90.185.3;
b. New structures or improvements may not be added or expanded in the buffer and/or critical area, including those listed in KZC 90.140;
c. Legally established lawns may be mowed and maintained, but not expanded in the buffer and/critical area; and
d. Non-native vegetation may be maintained, but not expanded in the buffer and/or critical area.

2. General Standards for KZC 90.188.3 through KZC 185.6.

a. The provisions of KZC 90.185.4 through 6 may each be used one time for the subject property and may be used in combination. Any building permit application utilizing these provisions shall clearly document the proposed location and size relative to the specific provision(s) being utilized.
b. Any structures or improvements that are nonconforming because of the regulations in this chapter shall be regulated pursuant to the following provisions rather than the provisions of Chapter 162 KZC. However, nonconforming multifamily structures for density pursuant to KZC 162.35.12 and continued uses pursuant to KZC 162.55 shall be regulated under Chapter 162 KZC and shall not be eligible to use the provision in this section;
c. No disturbance to the critical area is permitted. Any disturbance to the critical area buffer as a result of development activity shall be the minimum necessary and all disturbed areas shall be restored to pre-existing condition;
d. Any existing native vegetation removed in the buffer as part of the disturbance shall be replaced with native vegetation at a 1:1 ratio;
e. The limits of disturbance and a replanting plan for disturbed areas, if applicable, shall be submitted as part of the building permit application;
f. Temporary construction fencing is required pursuant to KZC 90.190. The Planning Official shall determine the appropriate location of the fencing depending on the location of existing improvements in relationship to the critical area buffer;
g. Lawn and non-native landscaped areas shall not be expanded in the buffer area; and
h. All costs for review by a qualified critical area professional and the City's review, mitigation and restoration shall be at the expense of the applicant.

3. <u>Maintenance and Repair of Nonconforming Structure</u>.

a. A legal nonconforming structure may be maintained and repaired as an Exemption pursuant to KZC 90.35 of this chapter provided that the work does not increase the previously approved structure footprint or impervious area.
b. Multifamily structures in multifamily zones that are nonconforming for density may not increase the density as part of the work on the structure. See KZC 162.35.12.

4. <u>Reconstruction of Existing Nonconforming Structures.</u>

a. General Standards:
   1) If there is no increase in the size of the structure footprint or impervious area, then the requirements of KZC 90.105 and KZC 90.110 for a critical area determination and report, KZC 90.130 for vegetative buffer, KZC 90.190 for critical area fencing and signage and KZC 90.210 for dedication of critical area and buffer are not required.
   2) Existing buffer fencing, native buffer vegetation and dedication of the critical area must be retained.

b. Detached Dwelling Units.
   1) An existing legally nonconforming building or detached garage may be reconstructed as repair, replacement or due to casualty damage such as a fire, provided that:
      a) There is no expansion of the existing size of the footprint, including decks or patios or other improvements;
      b) There is no increase in impervious surface;
      c) There is no expansion of existing exterior walls, including adding exterior walls below a cantilevered structure; except for new additional upper floors in subsection 4.b.4. below;
      d) There is no increase in the nonconformity in any way; and
      e) Reconstruction is built on the existing foundation, except as provided in subsection 4.b.2.

below;

2) With the exception of a casualty damage, if a new foundation is to be built, the new foundation must be relocated outside of the critical area, its buffer and the structure setback to the greatest extent possible given other required yards, configuration of the subject property and existing improvements;
3) For casualty damage, a structure may be reconstructed on the existing foundation, or a new foundation may be built in the same location or away from the critical area, but not closer to the critical area; and
4) Additional upper floors may be added above the ground floor if they do not encroach into the critical area, its buffer or the structure setback any further than the exterior walls of the existing nonconforming structure.

c. All Other Uses:
   1) An existing legally nonconforming structure may be reconstructed as repair, reconstruction or due to a casualty damage such as a fire, provided that there is no expansion of the existing footprint or increase of impervious area, including decks, patios or other improvements, no expansion of exterior walls, including adding exterior walls below a cantilevered structure, no increase in the nonconformity in any way, and reconstruction is built on the existing foundation;
   2) Additional upper floors may be added above the ground floor if they do not encroach into the critical area, its buffer or the structure setback any further than the exterior walls of the existing nonconforming structure, and
   3) If the cost of the reconstruction as a repair, replacement or due to a casualty damage, or for any upper floor additions exceeds 50 percent of the assessed or appraised value of that improvement, whichever is greater, the structure and improvements shall be brought into conformance.

d. In case of casualty damage, the following is required:
   1) A complete building permit application to rebuild a nonconforming structure must be submitted within two (2) years of the date of the damage or the nonconformance shall be considered to be terminated and shall not be replaced in its prior nonconforming location; and
   2) Rebuilding of the nonconforming structure shall be substantially complete within four (4) years of the date of the damage or the nonconformance shall be considered to be terminated and shall not be replaced in its prior nonconforming location; and
   3) Documentation showing the date of the damage, the location and dimensions of the damaged structure and cause of the damage shall be submitted to the Planning Official for review and confirmation.

5. <u>Expansion of Nonconforming Structure that does not Increase the Degree of Nonconformance</u>.

An existing, legally established nonconforming building may be expanded outside of a critical area, buffer or the building setback under the following standards and limitations:

a. Except as disallowed under KZC 90.185.3.b above for multifamily structures that are nonconforming for density, an expansion of a nonconforming structure that increases the footprint, impervious area or size of the structure, including new upper floors, is permitted if the expansion or any other change to the structure is outside of the critical area, critical area buffer, and structure setback;

b. If the size of the new net impervious surface or cost of new or replacement improvements meets KZC 90.130.3.a, the requirements of KZC 90.105 and KZC 90.110 for a critical area determination and report, KZC 90.130 for vegetative buffer, KZC 90.160 and KZC 90.165 for monitoring and maintenance and financial security, KZC 90.210 for dedication of critical area and buffer and KZC 90.185.6.a.11 for fencing and signage shall be met.

c. If the size of new net impervious area meets KZC 90.130.3b, the requirements of KZC 90.185.6.a.7 through 12 shall be met.

6. Expansion of Nonconforming Building that Increases the Nonconformance.

An existing, legally established nonconforming building may be expanded into a critical area buffer or the building setback under the following standards and limitations:

a. General Standards for Any Expansion.
   1) Expansion is only permitted for those buildings, that have not received City approval for a critical area or buffer modification allowed under this or a previous code or not received approval for a Reasonable Use Exception pursuant to KZC 90.180;
   2) A one (1)-time expansion of each option found in KZC 90.185.6.b. through 5.e. below is permitted on a subject property. No more than one expansion is permitted for each option. See Vegetative Buffer Standards in KZC 90.130.
   3) No expansion is permitted in a critical area buffer that is a fish and wildlife conservation area without an approved management plan pursuant to KZC 90.95;
   4) The following non-conforming improvements are allowed without going through review under KZC 90.185.6. b. through e. below if a new or replacement foundation is not required:
      a) Upper floor additions are allowed above the ground floor of an existing nonconforming building if they do not encroach closer to the critical area buffer or structure setback from the buffer beyond the existing exterior walls;
      b) Existing carports and decks with roofs may be enclosed if the new exterior walls do not extend beyond the existing foundation or corner supports of the structure; and
      c) An interior open courtyard of an existing building may be enclosed if the courtyard is covered entirely with impervious material. See KZC 90.185.6.d. if the material is not entirely impervious.
   5) Covering an existing deck with a roof or an existing pathway with a breezeway or similar improvements may be proposed using KZC 90.185. 6. b. through e. below;
   6) Any commercial parking required for additions shall not be located in the critical area buffer;
   7) A critical area determination, report and a survey pursuant to KZC 90.105 and KZC 90.110 are required if the wetland has not been rated and delineated pursuant to KZC 90.55 within the past five (5) years or the stream has not been classified or delineated pursuant to KZC 90.65;
   8) Compensatory mitigation through buffer restoration shall be provided as follows:
      a) A native vegetative buffer at a minimum ratio of 1:1 (new footprint area is equal to or less than vegetative buffer area) shall be provided;
      b) If the new or expanded building footprint results in removal of a significant tree in a buffer, the tree shall be replaced with two (2) native trees in the buffer. The replacement tree shall be six (6) foot tall for a conifer and 2-inch caliper for deciduous or broadleaf. For a removed significant tree in a buffer that is 24" in diameter, the tree shall be replaced with three (3) native trees;
      c) The vegetative buffer shall be located along the edge of the critical area or as close to the critical area as possible if the critical area is located off-site;

d) The vegetative buffer shall be 10 feet in depth and located across from the building expansion area;
e) The buffer vegetative standards pursuant to KZC 90.130 shall be used as a guideline for the mitigation area; and
f) The mitigation is in addition to revegetation of any disturbed area.

9) A mitigation planting plan, prepared by a qualified critical area professional approved by the City, shall be submitted for approval as part of the building permit. Prior to final inspection, replanting of any disturbed area and the mitigation planting shall be installed by the applicant and inspected by the City.
10) A performance and three-year maintenance and monitoring security shall be submitted with the building permit pursuant to KZC 90.165 for the mitigation plan;
11) Permanent critical area fencing and signage is required. Prior to issuance of a building permit, the Planning Official shall determine the location of the required critical area fencing and signage to be installed pursuant to KZC 90.190.
    a) The fencing shall be located at the edge of the buffer. However, if all or portions of the buffer is covered by legally established lawn, non-native vegetation and/or improvements, then the fencing shall be located at the boundary of that maintained area;
    b) If the critical area is off site and that maintained area extends to the property line, then the fencing shall be located at the property line; and
    c) Existing buffer fencing may need to be relocated to meet this provision.
12) A critical area covenant on a form approved by the City shall be recorded along with an as-built site plan showing the location of the approved expansion and mitigation vegetation in the buffer to protect the vegetated portion of the buffer in perpetuity. A critical area dedication pursuant to KZC 90.210 is not required for the vegetated portion of the buffer; and

b. <u>Expansion into Critical Area Buffer on Side of the Building Opposite of Critical Area</u>.
1) The footprint of an existing building may be expanded into the critical area buffer on the side of the dwelling unit opposite of the critical area buffer up to a maximum of 1,000 square feet. The existing building must be between the addition and the critical area (see Chapter 180 KZC, Plate 26);
2) Only a one-time expansion of this option is permitted for the subject property. See KZC 90.185.6.a.2) above; and
3) See General Standards in KZC 90.185.6.a above for an expansion.

c. <u>Expansion into Structure Setback from the Buffer</u>.
1) The footprint of an existing building may be expanded into the structure setback up to a maximum of 500 square feet;
2) If an addition is located at the edge of the buffer, the portion of the buffer next to the side of the addition abutting the buffer is considered a structure setback from the buffer. Only necessary maintenance and repair of the addition are permitted in this portion of the structure setback. No improvements pursuant to KZC 90.140 are permitted in this portion of the structure setback;
3) Only a one-time expansion of this option is permitted for the subject property. See KZC 90.185.6.a.2) above; and
4) See General Standards in KZC 90.185.6.a above for a building expansion.

d. <u>Expansion into Critical Area Buffer but No Closer than the Existing Building</u>.
1) The footprint of an existing building may be expanded into the critical area buffer, but no closer than the edge of the existing building nearest to the critical area, up to maximum of 500 square feet (see Chapter 180 KZC, Plate 26);

2) An interior open courtyard of an existing building may be enclosed up to 500 square feet if the courtyard is covered partially or entirely with pervious material. This improvement can be done in conjunction with KZC 90.185.6.d.1) above if the total new imperious area of the expanded building does not exceed 500 square feet;
3) The minimum buffer width for the addition shall be 60% of the required buffer width standard pursuant to KZC 90.55 for wetlands and KZC 90.65 for streams;
4) Only a one-time expansion of this option is permitted for the subject property. See KZC 90.185.6.a.2) above; and
5) See General Standards in KZC 90.185.6.a above for a building expansion.

e. Expansion into Critical Area Buffer between the Building and the Critical Area.
1) The footprint of a building may be expanded into the critical area buffer between the building and the critical area up to maximum of 250 square feet (see Chapter 180 KZC, Plate 26);
2) The new footprint must be attached to the original building and not to any subsequent footprint addition under KZC 90.185.5.e;
3) The minimum buffer width for the addition shall be 60% of the required buffer width standard pursuant to KZC 90.55 for wetlands and KZC 90.65 for streams;
4) Only a one-time expansion of this option is permitted for the subject property. See KZC 90.185.6.a.2) above; and
5) See General Standards in KZC 90.185.6.a above for a building expansion.

90.190 Critical Area Markers, Fencing and Signage

1. Survey Stakes. Permanent survey stakes delineating the boundary of the critical area buffer shall be set, using iron or concrete markers as established by current survey standards. For public projects, alternative survey stakes may be approved by the Planning Official, such as flexible delineator posts.

2. Construction Fencing.
   a. Prior to commencement of any grading or other development activities on the subject property, a 6-foot-high construction chain link fence with silt fencing must be installed along the entire edge of the buffer;
   b. The fence may not be located in the critical area buffer, except see Non-conformance section pursuant to KZC 90.185.2;
   c. The Planning Official shall inspect the fence prior to commencement of any work;
   d. The fence must remain in place until completion of the project and not be removed at any time other than as authorized by the Planning Official;
   e. The location of construction fencing for Nonconformances shall be on a case by case basis as determined by the Planning Official; and
   f. The location of construction fencing for public agency and utilities activities, improvements or uses shall be determined on a case-by-case basis by the Planning Official.

3. Permanent Fencing.
   a. Except as specified in subsections 3.b through 3.d of this section, upon completion of the project:
      1) A permanent split rail, open slatted with at least 18 inches between each slat, wrought iron, chain link, or similar non-solid fence between three (3) and six (6) feet in height must be installed along the entire edge of the buffer;
      2) Solid fencing is not permitted;
      3) Except for split rail, a gate is required for pedestrian access to the buffer;
      4) The fence may not be located in the critical area buffer, except for properties containing nonconformances pursuant to KZC 90.185.6.a.11;

5) The Planning Official shall inspect the fence prior to final inspection; and
6) The fence must be maintained and remain in perpetuity.

b. Except for utility substations, permanent fencing is not required for public or private utility activities or uses occurring in utility corridors, public rights-of-way, the Cross Kirkland Corridor or the Eastside Rail Corridor.

c. The location of permanent fencing for public agency activities, improvements or uses shall be determined on a case-by-case basis by the Planning Official.

d. The location of fencing for Nonconformances shall be determined on a case by case by the Planning Official. See KZC 90.185.

4. Permanent Signage.

a. Upon completion of the project, permanent signage shall be attached to the fence stating that the protected critical area and buffer must not be disturbed other than necessary for maintenance of vegetation;
b. The signs must be maintained and remain in perpetuity;
c. Signage shall meet the administrative standards of the Planning and Building Department for design, number and location;
d. The location of signage for public agency activities or uses shall be determined by the Planning Official on a case-by-case basis;
e. Signage for Nonconformances shall be determined on a case-by-case basis by the Planning Official. See KZC 90.185; and
f. The Planning Official shall inspect the signage prior to final inspection.

90.195 Pesticide and Herbicide Use

Application of pesticides, herbicides, or fertilizers and irrigation practices for residential, commercial and institutional uses shall follow the Best Management Practices (BMP) for landscaping activities and vegetation management in the King County Stormwater Pollution Prevention Manual, as amended. These practices include:

1. Never apply pesticides and fertilizers if it is raining or about to rain;
2. Do not apply pesticides within 100 feet of surface waters, such as lakes, ponds, wetlands, streams and stormwater conveyance ditches unless approved and permitted by the Washington State Department of Ecology;
3. Determine the proper fertilizer application for the types of soil and vegetation involved. Follow manufacturers' recommendations and label directions;
4. Clean up after spills immediately;
5. Use mulch or other erosion control measures when soils are exposed for more than one week during the dry season or two days during the rainy season;
6. Ensure sprinkler systems do not spray beyond vegetated areas resulting in the excess water discharging into the storm drain system; and
7. Use of hazardous substances, pesticides and fertilizers in a critical area containing a fish and wildlife habitat conservation area must follow state and City standards.

90.200 Critical Area Buffer and Structure Setback from Buffer Under Prior Approvals

1. If the City approved a development permit through Process I, II, IIA, IIB, or a Planning Official decision (excluding critical area determinations and delineations), and/or a subdivision or short subdivision, and that development permit or subdivision or short subdivision approval established critical area buffers and/or structure setbacks on the subject property allowed under the KZC at the time of approval, then those structure setbacks and/or buffers shall apply, provided that:
    a. The development permit or subdivision or short subdivision approval is valid; and
    b. The development permit or subdivision or short subdivision has not lapsed pursuant to the applicable lapse of approval standards.

    All further development activity and construction on the subject property shall comply with the provisions of this chapter.

2. All provisions of this chapter that do not conflict with the structure setback and/or buffer requirements set forth in Section 1 of this provision shall fully apply to the subject property.

90.205 Code Enforcement

Violations shall be subject to the City's code enforcement procedures and penalties under Chapter 1.12 KMC. In addition to any enforcement action or determinations pursuant to KMC 1.12, enforcement for critical area violations shall meet the following requirements:

1. Unauthorized development activity, use, land surface modification or other disturbances to a critical area or buffer shall cease immediately. All disturbances shall be rectified and restored consistent with an approved correction plan;
2. A correction plan, prepared by a qualified critical area professional approved by the City, must be submitted to the City within 30 calendar days of the enforcement notice from the City in conformance with this chapter unless otherwise approved by the City;
3. The correction plan shall include:
    a. Site plan drawn to scale;
    b. Location of the sensitive area and buffer;
    c. Affected area;
    d. A restoration plan that includes a planting plan that meets the requirements for a vegetative buffer in KZC 90.130 if the disturbance occurred in the buffer. If the disturbance occurred in a stream or wetland, the restoration plan must propose appropriate restoration based on the type of wetland or stream;
    e. The Planning Official may require a critical area report pursuant to KZC 90.110, funded by the property owner, or at a minimum a wetland delineation of the disturbed wetland, classification of a stream if it cannot be determined by the City, boundary of the critical area buffer and a survey depending on the extent and nature of the disturbance; and
    f. The critical area report shall make recommendations on a correction plan. The City may require the applicant to fund City peer review of the correction plan depending on the nature and extent of disturbance.
4. The Planning Official shall review and approve the correction plan based on the regulations in this chapter and inspect the restoration after installation. The City may require the applicant to fund City peer review to inspect the restoration plan depending on the nature and extent of disturbance;
5. The applicant shall pay the City's cost for the enforcement, including review of the plan and do the inspection;
6. The City may require a monitoring and maintenance plan for approval by the Planning Official pursuant to KZC 90.160 depending on the nature and extent of the disturbance;
7. The City may require a performance and maintenance/monitoring financial security for restoration depending on the nature and scope of the disturbance. If a security is required, the security shall be

on a form and in an amount determined by the Planning Official. See KZC 90.165;

8. The correction work shall be completed within 60 calendar days from the date of the enforcement notice, unless otherwise specifically approved by the Planning Official;
9. The requirements for a critical area dedication must be met pursuant to KZC 90.210; and
10. For repeat violators, the City is authorized to require monitoring and maintenance to extend beyond requirements of KZC 90.160 and funded by the violator.

90.210 Dedication and Maintenance of Critical Area and Buffer

1. Dedication.

   a. Consistent with law, the applicant shall dedicate development rights, air space, or grant a greenbelt protection or open space easement to the City to protect sensitive areas and their buffers;
   b. Land survey information shall be provided by the applicant for this purpose in a format approved by the Planning Official;
   c. The applicant shall record the dedication with the King County Recorder's Office as part of a subdivision recording or prior to issuance of a final inspection for all other developments; and
   d. The applicant shall provide proof of title ownership for the wetlands and buffers, including any compensatory mitigation areas; and
   e. If the applicant does not hold title ownership to the mitigation site, proof of perpetual right to locate the mitigation on the subject property shall be provided.

2. Critical Area Boundaries Subject to Change. Critical area categories, ratings, classifications and boundaries are subject to change due to amendments to this chapter and/or physical changes to the subject property or vicinity. Subsequent development on a subject property may require a change in the boundary of critical area tract or easement.

3. Removal or Modification of Dedication.

   a. The Planning Director may authorize removal or modification to a recorded critical area dedication, provided that removal or modification does not conflict with any requirement of this chapter or prior approval;
   b. The applicant shall submit a request in writing along with documentation as to why the dedication should be removed or modified and how the change is consistent with this chapter, along with any required review fee; and
   c. If the removal or modification is approved, the applicant shall record a document with King County Recorder's Office revising the dedication.

4. Maintenance of Critical Area and Buffer.

   In critical areas and their buffers, native vegetation shall not to be removed without prior City approval. It is the responsibility of the property owner to maintain critical areas and their buffers by removing nonnative, invasive, and noxious plants in a manner that will not harm critical areas or their buffers.

90.215 LIABILITY

Prior to issuance of a land surface modification permit or a building permit, whichever is issued first, the applicant shall enter into an agreement with the City that runs with the property, in a form acceptable to the City Attorney, indemnifying the City from any claims, actions, liability and damages to critical areas arising out of development activity on the subject property. The applicant shall record the agreement with the King County Recorder's Office.

90.220 APPEALS

Any decision made by the Planning Official or Planning Director pursuant to this chapter may be appealed using, except as stated below, the applicable appeal provisions of Chapter 145 KZC. If a proposed development activity requires approval through Process IIA or IIB (as described in Chapters 150 and 152 KZC, respectively), any appeal of a classification, determination, or decision shall be heard as part of that other process.

90.225 LAPSE OF APPROVAL

Any decision made by the Planning Official and Planning Director authorized by this chapter shall be subject to the lapse of approval provisions of KZC 145.115.

MINOR CODE AMENDMENTS IMPLEMENTATING CHAPTER 90 KZC

A. Kirkland Zoning Code

Chapter 1 – User Guide

Section 1.05. How to Use this Code

No change to 1-21.

22. Streams, Lakes, Wetlands – Does the subject property contain or is this property close to a stream; either above ground or in a culvert flowing surface water; lake other than Lake Washington; or a wetland? If so, see Chapter 90 KZC, Critical Areas – Wetlands, Streams, Minor Lakes, Fish and Wildlife Habitat Conservation Areas and Frequently Flooded Areas ~~Drainage Basins~~.

Chapter 5 – DEFINITIONS

Sections:

5.05 User Guide

5.10 Definitions

5.05 User Guide

The definitions in this chapter apply for this code. Also see definitions contained in Chapter 83 KZC for shoreline management, Chapter 90 KZC for critical areas – wetlands, streams, minor lakes, fish and wildlife habitat conservation areas and frequently flooded areas~~drainage basins~~, Chapter 95 KZC for tree management and required landscaping, and Chapter 113 KZC for cottage, carriage and two/three-unit homes that are applicable to those chapters. 5.05.326

5.10 Definitions

Delete the following existing definitions:

5~~.10.282 **Environmentally Sensitive Areas Maps (ESA) -** As defined in Chapter 90 KZC~~

5~~.10.283 **Environmentally Sensitive Area Buffer -** As defined in Chapter 90 KZC~~

~~5.10.530 **Minor Lake-** As defined in Chapter 90KZC~~

~~5.10.535 **Minor Stream-** Any stream that does not meet the definition of major stream.~~

~~5.10.854 **Significant Habitat Area** - As defined in Chapter 90 KZC~~

~~5.10.932 **Type I Wetlands** - As defined in Chapter 90 KZC~~

~~5.10.933 **Type II Wetlands** – As defined in Chapter 90 KZC~~

Revise the following existing definition:

5.10.326 -Frequently Flooded Areas – For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise; ~~as defined in Chapter 90 KZC~~ all areas shown on the Kirkland ~~sensitive~~ critical area~~s~~ maps and as noted on effective FEMA maps as being within a 100-year floodplain, as well as all areas of special flood hazard regulated by Chapter 21.56 KMC.

5.10.529-**Minor Improvements –** ~~As defined in Chapter 90KZC~~ Private ~~W~~walkways, pedestrian bridges, benches, and similar features, as determined by the Planning Official~~, pursuant to KZC 90.45(5) and 90.90(5)~~.

5.10.823 **Salmonid** – ~~As defined in Chapter 90KZC~~ A member of the fish family salmonidae, which include chinook, coho, chum, sockeye, and pink salmon; rainbow, steelhead, and cutthroat trout; brown trout; brook and dolly varden char, kokenee, and white fish.

5.10.895 **Stream**- For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise; ~~as defined in Chapter 90KZC~~ ~~A~~areas where surface waters produce a defined channel or bed that demonstrates clear evidence of the passage of water, including but not limited to bedrock channels, gravel beds, sand and silt beds, and defined-channel swales. The channel or bed need not contain water year- round, provided there is evidence of a least intermittent flow during years of normal rainfall. Streams do not include irrigation ditches, canals, storm or surface water runoff devices, or other entirely artificial watercourses, unless they are used by salmonids or convey a naturally occurring stream that has been diverted into the artificial channel, or are created for the purposes of stream mitigation.

5.10.950 Urban Separator

Areas planned for permanent low density residential within the Urban Growth Area that protect adjacent resource land, ~~environmentally sensitive~~ critical areas, or rural areas, and create open space corridors within and between the urban areas which provide environmental, visual, recreational and wildlife benefits. The King County Countywide Planning Policies have designated the RSA 1 zone as an urban separator.

5.10.985 **Wetland** For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise~~, as defined in Chapter 90 KZC~~ **Wetland**" or "wetlands" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands. (RCW 36.70A.030)

Add the following new definitions:

Area of Permanent Disturbance: Portion of a critical area or its buffer where the ground surface or vegetation has been legally altered as part of a development action other than a mitigation area.

Best Available Science – Current scientific information used in the process to designate, protect, or restore critical areas; that is, derived from a valid scientific process as defined by WAC 365-195-900 through 925, as amended.

Best Management Practices (BMPs) - Conservation practices or systems of practices and management measures that:

(a) Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxins, or sediment;

(b) Minimize adverse impacts to surface water and ground water flow and circulation patterns and to the chemical, physical and biological characteristics of critical areas;

(c) Protect trees, vegetation, and soils designated to be retained during and following site construction and native plant species appropriate to the site for re-vegetation of disturbed areas; and

(d) Provide standards for proper use of chemical herbicides within critical areas.

Bog – A low-nutrient, acidic peat wetland with organic soils and characteristic bog plants.

Critical Areas – Critical areas include the following areas: (a) wetlands; (b) critical aquifer recharge areas; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas, as defined in RCW 36.70A and this Chapter.

Critical Area Buffer – The area contiguous to a critical area that maintains the functions and/or structural stability of the critical area.

Critical Area Maps – Maps contained in the Kirkland Comprehensive Plan; specifically Geologically Hazardous Areas Map for Chapter 85 KZC, and Wetlands, Streams and Lakes Map for Chapter 90 KZC

Critical Area Restoration – Measures taken to restore an altered or damaged natural feature, including:

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

(b) Actions performed to re-establish structural and functional characteristics of a critical area that have been lost by alteration, past management activities, catastrophic events, or introduction of invasive species.

Compensatory Wetland Mitigation – Means restoration (re-establishment or rehabilitation), creation (establishment), enhancement, and in certain circumstances, preservation for the purposes of offsetting unavoidable adverse impacts after all appropriate and practical avoidance and minimization of wetland impacts has been achieved.

Emergent Wetland – A wetland with at least 30 percent of the surface area covered by erect, rooted, herbaceous vegetation as the uppermost vegetative strata.

Fish and Wildlife Habitat Conservation Area – Areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. These areas include:
(a). Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association;
(b). Areas with which species of local importance have a primary association;

(c). Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds;
(d). Waters of the state, including lakes, rivers, ponds, streams, inland waters, underground waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Footprint – The area on a project site that is used by the building or structure and is defined by the perimeter of the building or structure.

Forested Wetland – A wetland defined by the Cowardin System with at least 30 percent of the surface area covered by woody vegetation greater than 20 feet in height that is a least partially rooted in the wetland.

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

Growing Season –Growing season, for the purposes of these regulations, may be considered the period from March 1st through October 31st of any calendar year.

Impervious Surface – For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise; impervious surface is a placed, created, constructed or compacted hard surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under pre-development conditions. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam materials or other surfaces which similarly impede the natural infiltration of surface water or stormwater. Impervious Surfaces do not include pervious surfaces as defined in this Code.

In-Kind Compensation or Mitigation – To replace critical areas with substitute areas whose characteristics and functions closely approximate those destroyed or degraded by a regulated activity.

Isolated Wetland – A wetland that is hydrologically isolated from other aquatic resources, or as determined by the United States Army Corps of Engineers (USACE).

Minor Lake – Forbes Lake and Totem Lake

Mitigation – A sequence of measures to avoid, minimize and mitigate for impacts, as follows:

a. Avoid the impact altogether by not taking a certain action or parts of actions;
b. Minimize impacts by limiting the degree or magnitude of the action and its implementation;
c. Rectify the impact by repairing, rehabilitating, or restoring the affected environment;
d. Reduce or eliminating the impact over time by preservation and maintenance operations during the life of the action;
e. Compensate for the impact by replacing or providing substitute resources or environments; and/or
f. Monitor the impacts and compensation projects and taking appropriate corrective measures.

Mitigation Service Area – The geographic area within which impacts can be mitigated at a specific mitigation bank or an in-lieu-fee program, as designated in its instrument.

Monitoring – Evaluating the impacts of development proposals on the biological, hydrological, and geological elements of such systems, and assessing the performance of required mitigation measures through the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features. Monitoring includes gathering baseline data.

Native Vegetation – Vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been expected to naturally occur on the site.

Off-Site Compensation – To replace critical areas away from the site on which a critical area has been impacted.

On-Site Compensation – To replace critical areas at or adjacent to the site on which a critical area has been impacted.

Ordinary High Water Mark – For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise; the mark that will be found on all lakes and streams by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation, as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the Department of Ecology; provided, that in any area where the OHWM cannot be found, the OHWM adjoining fresh water shall be the line of mean high water, or as amended by the state. For Lake Washington, the OHWM corresponds with a lake elevation of 18.5 feet, based on the NAVD 88 datum.

Out-of-Kind Wetland Compensation or Mitigation – To replace wetland or habitat with substitute wetlands or habitat whose characteristics do not closely approximate those adversely affected, destroyed, or degraded by a regulated activity.

Pervious Surface – For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise, as opposed to impervious surfaces, these are surfaces that allow water to infiltrate into the ground. Pervious surfaces include, pervious paving, lawn, landscaping, bare ground, wood chips, pasture and native vegetation areas. For the purposes of compliance with stormwater development regulations, impervious and pervious surfaces are defined pursuant to KMC 15.52.

Public Agency - Any agency, political subdivision or unit of government including, but not limited to, municipal corporations, special purpose districts and local service districts, any agency of the State of Washington, the United States or any state thereof or any Indian tribe recognized as such by the federal government.

Qualified Critical Area Professional – A qualified professional for critical areas shall have a minimum of 5 years of experience in the pertinent scientific discipline and experience in preparing critical area reports. A qualified critical area professional must have obtained a Bachelor's degree in biology, engineering, geology, environmental studies, fisheries, geomorphology, or a related field. The planning official may require professionals to demonstrate the basis for qualifications and shall make the final determination as to qualifications. A qualified professional must meet the following specific professional requirements, dependent upon the type of critical area on the subject property:

A. Wetlands and streams qualified professional:
   1. Shall be certified as a Professional Wetland Scientist; and

2. Have at least five years of full-time work experience delineating wetlands using the state or federal manuals, preparing wetland reports, conducting function assessments, and developing and implementing mitigation plans; and

B. Fish and Wildlife Habitat Conservation Areas qualified professional: A professional biologist, with a degree in biology or a related degree, with experience preparing reports for the relevant type of species.

C. Geologically Hazardous Area qualified professional: A professional engineer, geologist or hydrogeologist, licensed in the state of Washington, with experience analyzing geologic, hydrologic, and groundwater flow systems, and who has experience preparing reports for the relevant type of hazard.

Repair and Maintenance –An activity that restores the character, scope, size, and design of a structure to its previously authorized and undamaged condition. Activities that drain, dredge, fill, flood, or otherwise alter critical areas are not included in this definition. Examples of repair and maintenance include painting; replacement of siding, windows, or roofing; changing doors to windows and windows to doors, but not including reconstruction or replacement of the entire structure, including exterior bearing walls.

Scrub-shrub wetland – A wetland with at least 30 percent of its surface area covered by woody vegetation less than 20 feet in height as the uppermost strata.

Species – Any group of animals or plants classified as a species as commonly accepted by the scientific community.

Species of Local Importance – Those species of local concern designated by the City in Chapter 90.95.8 due to their population status or their sensitivity to habitat manipulation.

Species, Listed -- Any species listed under the federal Endangered Species Act or state endangered, threatened, and sensitive, or priority lists (see WAC 232-12-297 or "Priority Habitat and Species List," Washington Department of Fish and Wildlife, as revised).

Storm Water Dispersion Device –devices that disperse storm water, such as flow spreaders and rock pads

Storm Water Dispersion Flow Path – The route that storm water runoff follows after release from a storm water dispersion device. The route is designed to disperse water over a vegetated substrate.

Stream Channel Stabilization - Actions to stabilize a steam bank to prevent or limit erosion or risk of slope failure.

Stream Types –

1. Type F: means segments of natural waters, which are within the bankfull widths of defined channels and periodically inundated areas of their associated wetlands, or within lakes, ponds, or impoundments having a surface area of 0.5 acre or greater at seasonal low water and which contain fish habitat pursuant to WAC 222-16-030, as amended.
2. Type Np: means all segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are flowing waters that do not go dry any time of a year of normal rainfall and include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow pursuant to WAC 222-16-030, as amended.
3. Type Ns: means all segments of natural waters within the bankfull width of the defined channels that are not Type F, or Np Waters. These are seasonal, nonfish habitat streams in which surface

flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np Water. Ns Waters must be physically connected by an above-ground channel system to Type F, or Np Waters pursuant to WAC 222-16-030, as amended.

Street Shoulder - The portion of the street outside the edge of the asphalt or concrete traveled way that was installed to provide lateral support for the street. The material typically found in a shoulder consists of gravel, pit run, gravel borrow, and other material that can be installed and compacted to support a road or sidewalk.

Structure Setback – A minimum required distance from a designated or modified critical area buffer within which no above ground structures may be constructed, except as provided in Chapter 90.

Upland - For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise; generally described as the dry land area above and landward of the OHWM, but not including wetlands.

Watershed – For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise, a region or area bounded on the periphery by a parting of water and draining to a particular watercourse or body of water.

Wetland Category or **Wetland Rating–** For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise; the classification of wetlands according to the Washington State Wetland Rating System for Western Washington (Department of Ecology 2014, or as revised). This document contains the definitions, methods and a rating form for determining the categorization of wetlands below:

A. Category I. Category I wetlands are: (1) relatively undisturbed estuarine wetlands larger than 1 acre; (2) wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR; (3) bogs; (4) mature and old-growth forested wetlands larger than 1 acre; (5) wetlands in coastal lagoons; (6) interdunal wetlands that score 8 or 9 habitat points and are larger than 1 acre; and (7) wetlands that perform many functions well (scoring 23 points or more). These wetlands: (1) represent unique or rare wetland types; (2) are more sensitive to disturbance than most wetlands; (3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (4) provide a high level of functions.

B. Category II. Category II wetlands are: (1) estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre; (2) interdunal wetlands larger than 1 acre or those found in a mosaic of wetlands; or (3) wetlands with a moderately high level of functions (scoring between 20-22 points).

C. Category III. Category III wetlands are: (1) wetlands with a moderate level of functions (scoring between 16 and 19 points); (2) can often be adequately replaced with a well-planned mitigation project; and (3) interdunal wetlands between 0.1 and 1 acre. Wetlands scoring between 16 and 19 points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

D. Category IV. Category IV wetlands have the lowest levels of functions (scoring fewer than 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.

Wetland Creation – The manipulation of the physical, chemical, or biological characteristics to develop a wetland on an upland or deepwater site where a wetland did not previously exist.

Wetland Enhancement – The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present.

Wetland Field Data Form – The Wetland Rating form which is used to classify wetlands according to the Washington State Wetland Rating System for Western Washington.

Wetland In-Lieu-Fee Program – An agreement between a regulatory agency (state, federal, or local) and a single sponsor, generally a public natural resource agency or non-profit organization. Under an in-lieu-fee agreement, the mitigation sponsor collects funds from an individual or a number of individuals who are required to conduct compensatory mitigation required under a wetland regulatory program. The sponsor pools from multiple permittees to create one or a number of sites under the authority of the agreement to satisfy the permittees' required mitigation.

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

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

Wetland Preservation – The removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This term includes the purchase of land or conservation easements, repairing water control structures or fences, or structural protection. Preservation does not result in a gain of wetland acres but may result in a gain in functions over the long term.

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

Wetland Rehabilitation – The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain or returning tidal influence to a wetland.

Wildlife Species of Local Importance – The species include Coho Salmon, Sockeye/Kokanee Salmon, and Cutthroat Trout, Bald Eagle, Pileated Woodpecker and Great Blue Heron based on the Department of Fish and Wildlife's list of State Priority Species list and maps. Not included in the list are species within the shoreline jurisdiction regulated under Chapter 83 KZC.

Water Resource Inventory Area (WRIA) 8 – One of Washington States 62 major watersheds. WRIA 8 is located in the Cedar River/Sammamish basin, which drains into Lake Washington. WRIA 8 encompasses the City of Kirkland, along with 26 other member jurisdictions, including portions of

unincorporated King and Snohomish Counties. WRIAs support an integrated approach to managing water resources in Washington.

Chapter 20 – Medium Density Residential Zones

Section 20.05.020 Common Code Reference

1 through 3: No Change.

4. Development may be limited by Chapter 83 or 90 KZC, regarding development near streams, lakes, ~~and~~ wetlands, fish and wildlife habitat conservation areas and frequently flooded areas. ~~In addition, t~~The site must be designed to concentrate development away from~~,~~ and to minimize impact on~~,~~ these critical areas ~~the wetlands.~~

5. No change

6. Refer to KZC ~~90.75~~ 90.90 for regulations regarding Forbes Lake.

7. through 10: no change

Section 20.10.050 Planned Area 9

1.4: No change

5. Structures must be clustered to the maximum extent possible with open space provided adjacent to any abutting public park, low density zone, or ~~environmentally sensitive~~ critical area (does not apply to Detached Dwelling Unit, Mini-School or Mini-Day-Care, Public Utility, Government Facility, Community Facility and Park Use uses).

Chapter 30 – Offices Zones

Section 30.20, Permitted Uses

PU-11.The common recreational open space requirements may be waived if the City determines that preservation of ~~environmentally sensitive~~ critical areas provides a superior open space function

Chapter 53 – Rose Hill Business District (RHBD) Zones

Section 53.12 Zone RH 1B

Subsection 53.12.010 Vehicle Service Station
Special Regulations:
1 through 4: No change

5. The following improvements must be installed:
   a. No change

   b. Crosswalk markings at the intersection of NE 90th Street and 122nd Avenue NE.
   Minor deviations may be approved by the Public Works Director. If improvements will result in impacts to adjacent wetlands, they must comply with Chapter 90 KZC, Critical Areas – Wetlands, Streams, Minor Lakes, Fish and Wildlife Habitat Conservation Areas and Frequently Flooded Areas ~~Drainage Basins~~, requirement

   c. and d: No change

Chapter 70 – Holmes Point Overlay Zone

Section 70.15 Standards

Within the parcels shown on the Kirkland Zoning Map with an (HP) suffix, the maximum impervious surface standards set forth in Chapter 18 KZC are superseded by this (HP) suffix, and the following development standards shall be applied to all residential development:

1. When review under Chapter 85 KZC (Critical Areas - Geologically Hazardous Areas) or Chapter 90 KZC (Critical Areas – Wetlands, Streams, Minor Lakes, Fish and Wildlife Habitat Conservation Areas and Frequently Flooded Areas ~~Drainage Basins~~) or the City of Kirkland's Surface Water Design Manual is required, the review shall assume the maximum development permitted by this (HP) suffix condition will occur on the subject property, and the threshold of approval shall require a demonstration of no significant adverse impact on properties located downhill or downstream from the proposed development.

2-8: No changes

9. Pervious areas which are not geologically hazardous areas or ~~environmentally sensitive~~ or do not contain wetlands, streams, minor lakes, fish and wildlife habitat conservation areas and frequently flooded areas critical areas governed by Chapter 85 or 90 KZC shall be maintained as open space in an undisturbed state, except for the following activities:

   a. through e: No change

Chapter 75 – Historic Landmark Overlay Zone and Historic Residence Designation

Section 75.47 Historic Landmark Overlay Zone Effect – Modification of Code Provisions

   1. General – The provisions of this section establish the circumstances under which the City may modify any of the provisions of this code for an historic landmark, except:

   a. The City may not modify any of the provisions of this chapter; and

   b. The City may not modify any provision of this code that specifically states that its requirements are not subject to modifications under this chapter; and

c. The City may not modify any of the procedural provisions of this code; and

d. The City may not modify any provision that specifically applies to development ~~on~~ in a critical area or its buffer ~~a wetland, flood plain,~~ or on a regulated slope; and

e. The City may not allow any use in a low density zone that is not specifically allowed in that zone unless the subject property contains at least 35,000 square feet.

Chapter 85 – Critical Areas: Geologically Hazardous Areas

Section 85.12 Critical Area ~~Environmentally Sensitive Areas (ESA)~~ Maps

As part of the City's Comprehensive Plan, ~~SEPA Ordinance~~, City Council ~~adopts, and~~ from time to time amends the critical area maps~~, a map folio entitled "Kirkland Sensitive Areas."~~ Included in the critical area maps is a map ~~This folio contains maps~~ entitled "Geologically Hazardous Areas" ~~Seismic Hazards" and "Landslide and Erosion Hazards."~~ ~~These~~ The maps are ~~will be~~ used as a guide only to determine the presence of seismic hazards, erosion hazards, and landslide hazards, and the determination regarding whether these hazards exist on or near the subject property will be based on the actual characteristics of these areas and the definitions of this code.

Section 85.13 Definitions

The following definitions apply throughout this code, unless, from the context, another meaning is clearly intended:

~~1. Environmentally Sensitive Areas Maps – As referred to defined in Chapter 90 KZC.~~

2 through 5 renumbered.

Section 85.15 Required Information – Landslide Hazard Areas and Seismic Hazard Areas

The City may require the applicant to submit some or all of the following information, consistent with the nature and extent of the proposed development activity, for any proposed development activity in a landscape hazard area or seismic hazard area or on property which may contain one (1) of these areas based on the ~~environmentally sensitive~~ Geologically Hazardous Areas ~~areas~~ maps or preliminary field investigation by the Planning Official:

1. A topographic survey of the subject property, or the portion of the subject property specified by the Planning Official, with contour intervals specified by the Planning Official. This mapping shall contain the following information:

a. Delineation of areas containing slopes 15 percent or greater.

b. The proximity of the subject property to wetlands, streams and lakes ~~streams~~.

c. The location of structured storm drainage systems on the subject property.

d. Existing vegetation, including size and type of significant trees.

Chapter 95 - Tree Management and Required Landscaping

Section 95.10 Definition

1.-12. No change

13. Retention Value – The Planning Official's designation of a tree based on information provided by a qualified professional that is one (1) of the following:

a. High, a viable tree, located within required yards and/or required landscape areas. Tree retention efforts shall be directed to the following trees if they are determined to be healthy and windfirm by a qualified professional, and provided the trees can be safely retained when pursuing alternatives to development standards pursuant to KZC 95.32:

1) Specimen trees;

2) Tree groves and associated vegetation that are to be set aside as preserved groves pursuant to KZC 95.51 (3);

3) Trees on slopes of at least 10 percent; or

4) Trees that are a part of a grove that extends into adjacent property, such as in a public park, open space, ~~sensitive~~ critical area buffer or otherwise preserved group of trees on adjacent private property. If significant trees must be removed in these situations, an adequate buffer of trees may be required to be retained or planted on the edge of the remaining grove to help stabilize;

Section 95.23 Tree Removal – Non Associated with Development Activity

5. Tree Removal Allowances.

a, b and c: no changes

d. Removal of Hazard or Nuisance Trees. Any private property owner seeking to remove any number of significant trees which are a hazard or nuisance from developed or undeveloped property or the public right of way shall first obtain approval of a tree removal permit and meet the requirements of this subsection.

1) Tree Risk Assessment. If the nuisance or hazard condition is not obvious, a tree risk assessment prepared by a qualified professional explaining how the tree(s) meet the definition of a nuisance or hazard tree is required. Removal of nuisance or hazard trees does not count toward the tree removal limit if the nuisance or hazard is supported by a report prepared by a qualified professional and approved by the City.

2) Trees in Critical Areas or Critical Areas Buffers. See Chapter 90 KZC. ~~For hazard or nuisance trees in (a) easements dedicated to ensure the protection of vegetation; (b) critical areas; or (c) critical area buffers, a planting plan is required to mitigate the removal of the hazard or nuisance tree. The priority action is to create a "snag" or wildlife tree with the subject tree. If creation of a snag is not feasible, then the felled tree shall be left in place unless the Planning Official permits its removal in writing.~~

~~The intent of preserving vegetation in and near streams and wetlands and in geologically hazardous areas is to support the functions of healthy sensitive areas and sensitive area buffers (see Chapter 90 KZC) and/or avoid disturbance of geologically hazardous areas (see Chapter 85 KZC).~~

~~The removal of any tree in a critical area or native growth protective easement will require the planting of a native tree of a minimum of six (6) feet in height in close proximity to where the removed tree was located. Selection of native species and timing of installation shall be coordinated with the Planning Official.~~

Section 95.40 Required Landscaping

1. User Guide. Chapters 15 through 56 KZC containing the use zone ~~charts~~ or development standards tables assign a landscaping category to each use in each zone. This category is either "A," "B," "C," "D," or "E." If you do not know which landscaping category applies to the subject property, you should consult the appropriate use zone ~~chart~~ or development standards tables.

Requirements pertaining to each landscaping category are located throughout this chapter, except that Landscaping Category E is not subject to this section.

Landscape Categories A, B, C, D, and E may be subject to additional related requirements in the following other chapters:

a. and b: No change

c. Chapter 90 KZC, ~~Drainage Basins~~ Critical Areas, addresses vegetation within ~~sensitive~~ critical areas and ~~sensitive~~ critical area buffers.

d., e and f: No change

Section 95.50 Installation Standards for Required Plantings

1 through 10: No changes

~~11. Mitigation and Restoration Plantings in Critical Areas and Critical Area Buffers. Plants intended to mitigate for the loss of natural resource values are subject to the following requirements in addition to the other landscaping requirements found in KZC 95.40 through 95.45. Where these requirements conflict with other requirements of this chapter, these requirements take precedence. Refer to Chapters 85 and 90 KZC for additional requirements for these areas.~~

~~a. Plant Source. Plant materials must be native and selected from the Kirkland Plant List. Seed source must be as local as possible, and plants must be nursery propagated unless transplanted from on-site areas approved for disturbance. These requirements must be included in the Mitigation Plan specifications.~~

~~b. Installation. Plant materials must be supported only when necessary due to extreme winds at the planting site. Where support is necessary, stakes, guy wires, or other measures must be removed as soon as the plant can support itself, usually after the first growing season. All fertilizer applications to turf or trees and shrubs shall follow Washington State University, National Arborist Association or other accepted agronomic or horticultural standards.~~

~~c. Fertilizer Applications. Fertilizers shall be applied in such a manner as to prevent its entry into waterways and wetlands and minimize its entry into storm drains. No applications shall be made within 50 feet of a waterway or wetland, or a required buffer as established by the City codes (such as Chapter 90 KZC) or Kirkland Shoreline Master Program (SMP, KMC Title 24), whichever is greater, unless specifically authorized in an approved mitigation plan or otherwise authorized in writing by the Planning Official.~~

95.51 Tree and Landscaping Maintenance Requirements

1.4: No change

~~5. Maintenance of Critical Area and Critical Area Buffers. In critical areas and their buffers, native vegetation is not to be removed without City approval pursuant to KZC 95.23(5)(d). However, it is the responsibility of the property owner to maintain critical areas and their buffers by removing nonnative, invasive, and noxious plants in a manner that will not harm critical areas or their buffers. See also subsection (7) of this section and Chapters 85 and 90 KZC for additional requirements for trees and other vegetation within critical areas and critical area buffers.~~

~~7. Pesticides, Herbicides, and Fertilizer. The use of plant material requiring excessive pesticide or herbicide applications to be kept healthy and attractive is discouraged. Pesticide, herbicide, and fertilizer applications shall be made in a manner that will prevent their unintended entry into waterways, wetlands and storm drains. No application shall be made within 50 feet of a waterway or wetland or a required buffer as established by City codes, whichever is greater, unless done so by a State certified applicator with approval of the Planning Official., and is specifically authorized in an approved mitigation plan or otherwise authorized in writing by the Planning Official.~~

Chapter 113 – Cottage, Carriages and Two/Three-Unit Homes

Section 113.25 Parameters for Cottages, Carriages and Two/Three-Unit Homes

Footnote 7 See ~~KZC 90.135~~ KZC 90.170 for density calculation on a site which contains a wetland, stream minor lake, or their buffers.

Footnote 9 FAR regulations

a. FAR regulations are calculated using the "buildable area" of the site, as defined in ~~KZC 90.135~~ KZC 90.170. Where no ~~sensitive~~ critical areas regulated under Chapter 90 KZC exist on the site, FAR regulations shall be calculated using the entire subject property, except as provided in subsection b of this footnote.

b. through c: No changes

Section 113.45 Review Process

3. Approval Process – Requests for Modifications to Standards

a. Minor Modifications

Applicants may request minor modifications to the general parameters and design standards set forth in this chapter. The Planning Director or Hearing Examiner may modify the requirements if all of the following criteria are met:

1) The site is constrained due to unusual shape, topography, easement or ~~sensitive~~ critical areas.
2) The modification is consistent with the objectives of this chapter.
3) The modification will not result in a development that is less compatible with neighboring land uses.

Chapter 114 – Low Impact Development

Section 114.20 Design Standards and Guidelines

1. No change

2. Required Common Open Space – Required common open space shall support and enhance the project's LID stormwater facilities; secondarily to provide a sense of openness, visual relief, and community for low impact development projects.

a. The minimum percentage for required common open space is 40 percent and is calculated using the size of the LID portion of the project site. Wetlands and streams shall not be included in the calculation. The required common open space must be located outside of wetlands and streams. Passive trails for the residents of the development may be

located in the outer twenty five percent of the critical area buffer if approved under Permitted Activities, Improvements or Uses pursuant to KZC 90.40. ~~and may be developed and maintained to provide for passive recreational activities for the residents of the development as allowed in Chapter 90 KZC.~~

2. b No change

Section 114. 25 Review Process

1 and 2: No change

3. Approval Process – Requests for Modifications to Standards

a. Minor Modifications – Applicants may request minor modifications to the general parameters and design standards set forth in this chapter. The Planning Director under a Process I, Chapter 145 KZC or Hearing Examiner under Process IIA, Chapter 150 KZC may modify the requirements if all of the following criteria are met:

1) The site is constrained due to unusual shape, topography, easement or ~~sensitive~~ critical areas; and

2) The modification is consistent with the objectives of this chapter; and

3) The modification will not result in a development that is less compatible with neighboring land uses

Section 114.35 Required Application Documentation

1. Site assessment documents to be submitted with application include:

a. Survey prepared by a registered land surveyor or civil engineer.

b. Location of all existing and proposed lot lines and easements.

c. Location of all ~~sensitive~~ critical areas, including lakes, stream, wetlands, flood hazard areas, fish and wildlife habitat conservation areas and steep slope/erosion hazard areas.

d. Landscape plan showing existing and proposed trees and other vegetation.

2 and 3: No changes

Chapter 115 Miscellaneous Use Development and Performance Standards

Section 115.20 Animals in Residential Zones

5. Horses

a through .d: No change

e. Paddock Size and Setbacks

a) and b): No change

c) Additional Paddock Requirements

i) The area used or reserved for paddock area must be pervious and exclusive of any structures or improvements (except barns) such as storage sheds, residential units, carports, decks, patios, swimming pools, ponds, sports courts, rockeries, or paving, but may contain easily removed features such as children's play equipment, landscaping, trellises, and flagpoles, as long as such features are not embedded in concrete or otherwise permanently mounted. The area shall not be located over a septic tank, drain field, or reserve drain field. Paddock areas shall not be located on steep slopes (over 15 percent grade) or in areas regulated under Chapter 90 KZC, Critical Areas: Wetlands, Streams, Minor Lakes, Fish and Wildlife Conservation Areas and Frequently Flooded Areas ~~Drainage Basins~~

Section 115.33 Electric Vehicle Infrastructure

1. Purpose and Intent – It is the intent of these development regulations to encourage the use and viability of electric vehicles as they have been identified as a solution to energy independence, cleaner air and significantly lower greenhouse gas emissions.

Electric vehicles need access to electric vehicle infrastructure (EVI) in appropriate locations. In 2009 the Washington State Legislature passed House Bill 1481 relating to electric vehicle. The bill addressed EVI which includes the structures, machinery, and equipment necessary and integral to support an electric vehicle, including battery charging stations, rapid charging stations, and battery exchange stations.

The purpose of the development regulations in this section is to meet the State of Washington requirements and to also allow battery charging stations and exchange stations in appropriate use zones throughout the City.

2. General – This section establishes where the components of electric vehicle infrastructure are allowed within the City.

Exceptions – Electric vehicle infrastructure may not be located in ~~any sensitive~~ critical areas, their buffer or buffer setbacks.

Chapter 120 – Variances

Section 120.12 Expansion or Modification of an Existing Structure

If the expansion or modification of an existing structure requires a variance under this chapter, the Planning Director may approve such expansion or modification without requiring the variance process if all of the following criteria are met:

1. The request complies with the criteria in KZC 120.20; and

2. The expansion is not located in a critical area or critical area buffer pursuant to Chapter 90 KZC.

~~2.~~ 3. The gross floor area of the structure is expanded by less than five (5) percent; and

~~3.~~ 4. The Planning Director determines that the change or alteration will not have significantly more or different impact on the surrounding area than does the present development.

An approval granted pursuant to this subsection shall be valid for a period of four (4) years following the date of approval, during which time a complete building permit application for the expansion or modification shall be submitted to the City. Within six years following the date of approval granted pursuant to this subsection, the applicant shall substantially complete construction of the expansion or modification and any permit conditions applicable thereto, or the approval becomes null and void.

Section 120.25 What May Not Be Varied

The City may grant a variance to any of the provisions of this code except:

1. The City may not grant a variance to any provision establishing the uses that are permitted to locate or that may continue to operate in any zone; and

2. The City may not grant a variance to any of the procedural provisions of this code; and

3. The City may not grant a variance to any provision in this code that specifically states that its requirements are not subject to variance, including all provisions in Chapter 90 KZC.

Chapter 125 – Planned Unit Development

Section 125.20 Decision on the PUD – What Provisions May Be Modified

The City may modify any of the provisions of the code for a PUD except:

1. The City may not modify any of the provisions of this chapter; and

2. The City may not modify any provision of this code that specifically states that its requirements are not subject to modifications under a PUD, including all provisions in Chapter 90 KZC; and

3. The City may not modify any of the procedural provisions of this code; and

4. The City may not modify any provision that specifically applies to development on a regulated slope; and

5. The City may not modify any provision pertaining to the installation and maintenance of storm water retention/detention facilities; and

6. The City may not modify any provision pertaining to the installation of public improvements; and

7. The City may not modify any provision regulating signs; and

8. The City may not modify any provision regulating the construction of one (1) detached dwelling unit

Chapter 162 – Nonconformance

162.05 User Guide

This chapter establishes when and under what circumstances nonconforming aspects of a use or development must be brought into conformance with this code. You need to consult the provisions of this chapter only if there is some aspect of the use or development on the subject property that is not permitted under this code.

For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

For properties containing wetlands, streams, minor lakes, frequently flooded areas and fish and wildlife habitat conservation areas, see Chapter 90. KZC.

Chapter 180 – Plates

The following plates will be deleted:

- Plate 16 Determining Stream Buffers
- Plate 16a Stream Buffers
- Plate 25 Piped Streams within Stream Buffers
- Plate 26 Wetland Field Data Form

The following plate will be revised:

Plate 32 – Affordable Housing Incentive – Multifamily

112.20.2 Defined Affordable Housing Incentives – Multifamily

In use zones where the number of dwelling units allowed on the subject property is determined by dividing the lot size by the required minimum lot area per unit, two bonus units may be constructed for each affordable housing unit provided (see Example 1). In areas where the density allowed on the subject property is expressed as a floor area ratio (F.A.R.), bonuses will

be calculated as an equivalent FAR bonus (see Example 2). These examples are for properties that do not contain a wetland, stream, minor lake or their buffers. For properties that contain a wetland, stream, minor lake or their buffers, the base density allowed shall be established using the maximum development potential calculation in ~~KZC 90.135~~ KZC 90.170.

The following plates will be new (see attachments at end of document)

- Plate 16 Measurement of Stream Buffer from Ordinary High Water Mark
- Plate 16A Stream Buffer for Stream Culvert
- Plate 25 Interrupted Critical Area Buffer
- Plate 26 Expansion of Nonconforming Building located in Critical Are Buffer

B. KIRKLAND MUNICIPAL CODE

Business Licenses and Regulations – Cable Television – Procedures and Terms for the Grant of Franchises

7.61.160 Tree trimming.

No change to first paragraph.

A franchisee shall make its best effort to notify all property owners directly adjacent to any scheduled trimming. Removal of any tree within the franchise area, city owned land (including parks), natural growth protection easements, ~~sensitive~~ critical areas (as generally identified on ~~defined by~~ the city planning and building department's critical areas maps ~~sensitive area map~~), or private property shall only occur after written permission is granted by the respective city department or private property owner; a copy of any written permission given by a private property owner must be provided to the city planning and building department at least two weeks prior to the removal of the tree.

No change to last paragraph.

Subdivision Ordinance Title 22

22.08.054 Class A streams.

For "Class A streams," see definition in Chapter 83 KZC for properties within jurisdiction of the Shoreline Management Act~~, otherwise see Chapter 90 KZC~~.

22.08.055 Class B streams.

For "Class B streams," see definition in Chapter 83 KZC for properties within jurisdiction of the Shoreline Management Act~~, otherwise see Chapter 90 KZC~~.

22.08.056 Class C streams.

For "Class C streams," see definition in Chapter 83 KZC for properties within jurisdiction of the Shoreline Management Act~~, otherwise see Chapter 90 KZC~~.

22.08.190 Primary basins.

"Primary basins" means the watersheds associated with the following seven creeks: (1) Juanita Creek, (2) Forbes Creek, (3) Cochran Springs Creek, (4) Yarrow Creek, (5) Carillon Creek, (6) Denny Creek, and (7) Champagne Creek for properties within jurisdiction of the Shoreline Management Act. See Chapter 83 KZC. ~~as shown in the Kirkland sensitive areas maps.~~

~~**22.08.203 Secondary basins.**~~

~~"Secondary basins" means the Moss Bay Basin, Houghton Basin, Kirkland Slope Basin, Holmes Point Basin, and Kingsgate Slope Basin which are also depicted as the urban drainage basins on the Kirkland sensitive areas maps.~~

22.08.220 Short subdivision.

"Short subdivision" means the division or redivision of land into nine or fewer lots, tracts, parcels, sites or divisions for the purpose of sale, lease, or transfer of ownership; provided, however, unbuildable areas outside of such lots, tracts, parcels, sites or divisions for other purposes, such as access, drainage, and the protection of ~~environmentally sensitive~~ critical areas, shall not be considered a lot, tract, parcel, site or division.

22.08.250 Subdivision.

"Subdivision" means the division or redivision of land into ten or more lots, tracts, parcels, sites or divisions for the purpose of sale, lease, or transfer of ownership; provided, however, unbuildable areas outside of such lots, tracts, parcels, sites or divisions for other purposes, such as access, drainage, and the protection of ~~environmentally sensitive~~ critical areas, shall not be considered a lot, tract, parcel, site or division.

22.28.025 Maximum Development Potential.

For lots containing critical areas or associated buffers, see Chapter 90 KZC for Subdivisions and Maximum Development Potential.

22.28.180 Preservation of natural features—Compliance with Zoning Code.

The applicant has the responsibility in proposing a plat to be sensitive with respect to the natural features, including topography, streams, lakes, wetlands, fish and wildlife habitat conservation areas, frequently flooded areas, geologic features and vegetation, of the property.

The plat must be designed to preserve and enhance as many of these valuable features as possible. In addition to the specific provisions of this chapter, the applicant shall comply with all applicable provisions of the Zoning Code regarding property containing or adjacent to Lake Washington, Totem Lake, Forbes Lake, ~~sensitive~~ wetlands and streams , geologically hazardous areas, trees and other specific requirements regarding site development restrictions due to natural features.

22.28.200 Preservation of natural features—Land adjacent to streams, lakes or wetlands.

The city may require that any area adjacent to a Type F, NP or Ns stream under Chapter 90 KZC or Class A, B and C stream for properties within jurisdiction of the Shoreline Management Act under Chapter 83 KZC, a lake, or a wetland be kept in its natural or preexisting state if this is reasonably necessary to prevent hazards to persons or property. In addition, the city may also require that areas around Type F, NP and Ns streams under Chapter 90 KZC or Class A, B, and C streams for properties within jurisdiction of the Shoreline Management Act under Chapter 83 KZC, lakes, ~~or~~ wetlands, frequently flooded areas or fish and wildlife habitat conservation areas be kept in their natural or preexisting state if this is reasonably necessary to protect unique and valuable environments.

22.28.210 Preservation of natural features — Significant vegetation.

The applicant shall design the plat so as to comply with the tree management requirements set forth in Chapter 90 KZC and Chapter 95 KZC~~,~~ to maximize the chances of survival of trees and associated vegetation designated for retention, and minimize potential hazards to life or property.

22.28.220 Preservation of natural features — Easements.

The city shall require open space or ~~drainage~~ critical area easements or other similar mechanisms to ensure compliance with Sections 22.28.130 through 22.28.210 of this chapter.

Plate 16
Measurement of Stream Buffer from Ordinary High Water Mark

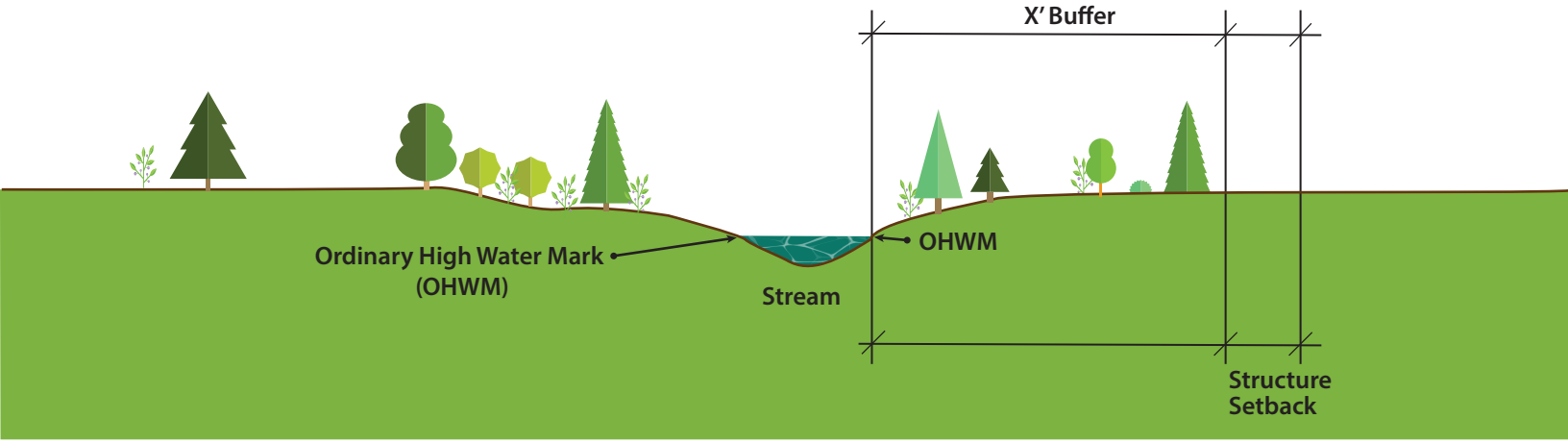


Plate 16A
Stream Buffer for Stream Culvert

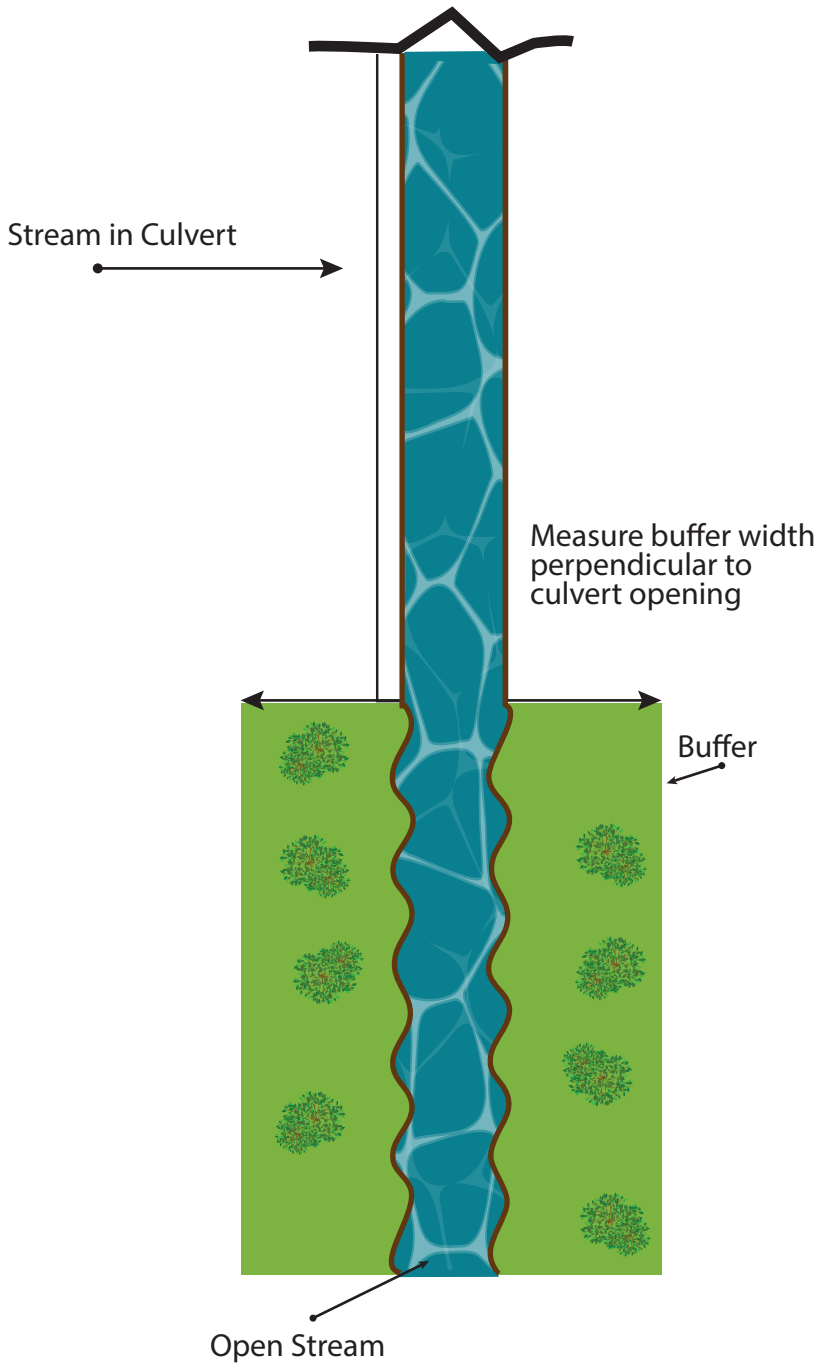


Plate 25
Interrupted Critical Area Buffer

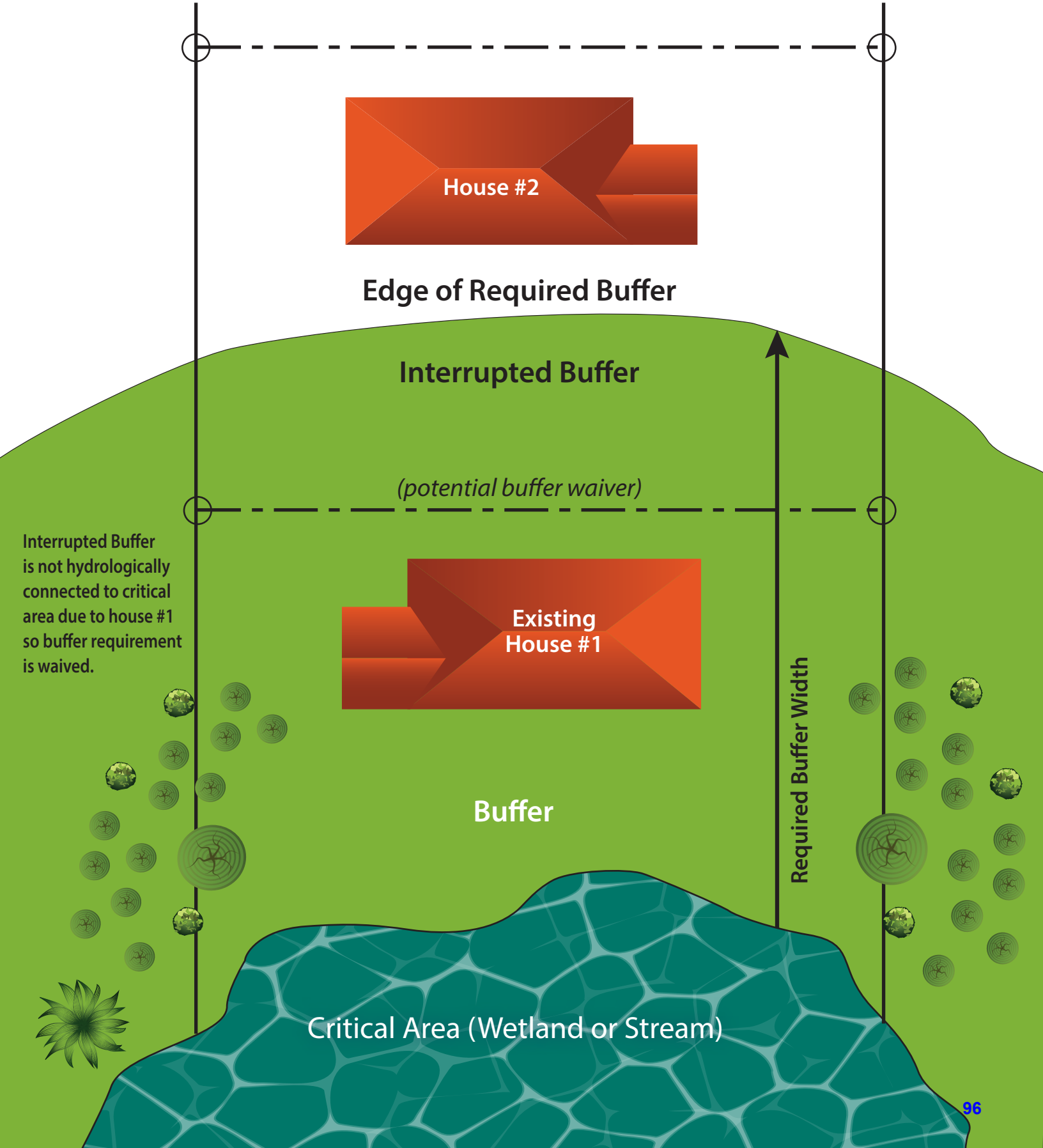
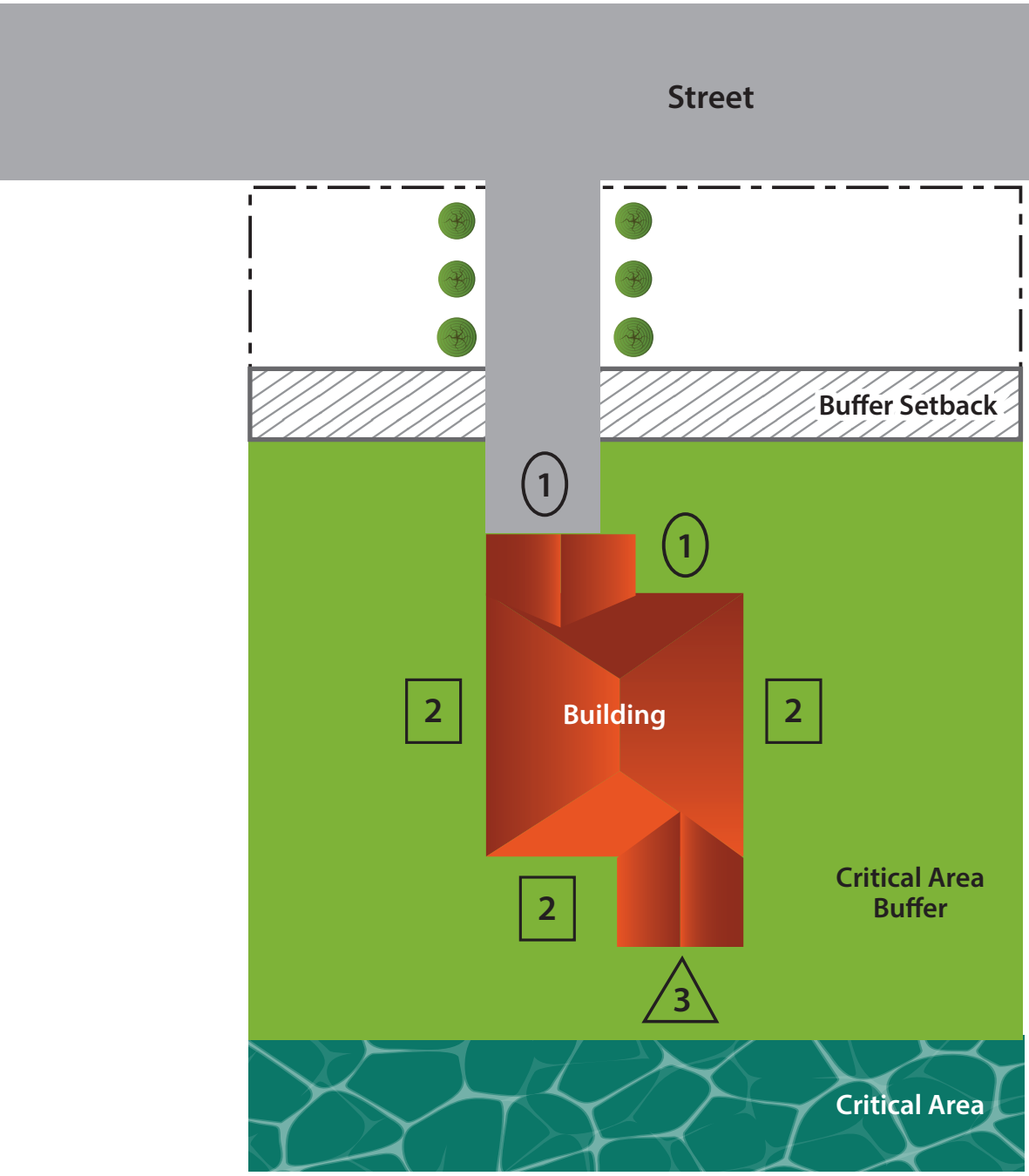


Plate 26
Expansion of Nonconforming Building Located in Critical Area Buffer



1.) Building footprint expanded into buffer on side opposite of critical area and not to exceed 1,000 square feet

2.) Building footprint expanded into buffer on sides but not closer to critical area than existing building and not to exceed 500 feet

3.) Building footprint expanded into the buffer between building and critical area and not to exceed 250 feet

RESOLUTION. 2017-2

A RESOLUTION OF THE HOUGHTON COMMUNITY COUNCIL APPROVING ORDINANCE NO. 4551 ADOPTED BY THE KIRKLAND CITY COUNCIL ON DECEMBER 13, 2016, RELATING TO ZONING, PLANNING AND LAND USE AND AMENDING KIRKLAND ZONING CODE CHAPTER 90 AND RELATED MINOR CODE AMENDMENTS TO THE KIRKLAND ZONING CODE AND THE KIRKLAND MUNICIPAL CODE, (CASE NO. CAM15-01832)

WHEREAS, the Houghton Community Council has received from the Kirkland City Council Ordinance No. 4551 , adopting the amendments to the Zoning Code and Municipal Code.

WHEREAS, pursuant to Ordinance 2001, the subject matter of this ordinance is subject to the disapproval jurisdiction of the Houghton Community Council and shall become effective within the Houghton Community Municipal Corporation only upon (i) approval by the Houghton Community Council, or (ii) the failure of said Community Council to disapprove this ordinance within 60 days of its passage; and

WHEREAS, the pertinent subject matter of this ordinance was reviewed and discussed by the Houghton Community Council at the joint public hearing with the Planning Commission on September 29, 2016, followed by deliberations on October 24, 2016; and

WHEREAS, following the joint public hearing and deliberations, the Houghton Community Council recommended approval of the amendments; and

WHEREAS, the Houghton Community Council finds that being included in the pertinent subject matter of this ordinance will serve the interests and promote the health, safety, and welfare of the Houghton Community Municipal Corporation;

NOW, THEREFORE, be it resolved that Ordinance 4551 is hereby approved by the Houghton Community Council.

PASSED by majority vote of the Houghton Community Council in regular, open meeting this 26th day of January, 2017.

SIGNED IN AUTHENTICATION thereof this 26th day of January, 2017.

_____
Chair, Houghton Community Council

_____
City Clerk