ORDINANCE NO. 3658 repealed by 3781

AN ORDINANCE OF THE CITY OF KIRKLAND, RELATING TO SENSITIVE AREAS, AND REPLACING CHAPTER 90 OF THE KIRKLAND ZONING CODE WITH INTERIM SENSITIVE AREAS REGULATIONS (FILE NO. IV-95-104)

WHEREAS, the City Council has the authority to adopt interim regulations pursuant to RCW 35A.63.220; and

WHEREAS, in regular public meeting on February 18, 1997, the City Council determined that there is a need for interim regulation of development within wetlands, wetland buffers, stream buffers, and minor lake buffers, and adopted interim regulations by Ordinance No. 3575; and

WHEREAS, in regular public meetings on August 5, 1997, and on January 20, 1998, the City Council extended the interim regulations for an additional six-month period by Ordinance No. 3592 and Ordinance No. 3620, respectively; and

WHEREAS, in regular public meeting on May 19, 1998, the City Council extended the interim regulations for an additional 120-day period by Ordinance No. 3632, in order to have an opportunity to consider and act on new interim regulations that will be more flexible and will protect the particular functions and values of each drainage basin; and

WHEREAS, the City Council considered *Kirkland's Streams, Wetlands and Wildlife Study*, prepared by The Watershed Company and dated July 1998, and *City of Kirkland Sensitive Areas Recommendations Report*, prepared by Adolfson Associates, Inc. and dated August 1998, in developing the new interim regulations; now, therefore

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

Section 1. **Adoption.** Chapter 90 of the Kirkland Zoning Code is replaced in its entirety by a new interim Chapter 90 as follows:

CHAPTER 90 - DRAINAGE BASINS

I. USER GUIDE

These regulations apply to activities, work, and conditions in or near any stream, wetland, frequently flooded area, or lake in the City. These regulations add to and in some cases supersede other City regulations. Anyone interested in conducting any development activity on or near a wetland, stream, lake, or frequently flooded areas; wishing to participate in the City's decision on a proposed development on or near any of these areas; or wishing to have a determination made as to the presence of one of these areas on their property, should read these regulations.

II. PURPOSE

These regulations were prepared to comply with the Growth Management Act, RCW Chapter 36.70A. 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, lakes, and frequently flooded areas. The designation and classification of these sensitive areas is intended to assure their preservation and protection from loss or degradation, and to restrict incompatible land uses.

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

A. Wetlands. Wetlands help maintain water quality; store and convey storm and flood water; recharge ground water; provide fish and wildlife habitat; and serve as areas for recreation, education, scientific study, and aesthetic appreciation. The City's goal is to achieve no net loss of wetlands through retention of wetland functions, values, and acreage within each drainage basin. Wetlands are protected in part by buffers, which are upland areas adjacent to wetlands.

Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment loads; remove waterborne contaminants such as excess nutrients, synthetic organic chemicals (e.g., pesticides, oils, and greases), and metals; provide shade for surface water temperature moderation; provide wildlife habitat; and deter harmful intrusion into wetlands.

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

B. 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. Streams are protected in part by buffers, which are adjacent upland areas that interact with streams.

Stream buffers - sometimes known as riparian buffers - serve to moderate runoff volume and flow rates; reduce sediment loads; remove waterborne contaminants such as excess nutrients, synthetic organic chemicals (e.g., pesticides, oils, and greases), and metals; provide shade for surface water temperature moderation; provide wildlife habitat; and deter harmful intrusion into streams.

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

C. Lakes. Lakes provide important fish and wildlife habitat; store and convey storm and flood water; recharge ground water; store ground water discharge; and serve as areas for recreation, education, scientific study, and aesthetic appreciation. Many activities in and around lakes are regulated under the wetland regulations, because the shallow perimeter of most lakes (the littoral zone) often meets the definition of a wetland. Lake Washington is a Shoreline of the State, and is subject to the Shoreline Management Act. Activities on or in Lake Washington are regulated by the use zone regulation for the zones that include Lake Washington (see the Kirkland Zoning

Code). Activities in wetlands contiguous to Lake Washington are subject to both the Shoreline Master Program and the wetland regulations; where these regulations differ, the more protective of wetlands shall apply.

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

D. Frequently Flooded Areas. Frequently flooded areas help to store and convey storm and flood water; recharge ground water; provide important riparian habitat for fish and wildlife; 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 results in significant costs to the public as well as to private individuals.

The primary purpose of frequently flooded areas regulations is to regulate development in the 100-year floodplain to avoid substantial risk and damage to public and private property and loss of life.

III. APPLICABILITY

A. General. These regulations apply to any property that contains or is within 100 feet of any of the following:

1. Streams;
2. Type 1 or 2 wetlands;
3. Type 3 wetlands greater than 1,000 square feet in a Primary Basin;
4. Type 3 wetlands greater than 2,500 square feet in a Secondary Basin;
5. Totem Lake and Forbes Lake; and
6. Frequently flooded areas.

B. Conflict with the Kirkland Zoning Code. The provisions of these regulations supersede any conflicting provisions of the Kirkland Zoning Code. If more than one provision of these regulations applies to the subject property, then the regulation that provides the greatest protection to sensitive areas shall apply.

C. Other Jurisdictions. Nothing in these regulations eliminates or otherwise affects the responsibility of the applicant to comply with all other applicable local, state, and federal laws regulating development activities in sensitive areas, as herein defined.

D. 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, RCW Chapter 43.21C.

IV. GENERAL EXCEPTIONS

The following activities or conditions shall be exempt from this Chapter:

A. Activities involving artificially created wetlands or streams intentionally created from non-wetland sites, including but not limited to grass-lined swales, irrigation and drainage ditches, retention and/or detention facilities, farm ponds, and landscape features, *except* wetlands or streams that are created as mitigation for impacts to regulated sensitive areas, or that support state or federally listed threatened or endangered species.

B. Legally filled wetlands or wetlands created after July 1, 1990 that were unintentionally created as a result of the construction of a road, street, or highway.

C. Activities affecting Type 3 wetlands that are 1,000 square feet or less in any of the Primary Basins, or affecting Type 3 wetlands that are 2,500 square feet or less in any of the Secondary Basins.

D. All utility work in improved City rights-of-way; and all normal and routine maintenance, operation and reconstruction of existing roads, streets, and associated rights-of-way and structures; and public and private connections to existing public utilities, where no feasible alternative location exists based on an analysis of technology and system efficiency; provided, that the Planning Official determines that (1) such activities will not increase the impervious area or reduce flood storage capacity, and (2) the construction drawings specify that all affected sensitive areas and buffers will be expeditiously restored to their pre-project condition or better. For purposes of this Subsection only, "improved City rights-of-way" include those rights-of-way that have improvements only underground, as well as those with surface improvements.

E. Normal and routine maintenance or repair of buildings or driveways; provided, that such activities do not increase the previously approved building footprint within a sensitive area or its buffer. Increases in building footprint outside of such areas shall be allowed, even if all or a portion of the previously approved footprint is within such areas.

F. Site investigative work and studies necessary for preparing and processing land use applications, including, but not limited to hand dug holes for soils tests, water quality sampling, wildlife studies, and wetland and stream investigations; provided, that any disturbance of the sensitive area or its buffer shall be the minimum necessary to carry out the work or studies.

G. Educational activities, scientific research, and passive outdoor recreational activities such as bird watching.

H. Emergency activities necessary to prevent an immediate threat to public health, safety, or welfare.

V. SENSITIVE AREAS MAPS AND OTHER RESOURCES

As part of the City's SEPA Ordinance, the City Council adopted, and may amend, a map folio entitled "Kirkland Sensitive Areas." Some of the maps in this folio depict wetlands, streams, and 100-year floodplains. The most recent amendment to this map folio is a 1998 study of wetlands and streams throughout the City's drainage basins. The map folio, subsequent amendments, and other available resources (such as topographic maps, soils maps, and air photos) are intended only as guides. They depict the *approximate* location and extent of known wetlands and streams. Some sensitive areas depicted in these resources may no longer exist; further, sensitive areas not shown in these resources may occur. Property owners and project applicants are strongly advised to retain qualified professionals to conduct site-specific studies for the presence of sensitive areas.

VI. DEFINITIONS

A. Basin -- A specific area of land drained by a particular watercourse and its tributaries.

B. Buffer – The area immediately adjacent to wetlands and streams that protects these sensitive areas and provides essential habitat elements for fish and/or wildlife.

C. Building Setback Line (BSBL) -- A setback distance of 10 feet from a designated or modified wetland or stream buffer within which no buildings or other above-ground structures, with the exception of fencing or other minor improvements, may be constructed. The BSBL serves to protect the wetland or stream buffer during development activities and routine maintenance occurring adjacent to these resources.

D. Class A Streams– Streams that are used by salmonids. Class A streams generally correlate with Type 3 streams as defined in the Washington State Hydraulic Code.

E. Class B Streams – Perennial streams (during years of normal precipitation) that are not used by salmonids. Class B streams generally correlate with Type 4 streams as defined in the Washington State Hydraulic Code.

F. Class C Streams – Intermittent or ephemeral streams (during years of normal precipitation) not used by salmonids. Class C streams generally correlate with Type 5 streams as defined in the Washington State Hydraulic Code.

G. Frequently Flooded Areas – All areas shown on the Kirkland Sensitive Areas maps as being within a 100-year floodplain, as well as all areas regulated by Chapter 21.56 of the Kirkland Municipal Code.

H. Minor Improvements - Walkways, pedestrian bridges, benches, and similar features as determined by the Planning Official, that present minimal disturbance to the area affected.

I. Primary Basins – The watersheds associated with the following five creeks: (1) Juanita Creek, (2) Forbes Creek, (3) Cochran Springs Creek, (4) Yarrow Creek, and (5) Carillon Creek, as shown in the Kirkland Sensitive Areas maps.

J. Qualified Professional -- An individual with relevant education and training, as determined by the Planning Official, and with at least three years experience in biological fields such as botany, fisheries, wildlife, soils, ecology, and similar areas of specialization, and including a professional Wetland Scientist.

K. Salmonid – 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.

L. Secondary Basins - The Moss Bay Basin, Houghton Basin, and Kirkland Slope Basin, which are also depicted as the Urban Drainage Basins on the Kirkland Sensitive Areas maps.

M. Sensitive Areas – Wetlands, streams, lakes, and frequently flooded/flood hazard areas.

N. Significant Habitat Area - An area that provides food, protective cover, nesting, breeding, or movement for threatened, endangered, sensitive, monitor, or priority species of plants, fish, or wildlife, or a species of local significance due to its rarity within the City. The terms threatened, endangered, sensitive, monitor, and priority pertain to lists, categories, and definitions of species promulgated by the Washington

Department of Wildlife (Non-Game Data Systems Special Animal Species), as identified in WAC Sections 232-12-011 or 232-12-014, or in the Priority Habitat and Species (PHS) program of the Washington State Department of Wildlife, or in rules and regulations adopted from time to time by the U.S. Fish and Wildlife Service.

O. Streams – 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. Streams do not include irrigation ditches, canals, storm or surface water runoff devices, or other entirely artificial water courses, unless they are used by salmonids or convey a naturally-occurring stream that has been diverted into the artificial channel.

P. Type 1 Wetlands – Wetlands that meet any of the following conditions:

1. Wetlands contiguous to Lake Washington;
2. Wetlands containing at least ¼ acre of organic soils, such as peat bogs or mucky soils;
3. Wetlands equal to or greater than 10 acres in size and having three or more wetland classes, as defined by the U.S. Fish & Wildlife Service (Cowardin et al., 1979), one of which is open water;
4. Wetlands that have significant habitat value to state or federally-listed threatened or endangered wildlife species; or
5. Wetlands that contain state or federally listed threatened or endangered plant species.

Q. Type 2 Wetlands – Wetlands that do not meet any of the criteria for Type 1 Wetlands, yet provide significant habitat function and value, and that merit at least 22 points as determined by using the City's Wetland Field Data Form, which is Appendix A at the end of this Chapter.

R. Type 3 Wetlands – Wetlands that do not meet the criteria for either Type 1 or Type 2 wetlands and that merit fewer than 22 points as determined by using the City's Wetland Field Data Form, which is Appendix A at the end of this Chapter.

S. Watershed -- A region or area bounded on the periphery by a parting of water and draining to a particular watercourse or body of water.

T. Wetlands – Those areas that are inundated or saturated by surface or groundwater at a frequency and duration to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soils conditions.

Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including but not limited to irrigation and drainage ditches, grass-lined swales, canals, retention and/or 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. However, wetlands do include those artificial wetlands intentionally created from non-wetland sites as mitigation for the conversion of wetlands.

VII. ACTIVITIES IN OR NEAR WETLANDS, TOTEM LAKE, AND FORBES LAKE

Wetland Determinations, Delineations, Regulations, Criteria, and Procedures. All determinations and delineations of wetlands shall be made using the criteria and procedures contained in the *Washington State Wetlands Identification and Delineation Manual* (Washington Department of Ecology, 1997). All determinations, delineations, and regulations of wetlands shall be based on the entire extent of the wetland, irrespective of property lines, ownership patterns, and the like.

A. Determination of Wetlands. Either prior to or during review of a development application, the Planning Official shall determine whether a wetland or its buffer is present on the subject property using the following provisions.

1. During or immediately following a site inspection, the Planning Official shall make an initial assessment as to whether any portion of the subject property or surrounding area (which shall be the area within 100 feet of the subject property) meets the definition of a wetland. If this initial site inspection does not indicate the presence of a wetland on the subject property or surrounding area, no additional wetland studies will be required. However, if the initial site inspection or information subsequently obtained indicates the presence of a wetland on the subject property or surrounding area, then the applicant shall follow the procedure in paragraph 2 below.

2. If the initial site inspection or information subsequently obtained indicates that a wetland may exist on or near the subject property or surrounding area, the applicant shall either (1) fund a study and report prepared by the City's wetland consultant, or (2) submit a report prepared by a qualified professional approved by the City, and fund a review of this report by the City's wetland consultant.

3. If a wetlands study and report are required, at a minimum the report shall include the following:

   a) A summary of the methodology used to conduct the study;
   b) A professional survey which is based on the KCAS or plat bearing system and tied to a known monument, depicting the wetland boundary on a map of the surrounding area which shows the wetland and its buffer;
   c) A description of the wetland habitat(s) found throughout the entire wetland (not just on the subject property) using the U.S. Fish & Wildlife Service classification system (*Classification of Wetlands and Deepwater Habitats in the U.S.*, Cowardin et al., 1979);
   d) A description of nesting, denning, and breeding areas found in the wetland or its surrounding area;
   e) A description of the surrounding area, including any drainage systems entering and leaving the wetland, and a list of observed or documented plant and wildlife species;
   f) A description of historical, hydrologic, vegetative, topographic, and soil modifications, if any;
   g) A proposed classification of the wetland as a Type 1, 2, or 3 wetland, including the rationale for the proposed classification; and
   h) A completed Wetland Field Data Form, which is Appendix A at the end of this Chapter.

4. Formal determination of whether a wetland exists on the subject property, as well as its boundaries, habitat classes, and rating, shall be made by the Planning Official after review of the report prepared under paragraph 3 of this Section. A decision of the Planning Official may be appealed pursuant to Section XVI of this Chapter. The Planning Official's decision under this section shall be used for review of any development activity proposed on the subject property for which an application is received within two years of the decision; provided, that the Planning Official may modify any decision whenever physical circumstances have markedly and demonstrably changed on the subject property or the surrounding area as a result of natural processes or human activity.

B. Standard Wetland Buffers. Required, or standard, buffers for wetlands are as follows.

Wetland Type	Primary Basin	Secondary Basin
1	100'	75'
2	75'	50'
3	50'	25'

C. Building Setback Line (BSBL). Structures shall be set back at least 10 feet from the designated or modified wetland buffer. This BSBL shall not be modified except through provisions for reasonable use.

D. Minor Improvements. Minor improvements may be located within the sensitive area buffers of Section VII.B. These minor improvements shall be located within the outer one-half of the sensitive area buffer, except where approved stream crossings are made. The Planning Official shall approve a proposal to construct a minor improvement within an environmentally sensitive area buffer if:

1. It will not adversely affect water quality;
2. It will not destroy or damage a significant wildlife habitat area;
3. It will not adversely affect drainage or storm water detention capabilities;
4. It will not lead to unstable earth conditions or create erosion hazards; and
5. It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas.

The Planning Official's decision may be appealed in accordance with Section XVI of this Chapter.

The Planning Official may require the applicant to submit a report prepared by a qualified professional which describes how the proposal will or will not comply with the criteria for approving a minor improvement.

E. Modification of Type 1 Wetlands. No land surface modification shall occur and no improvement shall be located in a Type 1 wetland, except as provided in this Section. Furthermore, all modifications of a Type 1 Wetland shall be consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998).

An applicant may request a modification of the requirements of this Section. The Hearing Examiner shall review a modification request, and when deemed appropriate, issue a Modification Request Approval under a Process IIA, described in Chapter 150 of the Kirkland Zoning Code. As part of the Modification Request, the applicant shall submit a report prepared by a qualified professional approved by the Planning Official, and fund a review of this report by the City's wetland consultant. In either event, the report shall contain all information required in Section VII.A.3 as well as an assessment of the habitat, water quality, storm water detention, ground water recharge, shoreline protection, and erosion protection functions of the wetland and its

buffer. The report shall also assess the effects on those functions of the proposed modification. In addition to criteria of Process IIA, the Hearing Examiner shall approve an improvement or land surface modification in a wetland only if:

1. It will not adversely affect water quality;
2. It will not destroy, damage, or disrupt a significant habitat area;
3. It will not have an adverse effect on drainage and/or storm water detention capabilities;
4. It will not lead to unstable earth conditions or create an erosion hazard;
5. It will not be materially detrimental to any other property or the City as a whole;
6. It will result in land surface modification of no more than 5% of the wetland on the subject property;
7. Compensatory mitigation is provided in accordance with the table in Section I below;
8. Fill material does not contain organic or inorganic material that would be detrimental to water quality or fish and wildlife habitat;
9. All exposed areas are stabilized with vegetation normally associated with native wetlands and/or buffers, as appropriate; and
10. There is no practicable or feasible alternative development proposal that results in less impact to the Type 1 wetland and its buffer.

F. Modification of Type 2 Wetlands. No land surface modification shall occur and no improvement shall be located in a Type 2 wetland, except as provided in this Section.

An applicant may request a modification of the requirements of this Section. The Hearing Examiner shall review a modification request, and when deemed appropriate, issue a Modification Request Approval under Process IIA, described in Chapter 150 of the Kirkland Zoning Code. The requirements for requesting such a modification are identical to those listed above for a Type 1 wetland with the following exceptions:

1. In Primary Basins, the modification shall not affect more than 10% of the wetland on the subject property; and
2. In Secondary Basins, the modification shall not affect more than 25% of the wetland on the subject property.

G. Modification of Type 3 Wetlands. No land surface modification shall occur and no improvement may be located in a Type 3 wetland, except as provided in this Section.

An applicant may request a modification of the requirements of this Section. The Planning Official shall review a modification request, and when deemed appropriate, issue a Modification Request Approval in conjunction with approval of the applicable

development permit. The requirements for requesting such a modification are identical to those listed above for a Type 1 wetland with the following exceptions:

1. In Primary Basins, the modification shall not affect more than 50% of the wetland on the subject property; and
2. In Secondary Basins, the modification may affect all of the wetland on the subject property.

Decisions on requests to modify Type 3 Wetlands may be appealed in accordance with Section XVI of this Chapter.

H. Compensatory Mitigation Ratios. All approved impacts to regulated wetlands require compensatory mitigation so that the goal of no net loss of wetland function, value, and acreage may be achieved. Mitigation shall be implemented through the creation of wetlands (from non-wetland areas) or through the restoration of wetlands (from uplands that were formerly wetlands). The following mitigation ratios (the ratio of the mitigated area to the impacted area) shall apply:

Wetland Type	Primary Basins	Secondary Basins
1	3:1	3:1
2	2:1	1.5:1
3	1.5:1	1:1

Compensatory mitigation as wetland enhancement (that is, the improvement of existing wetlands) shall also be allowed. In Primary Basins, no more than 1/3 of the mitigation may consist of enhancement; in Secondary Basins, no more than 1/2 of the mitigation may consist of enhancement.

On-site mitigation is presumed to be preferable to off-site mitigation. The decision maker may approve a plan to implement all or a portion of the required mitigation off-site, if the off-site mitigation is within the same drainage basin as the property that will be impacted by the project. The applicant shall demonstrate that the off-site mitigation will result in higher wetland functions, values, and/or acreage than on-site mitigation. Required compensatory mitigation ratios shall be the same for on-site or off-site mitigation, or a combination of both.

If the proposed on-site or off-site mitigation plan will result in the creation or expansion of a wetland or its buffer on any property other than the subject property, the plan shall not be approved until the applicant submits to the Planning Official a copy of a statement signed by the owners of all affected properties, in a form approved by the City Attorney and recorded in the King County Department of

Elections and Records, consenting to the wetland and/or buffer creation or increase on such property.

I. Mitigation Plan Requirements. Applicants proposing to alter wetlands or their buffers shall submit a sensitive area mitigation plan prepared by a qualified professional. The mitigation plan shall consist of a description of the sensitive areas and buffers affected by the proposed project, the nature and extent of impacts to those areas, and the mitigation measures to offset those impacts. The mitigation plan shall also contain success criteria by which the mitigation will be assessed, and plans for a five-year monitoring and maintenance program. The monitoring program shall consist of at least two site visits per year by a qualified professional, with annual progress reports submitted to the Planning Official and all other agencies with jurisdiction.

The mitigation plan shall also contain a drawing that illustrates the compensatory mitigation elements. The plan and/or drawing shall list plant materials and other habitat features to be installed. The cost of the plan, program, reports, and drawing shall be borne by the applicant.

J. Modification of Wetland Buffers: Wetland buffer impact is assumed to occur when wetland fill/modification is proposed. Any proposal for wetland fill/modification shall include provisions for establishing a new wetland buffer zone to be located around the compensatory mitigation sites and to be equal in width to its standard buffer in Section VII.B or a buffer reduced in accordance with this Subsection J by no more than 1/3 of the standard buffer width in all cases (regardless of wetland type or basin type).

The remainder of this section applies to proposals that involve reduction of only the wetland buffer, and not the wetland itself.

No land surface modification may occur and no improvement may be located in a wetland buffer, except as provided for in this Subsection J. Buffer widths may be decreased if an applicant receives a Modification Request Approval. Any modification (increase or decrease) of a standard buffer shall be consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998). Buffers may be reduced through one of two means, either (1) buffer averaging, or (2) buffer reduction with enhancement. A combination of these two buffer reduction approaches shall not be used.

1. Buffer averaging requires that the area of the buffer resulting from the buffer averaging be equal in size and quality to the buffer area calculated by the

standards in Section VII.B. Buffers may not be reduced at any point by more than 1/3 of the standards in Section VII.B. Buffer averaging calculations shall only consider the subject property.

2. Buffers may be decreased through buffer enhancement. The applicant shall demonstrate that through enhancing the buffer (by removing invasive plants, planting native vegetation, installing habitat features such as downed logs or snags, or other means) the reduced buffer will function at a higher level than the existing standard buffer. At a minimum, a buffer enhancement plan shall provide the following: 1) a map locating the specific area of enhancement, 2) a planting plan that uses native species, including groundcover, shrubs, and trees, and 3) provisions for monitoring and maintenance. Buffers may not be reduced at any point by more than 1/3 of the standards in Section VII.B.

Modification requests for averaging or reduction/enhancement of Types 1 and 2 Wetland buffers shall be reviewed and decided upon by the Hearing Examiner under Process IIA, described in Chapter 150 of the Kirkland Zoning Code. Modification requests for averaging or reduction/enhancement of Type 3 Wetland buffers shall be reviewed and decided upon by the Planning Official. Decisions on modification requests may be appealed pursuant to the provisions of Section XVI of this Chapter.

K. Restoration. The Planning Official may permit or require the applicant to restore and maintain a wetland and/or its buffer by removing material detrimental to the area, such as debris, sediment, or vegetation. The Planning Official may also permit or require the applicant to restore a wetland or its buffer through the addition of native plants and other habitat features. Restoration may be required whenever a condition detrimental to water quality or habitat exists.

L. Public Park. The City may develop access through a wetland and its buffer in conjunction with a public park.

M. Totem Lake and Forbes Lake. The majority, if not the entirety, of the perimeters of Totem Lake and Forbes Lake meet the definition of wetlands. All activities in the shallow (less than or equal to 6.6 feet) portions of these lakes as well as in their contiguous wetlands (located above the high waterline) are regulated pursuant to Sections VIIA-L above. Activities in deep water portions (water depths greater than 6.6 feet) of these lakes, that is, waterward of the lakes' perimeter wetlands, shall be regulated as follows.

1. The Planning Official may permit or require the applicant to rehabilitate and maintain a lake by removing material detrimental to the lake, such a debris,

sediment, or non-native vegetation. Rehabilitation may be required when a condition detrimental to water quality or habitat exists. Decisions made under this paragraph may be appealed in accordance with Section XVI of this Chapter.

2. Moorage structures are permitted in Totem Lake and Forbes Lake. The Planning Official shall consider requests to construct, replace, or repair existing structures concurrently with the Washington Department of Fish and Wildlife's review of a Hydraulic Project Approval (HPA), or upon notification by that agency that an HPA is not required.

3. The Planning Official shall review applications for moorage structures using Process I, described in Chapter 145 of the Kirkland Zoning Code. The Planning Director shall authorize a moorage structure to be constructed only if (1) it is accessory to a dwelling unit or public park on the subject property, and (2) no significant habitat area will be destroyed.

4. A moorage structure shall extend no farther than is necessary to function properly, but in no event may extend more than 125 feet waterward of the high waterline.

5. A moorage structure shall not be treated with creosote or oil base or toxic substances.

6. Dock and pier decks and the top of other moorage structures shall not be more than two feet above the high waterline.

7. Bulkheads are prohibited unless (1) necessary to prevent significant erosion and (2) the use of vegetation or other "bioengineering" materials and techniques would not sufficiently stabilize the shoreline.

VIII. ACTIVITIES IN OR NEAR STREAMS

A. General. No land surface modification may occur and no improvements may be located in a stream or its buffer except as provided in this Section.

B. Stream Determination. The Planning Official shall determine whether a stream or stream buffer is present on the subject property using the following provisions. During or immediately following a site inspection, the Planning Official shall make an initial assessment as to whether a stream exists on any portion of the subject property or surrounding area (which shall be the area within approximately 100 feet of the subject property).

If the initial site inspection indicates the presence of a stream, the Planning Official shall determine, based on the definitions contained in this Chapter and after a review of all information available to the City, the classification of the stream.

If this initial site inspection does not indicate the presence of a stream on or near the subject property, no additional stream study will be required.

If an applicant disagrees with the Planning Official's determination that a stream exists on or near the subject property or the Planning Official's classification of a stream, the applicant shall submit a report prepared by a qualified professional approved by the Planning Official that independently evaluates the presence of a stream or the classification of the stream, based on the definitions contained in this Chapter.

The Planning Official shall make final determinations regarding the existence of a stream and the proper classification of that stream. This determination may be appealed pursuant to the provisions of Section XVI of this Chapter.

C. Stream Buffers. No land surface modification shall occur and no improvement may be located in a stream or its buffer, except as provided in this Section. Required, or standard, buffers for streams are as follows.

Stream Class	Primary Basins	Secondary Basins
A	75 ft.	N/A
B	60 ft.	50 ft.
C	35 ft.	25 ft.

Stream buffers shall be measured from each side of the top of the stream banks (see Plate 16 of the Kirkland Zoning Code).

D. Building Setback Line (BSBL). Structures shall be set back at least 10 feet from the designated or modified stream buffer. This BSBL shall not be modified except through provisions for reasonable use.

E. Minor Improvements. Minor improvements may be located within the sensitive area buffers of Section VIII.C. These minor improvements shall be located within the outer one-half of the sensitive area buffer, except where approved stream crossings are made. The Planning Official shall approve a proposal to construct a minor improvement within a sensitive area buffer if:

1. It will not adversely affect water quality;

2. It will not destroy or damage a significant wildlife habitat area;
3. It will not adversely affect drainage or storm water detention capabilities;
4. It will not lead to unstable earth conditions or create erosion hazards; and
5. It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas.

The Planning Official's decision may be appealed in accordance with Section XVI of this Chapter. The Planning Official may require the applicant to submit a report prepared by a qualified professional which describes how the proposal will or will not comply with the criteria for approving a minor improvement.

F. Modification of Stream Buffers.

Buffer widths may be increased when it is determined that wider buffers are necessary to protect stream functions and values. For example, increased buffer widths may be required for buffers located on steep slopes or adjacent to existing or proposed high-impact land uses.

Buffer widths may be decreased if an applicant receives a Modification Request Approval. Any modification (increase or decrease) of the buffers contained in Section VIII.C shall be consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998).

Buffers may be reduced through one of two means, either (1) buffer averaging, or (2) buffer reduction with enhancement. A combination of these two buffer reduction approaches shall not be used.

1. Buffer averaging requires that the area of the buffer resulting from the buffer averaging be equal in size and quality to the buffer area calculated by the standards in Section VIII.C. Buffers may not be reduced at any point by more than 1/3 of the standards in Section VIII.C. Buffer averaging calculations shall only consider the subject property.

2. Buffers may be decreased through buffer enhancement. The applicant shall demonstrate that through enhancing the buffer (by removing invasive plants, planting native vegetation, installing habitat features such as downed logs or snags, or other means) the reduced buffer will function at a higher level than the standard existing buffer. A buffer enhancement plan shall at a minimum provide the following: 1) a map locating the specific area of enhancement, 2) a planting plan that uses native species, including groundcover, shrubs, and trees, and 3)

provisions for monitoring and maintenance. Buffers may not be reduced at any point by more than 1/3 of the standards in Section VIII.C.

Modification requests for averaging or reduction/enhancement of Class A Stream buffers shall be reviewed and decided upon by the Hearing Examiner under Process IIA, described in Chapter 150 of the Kirkland Zoning Code. Modification requests for averaging or reduction/enhancement of Class B Stream buffers shall be reviewed and decided upon by the Planning Official under Process I, described in Chapter 145 of the Kirkland Zoning Code. Modification requests for averaging or reduction/enhancement of Class C Stream buffers shall be reviewed and decided upon by the Planning Official. Decisions on modification requests may be appealed pursuant to the provisions of Section XVI of this Chapter.

G. Stream Relocation or Modification. A proposal to relocate or modify a Class C stream shall be reviewed and decided upon by the Planning Official. The decision of the Planning Official may be appealed in accordance with Section XVI of this Chapter. A proposal to relocate or modify a Class A or B stream shall be considered under Process I. The Planning Official shall permit a stream to be relocated or modified only if water quality, conveyance, fish and wildlife habitat, wetland recharge (if hydrologically connected to a wetland), and storm water detention capabilities of the stream, will be significantly improved by the relocation or modification. Convenience to the applicant in order to facilitate general site design may not be considered.

A proposal to relocate or modify a Class A stream shall be approved only if the Washington Department of Fish and Wildlife issues a Hydraulic Project Approval for the project. Furthermore, all modifications shall be consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998).

If the proposed stream activity will result in the creation or expansion of a sensitive area or its buffer on any property other than the subject property, the Planning Official shall not approve the plan until the applicant submits to the Planning Official a copy of a statement signed by the owners of all affected properties, in a form approved by the City Attorney and recorded in the King County Department of Elections and Records, consenting to the sensitive area and/or buffer creation or increase on such property.

Prior to the Planning Official's approval of a stream relocation or modification, the applicant shall submit a stream relocation/modification plan prepared by a qualified

professional approved by the Planning Official. This plan shall contain or demonstrate the following.

1. A topographic survey showing existing and proposed topography and improvements;
2. The filling and revegetation of the existing stream channel;
3. A proposed phasing plan specifying time of year for all project phases;
4. The ability of the new stream channel to accommodate flow and velocity of 100-year storm events; and
5. The design and implementation features and techniques listed below, unless clearly and demonstrably inappropriate for the proposed relocation or modification:
   a) The creation of natural meander patterns;
   b) The formation of gentle and stable side slopes, no steeper than two feet horizontal to one-foot vertical, and the installation of both temporary and permanent erosion control features (the use of native vegetation on streambanks shall be emphasized);
   c) The creation of a narrow sub-channel (thalweg) against the south or west streambank;
   d) The utilization of native materials;
   e) The installation of vegetation normally associated with streams, emphasizing native plants with high food and cover value for fish and wildlife;
   f) The creation of spawning areas, as appropriate;
   g) The re-establishment of fish population, as appropriate;
   h) The restoration of water flow characteristics compatible with fish habitat areas;
   i) Demonstration that the flow and velocity of the stream after relocation or 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 Planning Official to improve fish and wildlife habitat or to improve storm water management; and
   j) A written description of how the proposed relocation or modification of the stream will significantly improve water quality, conveyance, fish and wildlife habitat, wetland recharge (if hydrologically connected to a wetland), and storm water detention capabilities of the stream.

Prior to diverting water into a new stream channel, a qualified professional approved by the Planning Official shall inspect the completed new channel and issue a written report to the Planning Official stating that the new stream channel complies with the requirements of this Section. The cost for this inspection and report shall be borne by the applicant.

H. Bulkheads. Bulkheads are not permitted along a stream except as provided in this Section. A proposal for a bulkhead shall be reviewed and decided upon by the Planning Official. Decisions made under this Subsection may be appealed in accordance with Section XVI of this Chapter. The Planning Official shall allow a bulkhead to be constructed only if:

1. It is not located within a wetland or between a wetland and a stream;
2. It is needed to prevent significant erosion;
3. The use of vegetation and/or other biological materials would not sufficiently stabilize the streambank to prevent significant erosion;
4. The applicant submits a plan prepared by a qualified professional approved by the Planning Official that shows a bulkhead and implementation techniques that meet the following criteria:
   a) There will be no adverse impact to water quality;
   b) There will be no adverse impact to fish and wildlife habitat;
   c) There will be no increase in the velocity of stream flow, unless approved by the Planning Official to improve fish habitat;
   d) There will be no decrease in flood storage volumes;
   e) Neither the installation, existence, nor operation of the bulkhead will lead to unstable earth conditions or create erosion hazards; and
   f) Neither the installation, existence, nor operation of the bulkhead will be detrimental to any other property or the City as a whole.

The bulkhead shall be designed and constructed to minimize the transmittal of water current and energy to other properties. Changes in the horizontal or vertical configuration of the land shall be kept to a minimum. Fill material used in construction of a bulkhead shall be non-dissolving and non-decomposing. The applicant shall also stabilize all exposed soils by planting native riparian vegetation with high food and cover value for fish and wildlife.

I. Culverts. Culverts are not permitted in streams except as specified in this Section. The Planning Official shall review and decide upon an application to place a stream in a culvert under an access drive, driveway, or street. Decisions made under this Subsection may be appealed in accordance with Section XVI of this Chapter. The Planning Director will review and decide upon proposals to place streams in culverts, other than as specified above, using Process I, described in Chapter 145 of the Kirkland Zoning Code. A stream shall be allowed to be put in a culvert only if:

1. No significant habitat area will be destroyed;

2. Placing the stream in a culvert is necessary to make reasonable use of the subject property (see Section XII). Convenience to the applicant in order to facilitate general site design shall not be considered;
3. The applicant submits a plan prepared by a qualified professional approved by the Planning Official that shows the culvert and implementation techniques that meet the following criteria:
   a) There will be no adverse impact to water quality;
   b) There will be no adverse impact to fish and wildlife habitat;
   c) There will be no increase in the velocity of stream flow, unless approved by the Planning Official to improve fish habitat;
   d) There will be no decrease in flood storage volumes;
   e) Neither the installation, existence, nor operation of the culvert will lead to unstable earth conditions or create erosion hazards; and
   f) Neither the installation, existence, nor operation of the culvert will be detrimental to any other property or to the City as a whole.

The culvert shall be designed and constructed to allow passage of fish inhabiting the stream or which may inhabit the stream in the future. The culvert shall be large enough to accommodate a 100-year storm event. The applicant shall at all times keep the culvert free of debris and sediment so as to allow free passage of water and fish. The Planning Official shall require a security or perpetual culvert maintenance agreement under Section XIII of this Chapter for continued maintenance of the culvert.

If a proposal for a culvert is denied, a bridge may be approved if the bridge complies with the above criteria.

If a proposed project requires approval through Process IIB or Process III, the City Council may require that any stream in a culvert on the subject property be opened, relocated, and restored, consistent with the provisions of this Subsection.

J. Rehabilitation. The Planning Official may permit or require the applicant to restore and maintain a stream and/or its buffer by removing material detrimental to the stream and its surrounding area such as debris, sediment, or vegetation. The Planning Official may also permit or require the applicant to restore a stream or its buffer through the addition of native plants and other habitat features. Restoration may be required at any time that a condition detrimental to water quality or habitat exists.

IX. FREQUENTLY FLOODED AREAS

No land surface modification may take place and no improvements may be located in a frequently flooded area except as specifically provided for in Chapter 21.56 of the Kirkland Municipal Code.

X. SITE REQUIREMENTS AND SENSITIVE AREAS PROTECTION TECHNIQUES

In addition to any other requirement of this Chapter, the applicant shall locate all improvements on the subject property to minimize adverse impacts to sensitive areas.

The applicant shall install a berm, curb, or other physical barrier during construction and following completion of the project when necessary to prevent direct runoff and erosion from any modified land surface into any sensitive area.

The applicant shall locate parking and vehicle circulation areas as far as possible from sensitive areas.

The decision maker may limit development activity in or near sensitive areas to specific months and to a maximum number of continuous days or hours in order to minimize adverse impacts.

The decision maker may require that equipment be operated from only one side of a stream in order to minimize bank disruption.

The decision maker may require other construction techniques, conditions, and restrictions in order to minimize adverse impacts to sensitive areas or to other areas not subject to development activity.

XI. MAXIMUM DEVELOPMENT POTENTIAL

A. Dwelling Units. The theoretical maximum number of dwelling units for a site which contains a wetland, stream, minor lake, or their buffers shall be the Buildable Area in square feet divided by the minimum lot area per unit as specified by Kirkland Zoning Code Chapters 15 through 65, plus the area of the wetland, stream, minor lake, and buffer in square feet divided by the minimum lot area per unit as specified by Kirkland Zoning Code Chapters 15 through 65, multiplied by the Development Factor derived from Section XI.C:

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

For purposes of this subsection only, "Buildable Area" means the total area of the subject property minus sensitive areas and their buffers.

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.

B. Development Factor. The development factor, consisting of a "percent credit", to be used in computing the number of dwelling units per square feet or the maximum allowable commercial floor area for a site which contains a wetland, stream, minor lake, or buffer is derived from the following table:

Percentage of Site in Wetland, Stream, Minor Lake, and Buffer			Counted at
< 1	to	10%	30%
> 10	to	20%	27%
> 20	to	30%	24%
> 30	to	40%	21%
> 40	to	50%	18%
> 50	to	60%	15%
> 60	to	70%	12%
> 70	to	80%	9%
> 80	to	90%	6%
> 90	to	100%	0%

XII. REASONABLE USE

This Chapter is not intended, and shall not be construed or applied in a manner, to deny all economically viable use of private property. Using Process IIB, described in Chapter 152 of the Kirkland Zoning Code, if an applicant demonstrates to the satisfaction of the decision maker that application of this Chapter will deny all economically viable use of the property in a residential area, one single family home may be permitted subject to appropriate conditions if the applicant also demonstrates all of the following to the satisfaction of the decision maker:

A. No use with less impact on the wetland or stream and the buffer is feasible and reasonable; and

B. There is no feasible and reasonable on-site alternative to the proposed activities, considering possible changes in site layout, reductions in density and similar factors; and

C. The proposed activities, as conditioned, will result in minimum feasible alteration or impairment to the wetland's or stream's functional characteristics and its existing contours, vegetation, fish and wildlife resources, and hydrological conditions; and

D. The proposed activities will not cause significant degradation of groundwater or surface-water quality; and

E. All reasonable mitigation measures have been implemented or assured; and

F. The proposed activities will not cause or result in damage to other properties; and

G. The inability to derive economically viable use is not the result of the applicant's actions, including such actions as segregating or dividing the property and creating the undevelopable condition, or taking actions in violation of any local, state, or federal law or regulation. The purchase price paid for the property shall not be the measure of economically viable use.

The applicant shall either fund a report prepared by the City's wetland consultant or submit a report prepared by a qualified professional, and fund a review of this report by the City's wetland/stream consultant. The report shall describe how the proposal will or will not comply with the applicable decisional criteria.

If the decision maker determines that alteration of a wetland, stream, and/or buffer is necessary and unavoidable, the decision maker shall set forth in writing its findings with respect to each of the items listed in this subsection.

For the purpose of this section only, "residential area" means all portions of the City located in a zone in which "detached dwelling units" or "detached, attached or stacked dwelling units" are uses that are permitted or are approved pursuant to this Code.

XIII. BOND OR PERFORMANCE SECURITY

The Planning Official shall require a performance or maintenance bond, a performance or maintenance security, a perpetual culvert maintenance agreement, and/or a perpetual landscape maintenance agreement, as determined to be appropriate by the Planning Official, to ensure compliance with any aspect of this Chapter or any decision or determination made pursuant to this Chapter.

A. Performance or Maintenance Bond or Security Requirement. The performance or maintenance security required by the Planning Official shall be provided in such forms and amounts as the Planning Official deems necessary to assure that all work or actions are satisfactorily completed or maintained in accordance with the approved plans, specifications, permit or approval requirements, and applicable regulations, and to assure that all work or actions not satisfactorily completed or maintained will be corrected to comply with approved plans, specifications, requirements, and regulations to restore environmental damage or degradation, protect fish and wildlife habitat and protect the health, safety, and general welfare of the public.

B. Form of Performance Security. The performance security shall be a surety bond obtained from companies registered as surety in the state or certified as acceptable sureties on federal bonds. In lieu of a surety bond, the Planning Official may allow alternative performance security in the form of an assignment of funds or account, an escrow agreement, an irrevocable letter of credit, or other financial security device in an amount equal to that required for a surety bond. The surety bond or other performance security shall be conditioned on the work being completed or maintained in accordance with requirements, approvals, or permits; on the site being left or maintained in a safe condition; and 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.

C. Amount of Performance Security. The amount of the performance or maintenance security shall be 125 percent of the estimated cost, as approved by the Planning Official, of conformance to plans, specifications, and permit or approval requirements, under this Chapter, including corrective work and compensation, enhancement, mitigation, maintenance, and restoration of sensitive areas. All bond or performance security shall be submitted in their original form with original signatures of authorization.

D. Administration of Performance Security. If during the term of the performance or maintenance security, the Planning Official determines that conditions exist which do not conform with plans, specifications, approval or permit requirements, the Planning Official may issue a stop work order prohibiting any additional work or maintenance until the condition is corrected. The Planning Official may revoke the performance or maintenance security, or a portion thereof, in order to correct conditions that are not in conformance with plans, specifications, approval or permit requirements. The performance or maintenance security may be released upon written notification by the Planning Official, following final site inspection or completion, as appropriate, or

when the Planning Official is satisfied that the work or activity complies with permits or approved requirements.

E. Exemptions for Public Agencies. State agencies and local government bodies, including school districts, shall not be required to secure the performance or maintenance of permit or approval conditions with a surety bond or other financial security device. These public agencies are required to comply with all requirements, terms, and conditions of the permit or approval, and the Planning Official may enforce compliance by withholding certificates of occupancy or occupancy approval, by administrative enforcement action, or by any other legal means.

XIV. DEDICATION

Consistent with law, the applicant shall dedicate development rights, air space, or a greenbelt protection or open space easement to the City to ensure the protection of sensitive areas and their buffers.

XV. LIABILITY

Prior to issuance of a building permit, 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 sensitive areas arising out of development activity on the subject property. The applicant shall record this agreement with the King County Department of Elections and Records.

XVI. APPEALS

All classifications, decisions, and determinations made pursuant to this Chapter may be appealed using, except as stated below, the applicable appeal provisions of Chapter 145 of the Kirkland Zoning Code. The applicant or any other aggrieved person shall file the appeal within 15 days of the date of the decision maker's written classification, determination, or decision. If a proposed development activity requires approval through Process IIA, IIB, or III (as described in Chapters 150, 152, and 155, respectively, of the Kirkland Zoning Code), any appeal of a classification, determination, or decision will be heard as part of that other process.

XVII. SETBACKS AND BUFFERS REQUIRED BY PRIOR APPROVALS

If, subsequent to October 2, 1982, the City approved a subdivision, short subdivision, or development permit for the subject property with established setbacks or buffers on the subject property from a stream or wetland, those setbacks or buffers shall apply to any

development on the subject property pursuant to that subdivision, short subdivision, or development permit, or any redevelopment or remodeling pursuant to that subdivision, short subdivision, or development permit. Any inconsistent environmentally sensitive area buffer requirements of this Chapter shall not apply, provided that all of the provisions of this Chapter which do not directly conflict with the previously imposed setback or buffer requirements shall fully apply to the subject property.

Section 2. **Duration.** This Ordinance shall be effective for six months. This Ordinance may be renewed for one or more six-month periods if a subsequent public hearing is held and findings of fact are made prior to each renewal.

Section 3. **Severability.** Should any section, paragraph, sentence, clause, phrase, or word of this Chapter be declared invalid or unconstitutional by a court or agency of competent jurisdiction, such invalidity or unconstitutionality shall not affect any of the remaining sections, paragraphs, sentences, clauses, phrases, or words of this Chapter, all of which will remain in full force and effect.

Section 4. **Effective Date.** This ordinance shall be in effect five days from and after its passage by the Kirkland City Council and publication, pursuant to Section 1.088.017 Kirkland Municipal Code, in the summary form attached to the original of this ordinance, and by this reference approved by the City Council, as required by law.

PASSED by majority vote of the Kirkland City Council in regular, open meeting this 20th day of October, 1998.

SIGNED IN AUTHENTICATION thereof this 20th day of October, 1998.

Mayor

Attest:

City Clerk

Approved as to Form:

City Attorney
ISAOFINA

APPENDIX A

CITY OF KIRKLAND

O-3658

DETERMINATION OF SIGNIFICANT WETLAND HABITAT

Wetlands that provide significant habitat are rated as Type I wetlands. These wetlands typically have at least two wetland vegetation classes, are at least partially surrounded by buffers of native vegetation, are connected by surface water flow (perennial or intermittent) to other wetlands or streams, and contain or are associated with forested habitat.

1. Total wetland area

POINTS

Estimate wetland area and score from choices.

Acres		Point Value
>20.00	=	6
10-19.99	=	5
5-9.99	=	4
1-4.99	=	3
0.1-0.99	=	2
<0.1	=	1

___

2. Wetland classes: Determine the number of wetland classes that qualify, and score according to the table.

	# of classes		points
Open Water: if the area of open water is >1/3 acre or > 10% of the total wetland area.	1	=	1
Aquatic Beds: if the area of aquatic beds >10% of the open water area or >1/2 acre.	2	=	3
Emergent: if the area of emergent class is >1/2 acre or >10% of the total wetland area.	3	=	5
Scrub-Shrub: if the area of scrub-shrub class is >1/2 acre or >10% of the total wetland area.	4	=	7
Forested: if area of forested class is >1/2 acre or >10% of the total wetland area.	5	=	10

___

3. Plant species diversity.

For all wetland classes which qualified in 2 above, count the number of different plant species and score according to table below. You do not have to name them.

e.g. If a wetland has an aquatic bed class with 3 species, an emergent class with 4 species and a scrub-shrub class with 2 species you would circle 2, 2, and 1 in the second column, below.

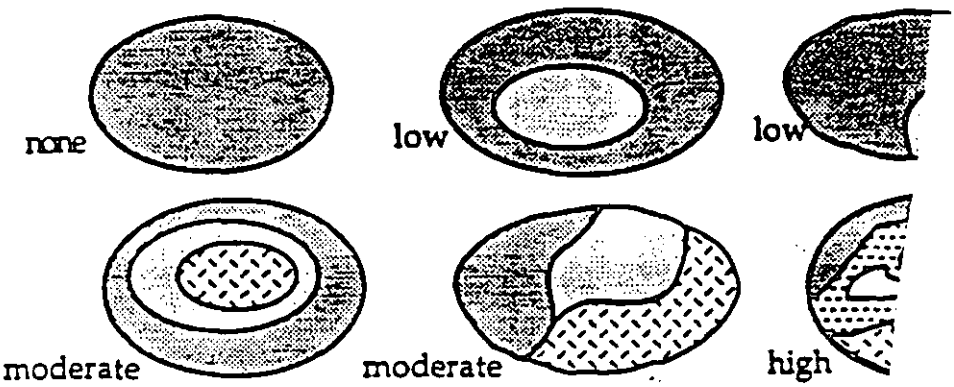
Class	# of Species	Points	Class	# of Species	Points
Aquatic Bed	1-2	1	**Scrub-Shrub**	1-2	1
	3	2		3-4	2
	>3	3		>4	3
Emergent	1-2	1	**Forested**	1-2	1
	3-4	2		3-4	2
	>4	3		>4	3

4. Structural Diversity.

If the wetland has a forested class, add 1 point for each of the following atributes present:

-trees > 50' tall	= 1
-trees 20' to 49' tall	= 1
-shrubs	= 1
-herbaceous ground cover	= 1

5. Decide from the diagrams below whether *interspersion between wetland classes* is high, moderate, low or none?



High	= 3	Low	= 1
Moderate	= 2	None	= 0

6. Habitat features.

Add points associated with each habitat feature listed.

Is there evidence of current use by beavers?	= 3
Is a heron rookery located within 300'?	= 2
Are raptor nest/s located within 300'?	= 1
Are there at least 3 standing dead trees (snags) per acre?	= 1
Are any of these standing dead trees (snags) >10" in diameter?	= 1
Are there any other perches (wires, poles or posts)?	= 1
Are there at least 3 downed logs per acre	= 1

7. Connection to streams. (Score one answer only.)

Is the wetland connected at any time of the year via surface water:

to a perennial stream or a seasonal stream with fish	= 5
to a seasonal stream without fish;	= 3
is not connected to any stream	= 0

8. Buffers.

Step 1: Estimate (to the nearest 5%) the percentage of each buffer or land-use type (below) that adjoins the wetland boundary. Then multiply these percentages by the factor(s) below and enter result in the column to the right.

	% of Buffer				Step 1		Width Factor		Step 2
roads, buildings or parking lots:	____%	x	0	=	0				
lawn, grazed pasture, vineyards or annual crops:	____%	x	1	=	___	x	___	=	___
ungrazed grassland or orchards:	____%	x	2	=	___	x	___	=	___
open water or native grasslands:	____%	x	3	=	___	x	___	=	___
forest or shrub:	____%	x	4	=	___	x	___	=	___

Add buffer total ___

Step 2: Multiply result(s) of step 1:
by 1, if buffer width is 25-50'
by 2, if buffer width is 50-100'
by 3, if buffer width is >100'.
Enter results below and add subscores:

Step 3: Score points according to table at right:

Buffer total		
900-1200	=	4
600-899	=	3
300-599	=	2
100-299	=	1

___

9. Connection to other habitat areas:

Is there a riparian corridor to other wetlands within 0.25 of a mile, or a corridor >100' wide with good forest or shrub cover to any other habitat area? = 5

Is there a narrow corridor <100' wide with good cover or a wide corridor >100' wide with low cover to any other habitat area? = 3

Is there a narrow corridor <100' wide with low cover or a significant habitat area within 0.25 mile but no corridor? = 1

Is the wetland and buffer completely isolated by development and/or cultivated agricultural land = 0 ___

Add the scores to get a total: **Total =** ___

Is the total greater than or equal to 22 points? Yes: Type I
No: Type II

PUBLICATION SUMMARY
OF ORDINANCE NO. 3658

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO SENSITIVE AREAS, AND REPLACING CHAPTER 90 OF THE KIRKLAND ZONING CODE WITH INTERIM SENSITIVE AREAS REGULATIONS THAT COMPLY WITH THE GROWTH MANAGEMENT ACT, R.C.W. CHAPTER 36.70.A (FILE NO. IV-95-104).

SECTION 1. Adopts a new interim Chapter 90 to replace Chapter 90 of the Kirkland Zoning Code.

SECTION 2. Provides a duration clause for the ordinance.

SECTION 3. Provides a severability clause for the ordinance.

SECTION 4. Authorizes publication of the ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.017 Kirkland Municipal Code and establishes the effective date as five days after publication of summary.

The full text of this Ordinance will be mailed without charge to any person upon request made to the City Clerk for the City of Kirkland. The Ordinance was passed by the Kirkland City Council at its regular meeting on the 20th day of October, 1998.

I certify that the foregoing is a summary of Ordinance 3658 approved by the Kirkland City Council for summary publication.

City Clerk

ISAO/SUMM/0CT98