

# FINAL ENVIRONMENTAL IMPACT STATEMENT

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## 2006 Critical Areas Update City of Bellevue, Washington



City of Bellevue



May 2006

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## 2006 Critical Areas Update City of Bellevue, Washington



City of Bellevue  
450 – 110<sup>th</sup> Avenue NE  
P.O. Box 90012  
Bellevue, Washington 98009-9012

*Carol V. Helland*

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Carol V. Helland, Environmental Coordinator

May 9, 2006

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# Fact Sheet

## Project Title

2006 Critical Areas Update for the City of Bellevue, Washington

## Nature and Location of Proposed Action

The proposed project area encompasses the City of Bellevue (Figure 1). Bellevue is a city of approximately 110,000 people, with a total land area of about 32 square miles. Bellevue is located approximately 3 miles east of Seattle, Washington, between Lake Washington and Lake Sammamish.

The City of Bellevue proposes to revise its critical areas protection strategy to ensure that the regulation and management of the city's critical areas is based on scientifically defensible principles, in conformance with requirements of the Washington State Growth Management Act (GMA). Critical areas as defined by the GMA include:

- Wetlands
- Geologically hazardous areas
- Fish and wildlife habitat conservation areas
- Aquifer recharge areas
- Frequently flooded areas.

The City of Bellevue is including the shorelines of Lake Washington, Lake Sammamish, and Phantom Lake in its critical areas update as fish and wildlife habitat conservation areas (Bellevue 2005a).

The City of Bellevue has proposed three implementation strategy alternatives:

- Alternative 1, Regulatory Alternative
- Alternative 2, City Programs Alternative
- Alternative 3, Council-Modified Alternative.

## Organization of the Environmental Impact Analysis

This environmental analysis is best understood by reviewing the following sections in the draft and final environmental impact statement (EIS) documents:

1. Part 1 of this final EIS—Summary
2. Part 2 of this final EIS—Description of Alternatives

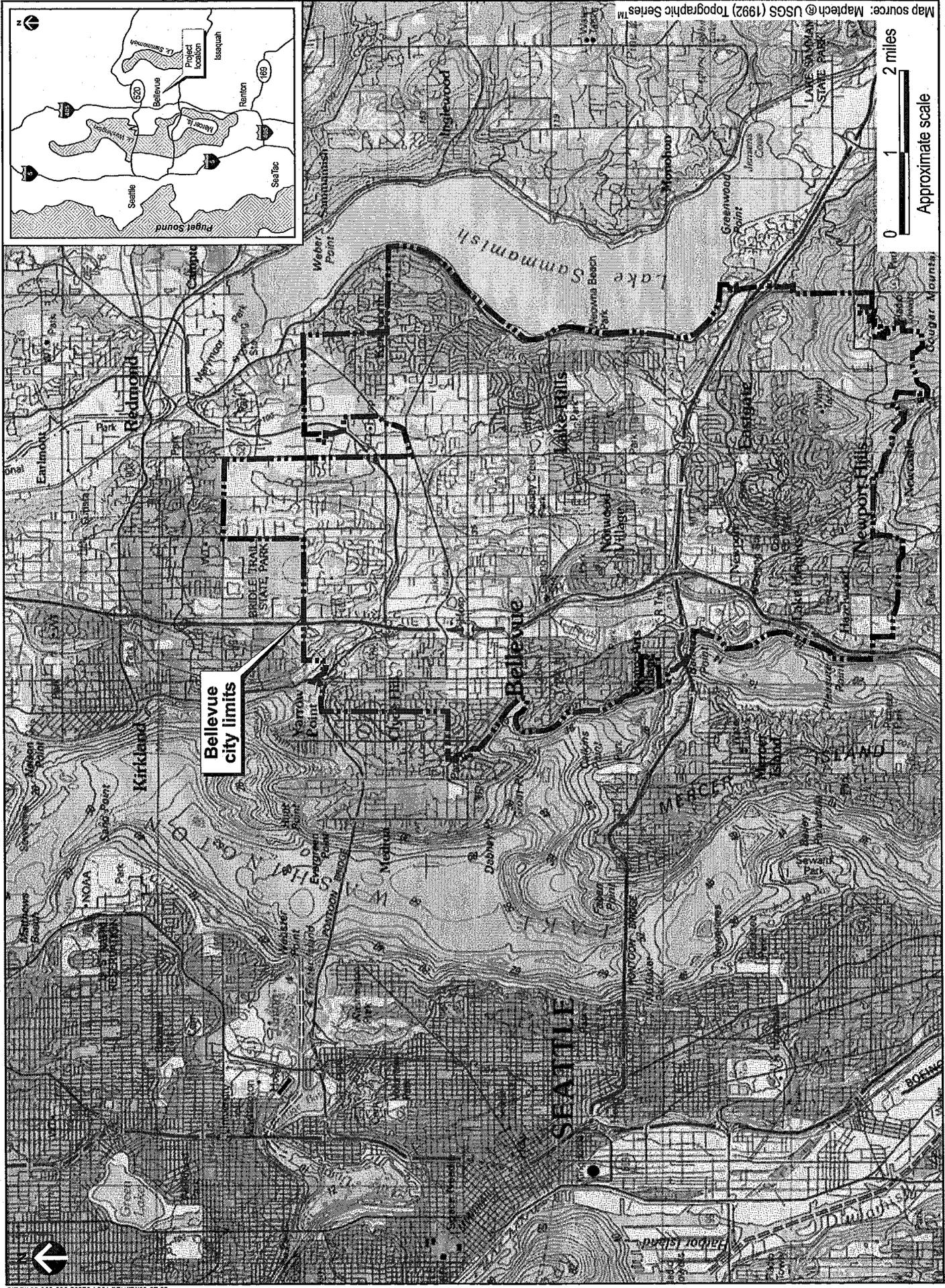


Figure 1. Vicinity map for the City of Bellevue, Washington.

3. Part 3 of the draft EIS—Affected Environment, Impacts, and Mitigation, for the analyses of the No-Action, City Programs, and Regulatory alternatives
4. Part 3 of this final EIS—Errata
5. Part 4 of this final EIS—Alternative 3 – Council-Modified Alternative, for the analysis of the Council-Modified Alternative
6. Part 5 of this final EIS—Comments and Responses.

The impact analysis of Alternatives 1 and 2 provided in the draft EIS is summarized here in Part 1, Section 5.0. The complete impact analysis of the Council-Modified Alternative is provided in this final EIS. A description summarizing all three alternatives is provided in Part 1, Section 4.0 of this final EIS.

The full text of Alternative 1, Regulatory Alternative and Alternative 2, City Programs Alternative can be found in the June 2005 draft EIS in Appendices A and B, respectively. The full text of the Council-Modified Alternative is located in Appendix A of this final EIS.

A risk analysis document provides the environmental analyses for Alternatives 1 and 2 (Herrera 2005b). An addendum to the risk analysis provides the environmental risk analysis for the Council-Modified Alternative (Herrera 2006).

### **Alternative 1 – Regulatory Alternative**

Alternative 1, the Regulatory Alternative, comprises several amendments to Bellevue's Land Use Code (LUC) for geologically hazardous areas, frequently flooded areas (referred to as Areas of Special Flood Hazard in the regulations), streams and riparian areas, wetlands, shorelines, and wildlife habitat conservation areas (LUC 20.25H). Land Use Code amendments are proposed to modify minimum lot size, required non-critical area setbacks, density, lot coverage, and impervious surface area standards to improve protection within critical areas. The Regulatory Alternative would also add new rules for redevelopment of nonconforming structures and uses. Impervious surface standards will be regulated city-wide. The city currently regulates lot coverage, which limits the amount of a site that may be covered with structures, but does not limit other features, like patios, driveways, sport courts, and surface parking. New regulations will limit impervious surface for all development. Through a site-specific *critical areas report*, the proposed regulations would allow for deviations from the prescriptive standards for certain proposals that can demonstrate that the result is at least as protective of critical area functions and values as the prescriptive standards. Changes proposed under the Regulatory Alternative for specific critical areas are presented here. The full text of the Regulatory Alternative is contained in the draft ordinances provided in Appendix A of the draft environmental impact statement (EIS).

*Geologically hazardous and frequently flooded areas* – The Regulatory Alternative will add a new minimum toe-of-slope buffer from steep slopes and slopes with identified landslide hazards.

The code clarifies the method for calculating the density allowed on multi-family and commercial lots with critical areas and for residential subdivision of land with critical areas. This clarification eliminates the current “disturbance limits” of the LUC, and replaces it with a new density calculation and expanded buffers. The Regulatory Alternative establishes standards to ensure that there would be no rise in flood levels, increasing protection against the risk of offsite flooding resulting from development.

*Streams and wetlands* – Under the Regulatory Alternative, the city will adopt the state stream and wetland typing systems, and will increase the width of stream-side and wetland buffers for each category of stream and wetland. With the change in typing system, expansion of buffers and continued use of structure setbacks, it is likely that most streams/wetlands will have expanded protection for remaining new development and redevelopment. Under the Regulatory Alternative, property owners will be able to suggest improvements to streams and wetland buffers, for example, enhancing native vegetation in the buffer in return for increased flexibility in the amount and location of development allowed outside of the stream or wetland and its buffer. This flexibility does not exist in the current Land Use Code.

*Shorelines* – The Regulatory Alternative establishes a shoreline setback of 50 feet, which will apply to all remaining new development, with accommodation made for areas where most existing development does not comply with the 50-foot setback. The city will adopt prescriptive moorage standards that are consistent with federal and state permitting authority standards, thereby streamlining the permitting process for citizens. Standards for new shoreline stabilization establish a preference for bioengineered or more natural shoreline strategies to improve protection of shoreline functions. Regulations will permit small repairs to maintain existing bulkheads.

*Wildlife habitat conservation areas* – Under the Regulatory Alternative, the city will add a wildlife habitat overlay to all designated critical areas to ensure wildlife habitat functions and values are considered where current rating systems do not take into account the full range of habitat values (for example, steep slopes or riparian buffers). The Regulatory Alternative will add to the Land Use Code a package of incentives aimed at preserving habitat linkages between patches of habitat and other isolated natural areas, parks, preserves, open spaces, or large tracts. When a proposal occurs on a site with a species of local importance, an applicant will be required to submit a Habitat Management Plan that documents how the proposal will avoid or mitigate impacts to the habitat or species in question. Habitat Management Plans are based on the State Department of Fish and Wildlife recommendations.

## **Alternative 2 – City Programs Alternative**

Alternative 2, the City Programs Alternative, would involve implementing programs and incentives rather than changing the critical areas regulations in the Land Use Code (LUC). The City Programs Alternative identifies a suite of programs and incentives focused on protecting streams, wetlands, shorelines, and wildlife. These programs would be prioritized and implemented over time (not all in the first year or two) to improve protection of Bellevue’s critical areas over the long-term. Not all programs would necessarily be undertaken in each year.

The existing Land Use Code, as it pertains to critical areas for streams, wetlands, shorelines, and wildlife, would be maintained. No major city projects or programs are designed to protect geologically hazardous areas or frequently flooded areas (Areas of Special Flood Hazard); therefore the regulatory changes proposed under the Regulatory Alternative would be included under the City Programs Alternative to protect these types of critical areas. The City Programs Alternative would include programs in four major categories: Acquisition; Rehabilitation/Maintenance; Education/Stewardship; and Monitoring. The full description of the City Programs Alternative is contained in Appendix B of the draft EIS.

This EIS describes the impacts and risks to ecological conditions that would be expected to result from implementation of each alternative, at 5 years after implementation and at 50 years after implementation as well as if no action is taken and current critical areas and shoreline management strategies are maintained. This EIS also addresses land use impacts associated with implementation of the No-Action Alternative, the Regulatory Alternative, and the City Programs Alternative.

### **Alternative 3 – Council-Modified Alternative**

Alternative 3, the Council-Modified Alternative, comprises several Land Use Code amendments for geologically hazardous areas, frequently flooded areas, streams and riparian areas, wetlands, shorelines, and wildlife habitat conservation areas. The Council-Modified Alternative is the same as the Regulatory Alternative, with the following modifications:

- Tree pruning within any critical area buffer may be allowed as long as it is performed in accordance with an approved vegetation management plan.
- The regulated area at the toe of slopes of 40 percent or greater and slopes with an identified landslide hazard would be classified as a 75-foot structure setback.
- Tree pruning may be allowed in geologic hazard areas and required buffers on individual lots, provided it is performed in accordance with the director's guidance.
- Tree topping would be allowed in geologic hazard areas and required buffers on individual lots where a tree has historically been topped.
- Stream and riparian buffers on developed properties would be 50 feet on Type F and S streams and 25 feet on all others.
- Structure setbacks on developed properties would be 50 feet on Type F and S streams, 25 feet on Type N streams, and zero feet on Type O streams.
- The definition of developed properties when used in relation to wetlands and wetland buffers would include only those properties where the

wetlands and buffers are in a native growth protection area or easement. An undeveloped site would be any site where the wetland and wetland buffer have not previously been included within a native growth protection area (NGPA) or native growth protection easement (NGPE), regardless of whether the site contains a primary structure.

- On developed properties with wetlands where an NGPE or NGPA has been previously approved and recorded, the required buffers are defined by the NGPE or NGPA.
- Structure setbacks on developed properties with wetlands where a NGPE or NGPA has been previously approved and recorded would be 20 feet from the edge of the NGPE or NGPA for Category I or II wetlands, 15 feet from the edge of the NGPE or NGPA for Category III wetlands, and no setback for Category IV wetlands.
- The Council-Modified Alternative would continue to allow reconstruction or remodeling within the footprint of existing primary structures that are located within a buffer. However properties considered developed, that is already having a primary structure, but large enough to be subdivided, would be subject to the revised buffer requirements of the Council-Modified Alternative if subdivided.
- On developed properties on shorelines, the required buffers would be 25 feet from the ordinary high water mark, and the structure setback would be 25 feet from the landward edge of the required buffer.
- The city would explore a pilot program to streamline permitting for docks in conjunction with federal and state permitting requirements.

## **Proponent**

City of Bellevue, Washington

## **Lead Agency and Responsible Official**

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## Required Permits and Approvals

No permits would be required for the adoption of either alternative. The adoption of a new critical areas ordinance would require Bellevue City Council approval. Development occurring after the implementation of either alternative would be subject to City of Bellevue land use policies and regulations.

## Environmental Impact Statement Authors

Herrera Environmental Consultants, Inc.:

- Geologically hazardous areas
- Critical aquifer recharge areas
- Frequently flooded areas
- Streams and riparian areas
- Wetlands
- Shorelines
- Wildlife habitat conservation areas

City of Bellevue:

- Land use

## Draft EIS Issue Date

June 16, 2005

## Final EIS Issue Date

May 9, 2006

## Subsequent Environmental Review

The ordinances and programs under consideration in this EIS will not be subject to future environmental review after completion of the EIS. The projects regulated by the proposed ordinances would be subject to additional environmental review as required under the City of Bellevue Environmental Procedures Code.

## **Date of Implementation**

A decision from the City of Bellevue regarding the proposed action is expected in May 2006, with implementation of new regulations effective in June 2006. Implementation of nonregulatory measures depends on the availability of funding and will be considered as part of the city's budget review process.

## **Availability of the Final EIS**

The final EIS is available for public review at the Department of Planning & Community Development, Bellevue City Hall, 450 – 110<sup>th</sup> Avenue NE, Bellevue, Washington.

Copies of the final EIS may be purchased from the City of Bellevue, city hall cashier, for \$5 each. A PDF version may be downloaded from the city website, at <http://www.cityofbellevue.org/page.asp?view=7481>.

## **Location of Materials Incorporated by Reference**

Background materials incorporated by reference in the final EIS are available for review at the Department of Planning & Community Development, Bellevue City Hall, 450 – 110<sup>th</sup> Avenue NE, Bellevue, Washington. These materials include:

- Bellevue critical areas maps
- *Bellevue Critical Areas Update: 2005 Best Available Science (BAS) Review*
- *City of Bellevue Critical Areas Update: Risk Analysis of No Action, Regulatory, City Programs, and Best Available Science (BAS) Based Alternatives for Improving Critical Areas Protection*
- *Draft Environmental Impact Statement: Critical Areas Update, City of Bellevue, Washington (June 2005).*

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## Abbreviations

BAS	best available science
BCC	Bellevue City Code
BFE	base flood elevation
CA	critical areas
CAO	Critical Areas Ordinance (Bellevue)
CIP	capital improvement project or program
CWA	federal Clean Water Act
EIS	environmental impact statement
ESA	federal Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GIS	geographic information system
GIS	geographic information system
GMA	Washington Growth Management Act
LID	low-impact development
LUC	Land Use Code (Bellevue)
LWD	large woody debris
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service (NOAA Fisheries)
NOAA	National Oceanic and Atmospheric Administration
NGPA	native growth protection agreement
NGPE	native growth protection easement
NPDES	National Pollutant Discharge Elimination System
NWI	National Wetlands Inventory
OHWM	ordinary high water mark
RCW	Revised Code of Washington
RGP	regional general permit
SEPA	State Environmental Policy Act
SMA	Washington Shoreline Management Act
TIA	total impervious area
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife

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## Glossary

**aquifer recharge area** – A geological formation where rainwater or seepage is able to move from the surface down into the aquifer to replenish ground water supplies.

**base flood elevation (BFE)** – the elevation (shown on the Flood Insurance Rate Map for Zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE) that indicates the water surface elevation resulting from a flood that has a 1 percent chance of equaling or exceeding that level in any given year.

**bank stabilization** – Action taken to control the rate of erosion along the bank of a stream or shoreline. Typical methods include placement of large woody debris, rounded or angular rock, soil, geotextile fabric, and planting of native woody vegetation.

**best available science (BAS)** – Current scientific information used to designate, protect, or restore critical areas that is derived from a valid scientific process as defined by WAC 365-195-900 through 925, now or as hereafter amended.

**bioengineering** – The use of living plants in combination with nonliving plants and inorganic materials in the reconstruction, stabilization and introduction of morphological and vegetative features, particularly in streams or along shorelines.

**cores** – Cores are areas that include wetlands, buffers, and undeveloped city-owned property such as Native Growth Protection Areas (NGPA) and Retained Vegetation Areas (RVA).

**critical areas** – Areas required to be protected under the Growth Management Act, RCW 36.70A that include the functions and values of the following areas and ecosystems: (a) wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas.

**critical areas overlay district** – An area that includes designated critical areas together with adjacent land, within which special provisions apply to protect and restore the natural environment. In the Regulatory Alternative, the Critical Area Overlay District includes the critical area, a buffer area immediately adjacent to the critical area, and the entire parcel, including noncritical areas.

**drainage network** – A pattern of hierarchical connections formed by streams, ditches, and culverts that drain a watershed.

**ecosystem** – The interacting and dynamic community of living organisms and the physical environment in a defined geographic area.

**environment** – All external conditions and influences affecting the life, development, and ultimately, the survival of an organism.

**fault** – A fracture in the earth's crust forming a boundary between rock masses that have shifted.

**fish passage barrier** – An artificial structure in a stream channel such as a culvert or a dam, or a natural feature such as a waterfall, that precludes the upstream or downstream movement of fish.

**floodplain** – Land area susceptible to being inundated by water from a natural source. This area is usually low land adjacent to a stream, lake, or ocean.

**floodplain connectivity** – The ability of off-channel areas to become hydrologically linked to an adjacent stream channel during bankfull discharge.

**frequently flooded areas** – Lands that are subject to one percent or greater change of flooding in any given year, also referred to as a 100-year floodplain.

**grandfathered** – a *grandfather clause* or *grandfather rule* is an exception that allows an old rule to continue to apply to some existing situations, when a new rule will apply instead in all future situations. It is often used as a verb: to "grandfather in" means to grant such an exemption. For example, a grandfathered development may be exempt from tougher critical area regulations.

**habitat** – The native environment or specific surroundings where a plant or animal naturally grows or lives and the particular characteristics of the place that make it suited to meet the life cycle needs of that species, including physical factors such as temperature, moisture, and light, and biological features such as the presence of food or predator organisms.

**habitat indicator** – A physical attribute of the environment measured to characterize the conditions necessary to support an organism, population, or community of organisms.

**hyporheic zone** – The saturated zone below and adjacent to a streambed that contains some portion of surface waters, serves as a filter for nutrients, and maintains water quality. Chemicals that have been dissolved in water can move repeatedly between the streambed and the subsurface below and adjacent to the streambed. The hyporheic zone is comprised of the resulting subsurface environments which contain variable portions of water from ground water and surface water. These zones can be active sites for aquatic life.

**impervious surface** – Any surface that resists or prevents the penetration or infiltration of water into the soil. Impervious surfaces are important because they will prevent the absorption of rainfall and, therefore, cause almost all of the rainfall that falls on them to accumulate as surface runoff.

**invasive weed** – Nonnative plant species that become easily established in disturbed conditions and reproduce readily, often taking over a disturbed site to the exclusion of indigenous species.

**large woody debris (LWD)** – Tree branches, stumps, and logs that fall naturally into streams or are strategically placed in them to improve or restore the functions and values of the stream

segment. Most naturally occurring LWD in streams is derived from trees growing in the riparian corridor.

**liquefaction** – A phenomenon that is caused by earthquake shaking, whereby fine-grained saturated soils can lose their strength and structure, becoming liquid-like. The loss of strength and structure may result in damage to surface structures and underground utilities.

**natural disturbances** – Relatively distinct (in time) natural events (such as major wildfires, drought, insect infestations, hurricane-force winds) that result in significant change in an ecosystem's structure and/or composition.

**nonnative species** – Species that do not normally exist and reproduce in a specific area.

**off-ramp** – Bellevue's proposed new Critical Areas Ordinance provides enhanced flexibility in the form of an "off-ramp" or alternative process that allows an applicant to depart from prescriptive regulations where they may be particularly onerous or where the result may achieve little environmental benefit.

**peak/base flow** – The peak flow is the maximum instantaneous discharge of a stream or river at a given location. Base flows are stream flows originating entirely from ground water discharging to the stream.

**refugia** – Areas that have not been exposed to great environmental changes and disturbances undergone by the region as a whole. These areas provide conditions suitable for survival of species that may be declining elsewhere.

**riparian** – Land area adjacent to a body of water that is influenced by the presence of water and that directly influences the aquatic ecosystem by providing shade, fine or large woody debris, nutrients, organic and inorganic debris, terrestrial insects, or wildlife habitat.

**riparian break** – An indicator of the condition of riparian forest vegetation, often used as a parameter to evaluate the number of breaks in riparian cover from development as well as from road and utility crossings. Tallies of riparian breaks are used as a measure of alterations to the longitudinal integrity or connectivity of the riparian corridor.

**salmonid** – A member of the fish family *salmonidae*, which includes salmon, trout, dolly varden, char, and white fish.

**sediment** – Soil particles that have been transported from their original location by wind or water action.

**shoreline upwelling** – Water currents that result in the upward movement of deeper waters to the surface along the shoreline. In areas of upwelling, deeper waters typically carry a significant amount of plant nutrients to the surface, elevating the level of primary production which, in turn, can support more abundant fish populations.

**substrate** – The physical surface upon which an organism lives or grows, or to which it is attached

**total impervious area (TIA)** – The percentage of a given area that is covered with impervious surfaces.

**seiche** – A movement on the surface of an enclosed body of water such as a lake, usually caused by intense storm activity or earthquakes.

**tsunami** – One or a series of unusually large, long-period sea waves caused by a great disturbance under an ocean of local or distant origin, such as a strong earthquake, landslide, or volcanic eruption.

**turbidity** – Reduced transparency of water due to suspended material. Turbidity may be caused by a wide variety of suspended materials, such as clay, silt, finely divided organic and inorganic matter, soluble colored organic compounds, plankton and other microscopic organisms, and similar substances.

**watershed** – An area bordered by topographic divides within which all precipitation and irrigation water flows to a stream or river.

**wetland or wetlands** – 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 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. Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands.

**width/depth ratio** – The average width of a stream channel at the normal high water level divided by the depth at normal high water level. The normal high water level is the stage reached during average annual high flow.

# **Part 1 Summary**

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## 1.0 Objectives of the Proposal

Bellevue's objective in updating its critical areas policies is to maintain and improve the city's natural environment over time, for the benefit of fish and wildlife, and for the well-being of the community as a whole (Bellevue 2005b). Like most cities in western Washington, Bellevue has grown dramatically in recent decades, and that trend is expected to continue. Bellevue has demonstrated that urban development and environmental sustainability are compatible goals; however, additional work is needed to protect the functions and values of natural systems.

The city proposes to better protect the natural functions and values of its critical areas through implementation of an updated critical areas management strategy, informed by current and reliable scientific information ("best available science"). The city has developed three implementation strategy alternatives to achieve these objectives; the first is a regulatory approach (the Regulatory Alternative), the second is a programmatic approach (the City Programs Alternative) that includes a range of nonregulatory means to protect the natural environment, and the third is a modification of the Regulatory Alternative (the Council-Modified Alternative).

In conformance with the State Environmental Policy Act (SEPA), this environmental impact statement (EIS) compares the three action alternatives with a no-action alternative that represents existing conditions. The three action alternatives were generated considering science-based management recommendations, although each of the action alternatives departs from best available science in some cases.

## 2.0 Project Purpose and Need

Under the state Growth Management Act, all cities and counties in Washington are required to adopt critical areas regulations (RCW 36.70A.060). Critical areas are defined by the state as wetlands, frequently flooded areas, geologically hazardous areas, aquifer recharge areas, and fish and wildlife habitat conservation areas (RCW 36.70A.030 [5]). Bellevue adopted critical areas policies (previously called "natural determinants" policies) in 1987, predating the state Growth Management Act (GMA) of 1990.

One of the objectives of the GMA is to protect the functions and values of critical areas by ensuring that cities and counties 1) accurately describe critical areas functions and values, 2) understand the likely adverse impacts on critical areas that are associated with proposed land use planning alternatives, and 3) make land use decisions that minimize or eliminate those adverse impacts. Bellevue revised its natural determinants policies in 1993, in accordance with the GMA. The city currently regulates development in critical areas with Part 20.25H, sensitive area overlay district, of the Bellevue City Code (BCC), Title 20, Land Use Code (LUC).

In 1995, the Washington state legislature added a new section to the GMA. This new section was intended to ensure that cities and counties consider reliable scientific information when adopting policies and regulations to designate and manage critical areas. The new section, RCW 36.70A.172, requires all cities and counties in Washington state to include "best available science" in developing policies and regulations to protect the functions and values of critical areas. Accordingly, to ensure continued compliance with GMA, all jurisdictions are required to review, evaluate, and, if necessary, revise their critical areas ordinances to consider best available science in the governance of critical areas. This proposal is a product of Bellevue's critical areas update process, which began in 2001, and it presents three alternative strategies for meeting the requirements of the GMA 1995 amendments. The city anticipates completion of the update process by June 2006.

### 3.0 Regulatory Context

While GMA provides a framework of regulations for protecting and managing Bellevue's critical areas, development in these resource areas is also subject to a combination of other regulations designed to protect natural resources and public well-being. These regulations include:

- Clean Water Act (federal)
- Endangered Species Act (federal)
- Washington State Environmental Policy Act (state)
- Shoreline Management Act (state)
- Bellevue clearing and grading regulations (local)
- Bellevue stormwater regulations (local).

Under the federal Clean Water Act, the U.S. Army Corps of Engineers (USACE) has responsibility and authority to regulate the discharge of dredged or fill material into streams and wetlands. Section 404 of the Clean Water Act requires a USACE-issued permit to place fill material in wetlands. In addition, if the proposed development involves discharge of pollutants to waters of the state, the Clean Water Act requires Section 401 Certification and a National Pollutant Discharge Elimination System (NPDES) permit.

If there is federal funding associated with a proposed development, the requirements of the Endangered Species Act (ESA) apply. The ESA provides broad protection for species of fish, wildlife, and plants that are listed as threatened or endangered. The purpose of the ESA is to "conserve the ecosystems upon which threatened or endangered species depend" and to conserve and recover listed species. All species of animals and plants, with the exception of pest insects, are eligible for listing. The Interior Department's U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) jointly administer the law. The USFWS administers terrestrial and freshwater species and migratory birds, while NOAA Fisheries administers marine species.

The Washington State Environmental Policy Act (SEPA) requires the analysis of impacts on elements of the built environment (including land use) and the natural environment (including critical areas) that would be expected to result from a proposed action.

The Shoreline Management Act was enacted in 1971 to manage and protect the shorelines of the state by regulating development in the shoreline area. Its jurisdiction includes marine shorelines, rivers, and streams and lakes larger than a certain size. It also regulates wetlands associated with these shorelines (Revised Code of Washington, Chapter 90.58 [RCW 90.58]). At the local jurisdiction level, the Shoreline Management Act is implemented through Shoreline Master Programs. Bellevue's shoreline use and development standards are contained in Part 20.25E Shoreline Overlay District of the Bellevue City Code (Title 20, Land Use Code).

Bellevue's clearing and grading regulations require best management practices to protect against increased slope instability, soil erosion, stream sedimentation, and excessive stormwater runoff, as a result of development. These measures limit risks to people and property, and also reduce the risk of ecological damage to critical areas such as streams and wetlands.

## 4.0 Summary Description of the Alternatives

This environmental impact statement (EIS) evaluates three alternatives. The City of Bellevue has proposed three alternative strategies for implementing updated critical areas protection measures: the Regulatory Alternative (Alternative 1), the City Programs Alternative (Alternative 2), and the Council-Modified Alternative (Alternative 3). In addition, as required by the State Environmental Policy Act (SEPA), the EIS evaluates a No-Action Alternative. All four alternatives are summarized in this chapter. A detailed description of the alternatives is presented in Part 2—Description of the Alternatives.

### 4.1 No-Action Alternative

The existing Land Use Code (Part 20.25H Sensitive Area Overlay District and Part 20.2E Shoreline Overlay District) comprises the No-Action Alternative. Development would also be subject to existing state and federal regulations that protect some of the resources in critical areas. In the No-Action Alternative, some city programs that currently exist would continue, including acquisition of greenways, open space, and trail linkages as identified in the Parks Open Space Plan; utilities maintenance and rehabilitation efforts, including fish passage improvement projects; parks maintenance activities in native growth protection areas (NGPA); and existing education and stewardship programs.

### 4.2 Alternative 1 – Regulatory Alternative

Alternative 1, the Regulatory Alternative, comprises several Land Use Code amendments for geologically hazardous areas, frequently flooded areas, stream and riparian areas, wetlands, shorelines, and wildlife habitat conservation areas.

#### 4.2.1 City-Wide and All Critical Areas

Proposed code amendments affecting all critical areas include modifications to minimum lot size, density, and lot coverage, to better protect critical areas. Under the Regulatory Alternative, the Land Use Code would contain new rules for redevelopment of nonconforming structures and uses in certain situations.

Calculation of development credit from critical areas would be revised for all types of development. The overall amount of development that, absent critical areas, could be realized would not change, but the proposed regulations increase the size of the development “credit” from critical areas that may be used on the buildable part of the site. (See Land and Shoreline Use section for more detail.)

The Regulatory Alternative would also add flexibility in development standards for property owners who propose critical area enhancements, such as increasing native vegetation in a buffer,

so long as the proposal results in at least as much protection of the critical area as the protection provided by the standard regulations. This flexibility does not exist in the current Land Use Code.

#### **4.2.2 Geologically Hazardous Areas**

The city currently regulates steep slopes, landslide hazard areas, and coal mine hazards. Under the Regulatory Alternative, additional criteria would be added to the Land Use Code to aid in identification of landslide hazard areas on slopes less than 40 percent that have a vertical relief of 20 feet or greater. The Regulatory Alternative would add a new minimum toe-of-slope buffer of 75 feet from slopes of 40 percent or greater or slopes with an identified landslide hazard. Under the Regulatory Alternative, the existing section of the code that establishes the method for determining the amount of site disturbance when slopes over 15 percent are present would be eliminated and replaced by an impervious surface limit.

#### **4.2.3 Frequently Flooded Areas**

The City of Bellevue calls frequently flooded areas “areas of special flood hazard” to be consistent with Federal Emergency Management Agency (FEMA) terminology; however, the two terms define the same type of critical area. The Regulatory Alternative establishes a standard to ensure that there would be no rise in flood levels, increasing protection against the risk of offsite flooding resulting from development. Under the Regulatory Alternative, code revisions would provide greater detail on base flood elevations through proposed revisions to flood insurance studies and Flood Insurance Rate Maps (FIRMs). The coupling of proposed updates to FIRMs would increase protection for floodways.

#### **4.2.4 Streams and Riparian Areas**

Under the Regulatory Alternative, the city would adopt the state-created stream typing system, which places particular emphasis on the presence of fish in streams. The state stream typing system is based on a multi-parameter model that uses geomorphic parameters such as basin size, gradient, elevation, and other indicators developed from thousands of field surveys of fish presence and fish habitat. Adopting the state typing system would bring the city in line with many other jurisdictions in the area and would allow property owners to call on a wider number of consultants to assist in typing streams on their properties. The Regulatory Alternative would also increase the width of streamside buffers for each stream type but makes allowances for existing primary structures located within those buffers. Newly subdivided lots would be subject to full buffer requirements.

#### **4.2.5 Wetlands**

Under the Regulatory Alternative, the city would adopt the state wetland typing system. The proposed rating system differentiates between wetlands based on their sensitivity to disturbance, their significance, their rarity, the ability to successfully replace them, and the functions they provide. The rating system considers three major groups of functions that wetlands perform

(improving water quality, hydrologic function, and wildlife habitat). The new system simplifies wetland categorization for Bellevue property owners seeking to use the prescriptive regulations for wetlands based on type. The Regulatory Alternative would also increase the width of wetland buffers for each category of wetland based on scoring used by the state wetland rating system but makes allowances for existing primary structures located within the buffers. Development on sites with a wetland or wetland critical area buffer would be subject to increased performance standards for light, noise, runoff, buffer plantings, and pesticide use. Newly subdivided lots would be subject to full buffer requirements.

#### **4.2.6 Shorelines**

Under the Regulatory Alternative, there would be a shoreline setback of 50 feet. The recommended 50-foot setback would apply to all remaining new development, with accommodation made for areas where most existing development does not comply with the 50-foot setback. In some circumstances a modification of the buffer may be allowed with mitigation, which would likely include planting appropriate native shoreline vegetation. Such modifications would in no event allow the buffer to be reduced below 25 feet. Under the Regulatory Alternative, the city would adopt prescriptive moorage standards that are in alignment with the U.S. Army Corps of Engineers regional general permit. Because the Corps and the Washington Department of Fish and Wildlife (WDFW) each have permitting authority over moorage located waterward of the ordinary high water mark, adopting city standards that are consistent with the regional general permit would streamline the permitting process for citizens. The Regulatory Alternative also establishes new standards that require changes when residential moorage (a dock) is being substantially repaired.

Under the Regulatory Alternative, priority would be given to the use of bioengineered shoreline stabilization techniques that incorporate plant and other natural materials to stabilize the shoreline. Development of new bulkheads generally would be prohibited; however, minor repair of existing bulkheads would be allowed.

#### **4.2.7 Wildlife Habitat Conservation Areas**

The Regulatory Alternative would add a wildlife habitat overlay to all designated critical areas to ensure wildlife habitat functions and values are considered where current critical areas do not take into account the full range of habitat values on a property (such as steep slopes or riparian buffers). The Regulatory Alternative would add to the Land Use Code a package of incentives aimed at preserving habitat linkages between patches of habitat and other isolated natural areas, parks, preserves, open spaces, or large tracts. Under the Regulatory Alternative, both city and private development projects would apply science-based management recommendations to mitigation projects for special status species in Bellevue. Under the Regulatory Alternative, when a proposal occurs on a site with a species of local importance, an applicant would be required to submit a habitat management plan that documents how the proposal would avoid or mitigate impacts on the habitat or species in question. Habitat management plans are based on the state Department of Fish and Wildlife recommendations.

### **4.3 Alternative 2 – City Programs Alternative**

Alternative 2, the City Programs Alternative, assumes that the major component of the city's response to the Growth Management Act (GMA) requirement to update critical area policies and regulations considering best available science comprises programs and investments. The city would implement programs and investments in lieu of making substantial amendments to the city's existing critical area regulations of 20.25H. The existing Land Use Code pertaining to critical areas for streams, wetlands, shorelines, and wildlife would be maintained. It is assumed, however, that the City Programs Alternative would include the amended regulations as outlined in the Regulatory Alternative for geologic hazards, as the City Programs Alternative does not contain programs or investments targeted to those hazards. The City Programs Alternative would include programs within four major categories: acquisition; rehabilitation/maintenance; education/stewardship; and monitoring.

#### **4.3.1 Acquisition**

The city could acquire up to approximately 13 acres of shoreline and associated buffer areas (Lake Washington and Lake Sammamish), 30 acres of wetland and wetland buffer areas, 207 acres of stream and stream buffer areas, through the acquisition element of the City Programs Alternative. Conservation easements would be established in wetland areas and less developed basins (e.g., Goff Creek/Richards Creek). Existing vegetation would be maintained by preventing encroachment into stream, wetland, and shoreline setbacks.

#### **4.3.2 Rehabilitation/Maintenance**

The rehabilitation/maintenance element would focus current levels of investment on rehabilitation and maintenance projects to those projects that improve wetland, wetland and streamside buffers, and shoreline functions and values, such as removing invasive plants and replanting with native species, or replacing hardened shoreline armoring with bioengineered structures. The number of capital improvement projects (CIP) to provide or improve fish passage and to modify stream channels (for example, large woody debris installations and erosion/sediment control projects) would be increased over current levels. Drainage and stormwater management and maintenance activities would be continued.

#### **4.3.3 Education/Stewardship**

Under the education/stewardship element, the city would increase its current level of effort for stewardship, education, and outreach programs. Many of these programs are targeted to engage volunteers in an array of planned public or private rehabilitation activities, ranging from reducing invasive nonnative plants to controlling sources of water pollution.

#### **4.3.4 Monitoring**

A monitoring program would be implemented for streams, wetlands, shorelines, and wildlife, and would also track use of the education and stewardship programs. Shorelines and city-owned wetlands would be inventoried, and landscape analysis would be performed to establish key

baseline data. Monitoring data would be used to guide future actions through adaptive management. For example, through investigations that identify buffer width conditions that lead to improvements in water temperature, the monitoring program could supply a basis for replacing fixed buffer sizes with variable buffer widths determined on a site-specific basis. Monitoring would be designed to be sensitive to scale and species life stage issues, and would be used to measure the effectiveness of rehabilitation efforts.

#### **4.4 Alternative 3 – Council-Modified Alternative**

Alternative 3, the Council-Modified Alternative, is the same as the Regulatory Alternative in most provisions, although it includes several additional Land Use Code amendments that directly or indirectly affect geologically hazardous areas, streams and riparian areas, wetlands, shorelines, and wildlife habitat conservation areas.

##### **4.4.1 City-wide and All Critical Areas**

The Council-Modified Alternative is the same as the Regulatory Alternative, with the following modification:

- Tree removal within all critical area buffers may be allowed as long as it is performed in accordance with the director's guidance and an approved vegetation management plan. Allowed pruning methods include tree topping where trees have historically been topped.

##### **4.4.2 Geologically Hazardous Areas**

The Council-Modified Alternative is the same as the Regulatory Alternative, with the following modification:

- The regulated area at the toe of both slopes of 40 percent or greater and slopes with an identified landslide hazard would be classified as a 75-foot structure setback. (The 75-foot buffer as proposed in the Regulatory Alternative requires protection of existing vegetation at the toe of the slope, while the structure setback proposed for the Council-Modified Alternative does not.)

##### **4.4.3 Frequently Flooded Areas**

The standards under the Council-Modified Alternative are the same as under the Regulatory Alternative.

##### **4.4.4 Streams and Riparian Areas**

The Council-Modified Alternative is the same as the Regulatory Alternative, including requirements for buffer widths on undeveloped properties, with the following modifications for developed properties:

- Required buffers on developed properties are:
  - Type F and Type S – 50 feet
  - Type N – 25 feet
  - Type O – 25 feet
- Required structure setbacks on developed properties are:
  - Type F and Type S – 50 feet
  - Type N – 25 feet
  - Type O – None.

#### 4.4.5 Wetlands

The Council-Modified Alternative is the same as the Regulatory Alternative, including requirements for buffer widths on undeveloped properties, with the following modifications for developed properties:

- On developed properties where a native growth protection easement (NGPE) or a native growth protection agreement (NGPA) has been previously approved and recorded, the required buffers are defined in the NGPE or NGPA.
- Required structure setbacks on developed properties where a NGPE or NGPA has been previously approved and recorded are:
  - Category I or II – 20 feet from edge of NGPE or NGPA
  - Category III – 15 feet from edge of NGPE or NGPA
  - Category IV – None.

#### 4.4.6 Shorelines

The Council-Modified Alternative is the same as the Regulatory Alternative, including requirements for buffer widths on undeveloped properties, with the following modifications for developed properties:

- On developed properties the required buffers would be 25 feet from the ordinary high water mark.
- On developed properties the structure setback would be 25 feet from the landward edge of the required buffer.
- The city would explore a pilot program to streamline permitting for docks in conjunction with federal and state permitting requirements.

#### **4.4.7 Wildlife Habitat Conservation Areas**

The standards specific to wildlife protection under the Council-Modified Alternative are the same as under the Regulatory Alternative. Both rely on protection of critical areas and buffers to protect wildlife habitat. However, because the Council-Modified Alternative would provide reduced protection for stream and shoreline buffers on developed property compared to the Regulatory Alternative, it would be less protective of wildlife habitat.

In addition, regulated and unregulated tree pruning may have adverse impacts on the quantity and quality of vegetation. For example, pruning or removal of structural habitat elements may have pronounced effects on the diversity of wildlife populations.

## **5.0 Summary of Impacts, Mitigation Measures, and Significant Unavoidable Adverse Impacts**

### **5.1 No-Action Alternative**

#### **5.1.1 Geologically Hazardous Areas**

Public health and safety are properly protected with regard to many geological hazards (e.g., ground shaking, liquefaction, ash fall, and coal mine hazards), and these conditions would be maintained under the No-Action Alternative both in the near term and in the long term.

However, public health and safety are not properly protected with regard to surface rupture, tsunami inundation, and erosion. Protection is especially deficient for landslide hazards, due to the lack of toe-of-slope setback requirements. The No-Action Alternative would continue to degrade public health and safety conditions for these hazards in the near term and in the long term.

#### **5.1.2 Frequently Flooded Areas**

The criteria for evaluating whether conditions are properly protected with respect to development standards include the siting of essential public facilities and development in areas of special flood hazard. The No-Action Alternative, by maintaining current development standards, a capital improvement tracking program, and the existing critical areas ordinance (LUC 20.25H.070.C), would maintain properly protected floodway conditions in both the near-term and the long-term. Based on the small size and confinement of Bellevue streams, current conditions are considered properly protected with respect to channel migration hazards. Although current regulations do not address channel migration zones, the No-Action Alternative would maintain protection for frequently flooded areas in both the near term and long term.

#### **5.1.3 Streams and Riparian Areas**

Many of the existing environmental baseline conditions of Bellevue streams are below properly functioning conditions. In the near term and long term, the overall stream conditions would continue to degrade under the No-Action Alternative.

#### **5.1.4 Wetlands**

Many of the existing environmental baseline conditions of Bellevue wetlands are below properly functioning conditions. In the near term and long term, the overall wetland conditions would continue to degrade under the No-Action Alternative.

#### **5.1.5 Shorelines**

Under existing conditions, the ecological functions of Bellevue shorelines are not properly functioning or are functioning at risk. Under the No-Action Alternative, these trends would be expected to continue.

### **5.1.6 Wildlife Habitat Conservation Areas**

Many of the existing environmental baseline conditions of Bellevue wildlife habitat conservation areas are below properly functioning conditions. In the near term and long term, the overall wildlife habitat conservation area conditions would continue to degrade under the No-Action Alternative.

### **5.1.7 Land Use**

The No-Action Alternative maintains the current city land use regulations in place. Those regulations include provisions for accommodating development on existing sites with critical areas through several processes. Where development is allowed on severely constrained sites, existing provisions require compatibility with and consideration for surrounding development. The No-Action Alternative ensures continued consideration of the land use impacts of development on sites with critical areas.

### **5.1.8 Mitigation Measures**

Mitigation for activities under the critical areas regulations can be provided on a case-by-case basis as part of the project review process. Current regulations allow for site-specific measures to be required of individual developments to minimize impacts during and after construction.

### **5.1.9 Significant Unavoidable Adverse Impacts**

The functions and values of streams, wetlands, and shorelines would continue to degrade with the consistent application of the No-Action Alternative over the analysis period. From a SEPA standpoint, this may not constitute an impact; however, in actuality, the No-Action Alternative would have a cumulative adverse impact that would reduce environmental quality over time.

## **5.2 Alternative 1 – Regulatory Alternative**

### **5.2.1 Geologically Hazardous Areas**

Compared to the No-Action Alternative, the Regulatory Alternative would maintain public health and safety for most seismic hazards. The Regulatory Alternative would improve protection from erosion hazards in the near term and long term. Public health and safety would be maintained in the near term and long term for surface rupture, volcanic hazards, and coal mine hazards. The Regulatory Alternative would improve health and safety conditions for landslides.

### **5.2.2 Frequently Flooded Areas**

The Regulatory Alternative would maintain existing properly protected conditions for public health and safety in the near term compared to the No-Action Alternative. In the long term, the Regulatory Alternative would improve floodway protection conditions as redevelopment alters existing development conditions.

### 5.2.3 Streams and Riparian Areas

The Regulatory Alternative may lessen the current trend toward degradation of ecological functions of streams and riparian areas (specifically as habitat for salmonid fish species) compared to the No-Action Alternative. This would be accomplished by limiting the degree of clearing and development that could occur on the remaining undeveloped land adjacent to streams and wetlands, and by requiring redevelopment to provide increased buffer areas. However, this alternative would not change the trend to a positive, or restorative, direction for all the indicators. Consequently, in the near-term and long-term, overall stream conditions would continue to degrade under the Regulatory Alternative, albeit the degradation would be less rapid than under the No-Action Alternative.

### 5.2.4 Wetlands

The Regulatory Alternative would allow for some continued degradation of wetland resources in the near- and long-term as losses of small wetland would still be permitted, although potentially less area would be affected than for the No-Action Alternative. The Regulatory Alternative generally would maintain wetland indicators in the long term, because remaining new development would be subject to requirements more protective of wetlands than under the No-Action Alternative.

### 5.2.5 Shorelines

The Regulatory Alternative may lessen the current trend toward degradation of shoreline critical areas (and, consequently, habitat for salmonid fish species); however, in the near-term and long-term, the Regulatory Alternative would continue to allow for continued degradation of shoreline conditions when compared to the No-Action Alternative. Continued degradation would likely further imperil the remaining salmonid populations that use and depend upon Bellevue shorelines. This is primarily because the vast majority of the shorelines have been developed to the detriment of shoreline habitat, developed shorelines are likely to remain occupied by development for the foreseeable future, and human activity in shorelines areas causes cumulative loss of habitat functions as shoreline vegetation is cleared and maintained. Effectiveness monitoring, performed for various habitat indicators as well as cumulatively at the lake shoreline ecosystem scale, would be needed to determine the effect of the Regulatory Alternative on Bellevue shoreline conditions.

### 5.2.6 Wildlife Habitat Conservation Areas

The Regulatory Alternative would maintain the degraded condition (not properly functioning status) of the wildlife habitat area, core area, the ratio of core area to core length, landscape connectivity, area of priority habitats, and coverage of nonnative species indicator in the near-term due to past development practices. The Regulatory Alternative would maintain existing degraded conditions for all these indicators in the near term but would maintain conditions for many wildlife habitat indicators in the long term, because remaining new development would be subject to regulations more protective of critical areas than under the No-Action Alternative.

### **5.2.7 Land Use**

The Regulatory Alternative has limited impact on the city's overall development and land use patterns. Due to relatively limited opportunities for large-scale redevelopment, changes to critical areas regulations would not perceptibly alter the city's development pattern and density. The Regulatory Alternative does allow for additional modifications from standard development requirements (like reduced minimum lot size, reduced non-protected setbacks) for subdivisions and short subdivisions with critical areas; however, the resulting redevelopment would largely mimic the development allowed under the existing regulations.

### **5.2.8 Mitigation Measures**

Mitigation for activities under the critical areas regulations can be provided on a case-by-case basis as part of the project review process. The Regulatory Alternative allows for site-specific measures to be required of individual developments to minimize impacts during and after construction. The Regulatory Alternative also allows broader discretion in setting effective buffer widths and allows for greater flexibility outside of critical areas, which can minimize impacts on allowable land use density.

### **5.2.9 Significant Unavoidable Adverse Impacts**

Impacts on streams, wetlands, and shorelines would be reduced compared to the impacts expected under the No-Action Alternative. Therefore, no significant unavoidable adverse impacts would result from implementation of the Regulatory Alternative.

## **5.3 Alternative 2 – City Programs Alternative**

### **5.3.1 Geologically Hazardous Areas**

Under the City Programs Alternative, no major city programs are proposed to address geologically hazardous areas, and the regulatory changes proposed under the Regulatory Alternative would be included under the City Programs Alternative to protect geologically hazardous areas. Therefore, the near- and long-term impacts to geologically hazardous areas resulting from the City Programs Alternative would be the same as those described for the Regulatory Alternative.

### **5.3.2 Frequently Flooded Areas**

Under the City Programs Alternative, no major city programs are proposed to address frequently flooded areas, and the regulatory changes proposed under the Regulatory Alternative would be included under the City Programs Alternative to protect these areas. Therefore, the near- and long-term impacts to frequently flooded areas resulting from the City Programs Alternative would be the same as those described for the Regulatory Alternative.

### **5.3.3 Streams and Riparian Areas**

The City Programs Alternative may lessen the current trend toward degradation of ecological functions of streams and riparian areas (specifically as habitat for salmonid fish species),

particularly at the reach or segment scale where the programs are implemented; however, this alternative would not change the trajectory in a positive, or restorative, direction for all the indicators (i.e., would not improve critical areas functions) at the watershed scale of Bellevue streams. Consequently, in the near term and the long term, some stream conditions would continue to degrade under the City Programs Alternative, although other conditions would improve.

#### 5.3.4 Wetlands

Overall, the City Programs Alternative would improve existing wetland conditions, although not all wetland indicators would be positively affected. Steps to improve maintenance on stormwater facilities may have an immediate beneficial effect on water quality in some wetlands in the near-term. Education and stewardship programs, wetland acquisition programs, and habitat restoration initiatives would provide improved protection for wetland systems in the long-term but not the near-term.

#### 5.3.5 Shorelines

The City Programs Alternative may lessen the current trend of degradation of shoreline critical areas (and thereby salmonid fish species) more than the Regulatory Alternative and may improve critical areas functions at localized areas where programs are implemented. However, Alternative 2 would not likely improve critical areas functions at the watershed scale. The City Programs Alternative includes potential acquisition of shoreline habitat that would be managed to protect shoreline ecological functions. Despite such efforts, in the near term and long term, the overall shoreline conditions would continue to degrade. Effectiveness monitoring, performed for various habitat indicators as well as cumulatively at the lake shoreline ecosystem scale, would be needed to determine actual trends in Bellevue shoreline conditions under this alternative.

#### 5.3.6 Wildlife Habitat Conservation Areas

The City Programs Alternative would maintain existing *not properly functioning* conditions in the near term for the average core area indicator, for the ratio of core area to core length indicator, for the landscape connectivity indicator, and for the area of priority habitats. The City Programs Alternative would tend to move the city toward a *properly functioning* status of the habitat area, average core area, ratio of core area to core length, landscape connectivity, and acres of priority habitat indicators in the long term based on the implementation of acquisition, stewardship, and educational programs designed to protect and restore wildlife habitat. The City Programs Alternative would improve existing conditions in the long term.

#### 5.3.7 Land Use

The City Programs Alternative has limited impact on the city's overall development and land use patterns. Over the long-term, due primarily to acquisition efforts, more acres of the city would be devoted to open space, providing related benefits to the nearby neighborhoods. The level of

acquisition projected, however, would not significantly impact land use patterns or density, even in those neighborhoods where acquisition is likely.

### **5.3.8 Mitigation Measures**

Mitigation for activities under the critical areas regulations would continue to be provided on a case-by-case basis as a part of project review. Current regulations allow for site-specific measures to be required of individual developments to minimize impacts during and after construction. This alternative also would improve enforcement of critical areas regulations, which would help to ensure that the intended benefits are realized.

### **5.3.9 Significant Unavoidable Adverse Impacts**

Streams, wetlands, and shorelines would benefit from programs that protect and improve these resources, compared to the conditions expected under the No-Action Alternative. Therefore, no significant unavoidable adverse impacts would result from implementation of the City Programs Alternative.

## **5.4 Alternative 3 – Council-Modified Alternative**

### **5.4.1 Geologically Hazardous Areas**

The Council-Modified Alternative would maintain public health and safety for most seismic hazards. The Council-Modified Alternative would continue to degrade protection from erosion hazards in the near term and the long term. Public health and safety would be maintained in the near-term and the long-term for surface rupture, volcanic hazards, and coal mine hazards.

The Council-Modified Alternative is slightly less protective of public health and safety conditions than the Regulatory Alternative for landslide-prone areas, because it allows the clearing of vegetation from within 75 feet of the toe of steep slopes, although it would still improve public safety protection compared to the No-Action Alternative. Clearing of existing vegetation (particularly large trees) may increase the runout length of some landslides. In addition, vegetation pruning is unregulated on steep slopes and their buffers and setbacks, which, under some conditions, could weaken slope stability.

### **5.4.2 Frequently Flooded Areas**

Impacts under the Council-Modified Alternative would be the same as under the Regulatory Alternative.

### **5.4.3 Streams and Riparian Areas**

The impacts of the Council-Modified Alternative on streams and riparian areas would be the same as described in the draft EIS for the Regulatory Alternative. However, the Council-Modified Alternative is less protective of stream buffers. Therefore, under the Council-Modified

Alternative there would be an increased risk to some ecological indicators, such as water temperature, sediment and turbidity, and chemical contaminants and nutrients. Nevertheless, the Council-Modified Alternative would improve protection compared to the No-Action Alternative, because remaining undeveloped properties would be subject to significantly more protective buffer requirements. In addition, the Council-Modified Alternative has the potential to extend the buffer area outside the carve-out for the primary structure footprint, which would add buffer area beyond what would likely occur under the No-Action Alternative over time.

For developed properties in commercial areas, the No-Action Alternative could be more protective because of the current requirements for redevelopment of properties. Under the No-Action Alternative, properties would be required to comply with stream buffer regulations when a threshold of a structure's value is exceeded. However, residential property owners are likely to stay under any threshold in order to avoid having to comply with existing regulations (Berens et al. 2006).

Developed commercial properties, on the other hand, are more likely to exceed the threshold value. Redevelopment of commercial properties under the No-Action Alternative would likely produce stream-specific benefits, including rehabilitation of riparian buffer areas. Rehabilitation of riparian areas, particularly in areas adjacent to or upstream of salmon spawning grounds, would likely benefit existing salmon populations by improving the ecological functions that stream riparian areas provide (e.g., water quality and quantity moderation). In addition, these rehabilitated riparian areas would provide protection against future impacts associated with the redeveloped commercial properties.

Areas that could be affected include several Kelsey Creek tributaries such as Valley Creek, Gough Creek, and Richards Creek, among others. Fish originating in Kelsey Creek are believed to support important local chinook populations in the greater Lake Washington basin. Protecting and restoring habitat in Kelsey Creek are important to ensuring the survival of the Kelsey Creek population and, in turn, the population of the greater Lake Washington basin.

However, the percentage of developed commercial properties located adjacent to Bellevue streams is very small compared to the total miles of streams within the city. Areas that may meet the criteria for redevelopment in the foreseeable future include the Bellevue-Redmond corridor and Richards Creek valley. Because these areas represent a minority of properties located adjacent to streams within the city, no measurable improvement to stream protection is expected to result. Therefore, redevelopment of commercial properties located adjacent to streams is not likely to outweigh the beneficial effect of wider stream buffers on the overall condition of Bellevue streams.

In the near term and the long term, overall stream conditions would continue to degrade under the Council-Modified Alternative, although the degradation would be less rapid than under the No-Action Alternative. Only a combination of alternatives or implementation of targeted programs could maintain or improve stream and riparian area conditions. Monitoring, performed for various habitat indicators at all streams, would be needed to determine the effects of the Council-Modified Alternative on Bellevue streams and riparian areas.

#### 5.4.4 Wetlands

The Council-Modified Alternative would allow for some continued degradation of wetland resources in the near-term and the long-term because losses of small wetlands would still be permitted, although potentially less area would be affected than under the No-Action Alternative.

For most indicators of ecological function, the Council-Modified Alternative would improve wetland conditions in the long term compared to the No-Action Alternative, because remaining undeveloped areas would be subject to revised wetland buffer requirements. However, redevelopment scenarios under the No-Action Alternative could be more protective than under the Council-Modified Alternative, because properties would be required to comply with wetland buffer regulations when a certain threshold of a structure's value is exceeded, whereas the Council-Modified Alternative allows all noncompliant structures to be reconstructed within the same footprint. So, theoretically, although the buffer requirements of existing regulations are narrower, over time, more properties are likely to be required to comply with those buffers.

However, experience shows that Bellevue property owners will typically stay under any thresholds of value in order to avoid having to comply with existing regulations (Berens et al. 2006). That trend would be expected to continue under the No-Action Alternative. Therefore, in actuality, only a small number of properties are likely to meet the redevelopment threshold. Properties likely to meet this threshold are in commercially zoned areas where market forces direct a significant change in use, triggering exceedance of a threshold. Because this represents a minority of properties located adjacent to wetlands, streams, and shorelines within the city, no measurable improvement to critical area protection is expected to result. Consequently, overall, the Council-Modified Alternative would be expected to improve conditions over the No-Action Alternative.

#### 5.4.5 Shorelines

The Council-Modified Alternative is the same as the Regulatory Alternative, with the modifications discussed in the description of the Council-Modified Alternative. Given these modifications, it is expected that the Council-Modified Alternative would be less protective than the Regulatory Alternative but more protective than the No-Action Alternative. The Council-Modified Alternative may lessen the current trend (represented by the No-Action Alternative) toward degradation of shoreline critical areas (and, consequently, habitat for salmonid fish species).

However, in the near-term and the long-term, the Council-Modified Alternative would continue allowing degradation of shoreline conditions. Continued degradation would likely further imperil the remaining salmonid populations that use and depend upon Bellevue shorelines, primarily because the vast majority of city shorelines have been developed to the detriment of shoreline habitat. Developed shorelines are likely to remain occupied by development for the foreseeable future. Human activity in shoreline areas causes cumulative loss of habitat functions as shoreline riparian areas are cleared of vegetation and maintained.

Only a combination of alternatives or the implementation of targeted programs could maintain or improve shoreline indicators. Monitoring, performed for various habitat indicators as well as cumulatively at the lake shoreline ecosystem scale, would be needed to determine the effects of the Council-Modified Alternative on Bellevue shoreline conditions.

#### **5.4.6 Wildlife Habitat Conservation Areas**

Protection of wildlife habitat is largely dependent on the regulatory protections afforded streams, shorelines, wetlands, buffers, and setbacks. Compared to provisions of the Regulatory Alternative, the Council-Modified Alternative's reduced buffer requirements for protection of streams and shorelines on developed properties reduce protection of wildlife habitat. In addition, regulated and unregulated tree pruning may have adverse impacts on the quantity and quality of vegetation. For example, pruning or removal of structural habitat elements may have pronounced effects on the diversity of wildlife populations. The specific wildlife habitat indicators that would be less protected under the reduced buffer requirements provided for in the Council-Modified Alternative include the area of habitat, landscape connectivity, and coverage of nonnative species. Therefore, the Council-Modified Alternative is less protective than the Regulatory Alternative but somewhat more protective than the No-Action Alternative. The Council-Modified Alternative would likely provide little improvement to the road density, core wildlife area, and landscape connectivity indicators and, at best, would maintain current at-risk conditions.

#### **5.4.7 Land Use**

The Council-Modified Alternative and the Regulatory Alternative would have similar impacts on the city's overall development and land use patterns. Due to relatively limited opportunities for large-scale redevelopment, changes to critical areas regulations would not perceptibly alter the city's development pattern or density.

The Council-Modified Alternative allows for additional modifications from standard development requirements (such as reduced minimum lot size and reduced unprotected setbacks) for subdivisions and short subdivisions in critical areas. However, the resulting redevelopment would largely mimic development allowed under existing regulations.

#### **5.4.8 Mitigation Measures**

Under the critical areas regulations, mitigation can be required on a case-by-case basis as part of the permitting review process. The Council-Modified Alternative allows for site-specific measures to be required of individual developments in order to minimize impacts during and after construction. The Council-Modified Alternative also allows broader discretion than currently allowed in setting effective buffer widths, as well as allowing for greater flexibility outside critical areas, which can minimize impacts on allowable land use density.

#### **5.4.9 Significant Unavoidable Adverse Impacts**

Adverse impacts on streams, wetlands, shorelines, and wildlife habitat under the Council-Modified Alternative would be higher than those under the Regulatory Alternative, but likely

lower than impacts expected under the No-Action Alternative over the long term. Therefore, compared with the No-Action Alternative, no significant unavoidable adverse impacts would result from implementation of the Council-Modified Alternative.

## **5.5 Comparison of Impacts of the Alternatives**

Tables 1-1 through 1-6 present a summary and comparison of the trends for critical area conditions that are expected to result from the No-Action Alternative, the Regulatory Alternative, the City Programs Alternative and the Council-Modified Alternative.

**Table 1-1. Comparison of the trends for geologic hazards conditions by alternative.**

Geological Hazards	Near-term (5 Years)				Long-term (50 Years)		
	No-Action Alternative	Regulatory Alternative	City Programs Alternative/ Council-Modified Alternative	No-Action Alternative	Regulatory Alternative	City Programs Alternative/ Council-Modified Alternative	
Ground shaking	⊖	●	⊖	⊖	●	⊖	
Surface rupture	●	●	●	●	●	●	
Liquefaction	⊖	●	⊖	⊖	●	⊖	
Tsunami and seiche hazards	●	●	●	●	●	●	
Erosion	●	●	○	●	●	○	
Landsliding	●	●	○	●	●	○	
Volcanic eruption	⊖	●	⊖	⊖	●	⊖	
Coal mines	⊖	●	⊖	⊖	●	⊖	

⊖ = Critical area functions and public health and safety would be maintained as properly protected or at risk.

○ = Critical area functions and public health and safety would improve relative to current conditions.

● = Degraded conditions would result for critical area functions and protection of public health and safety.

**Table 1-2. Comparison of the trends for frequently flooded area conditions by alternative.**

Frequently Flooded Areas	Near-term (5 Years)		Long-term (50 Years)	
	No-Action Alternative	Regulatory Alternative/ City Programs Alternative/ Council-Modified Alternative	No-Action Alternative	Regulatory Alternative/ City Programs Alternative/ Council-Modified Alternative
Development standards	⊖	⊖	⊖	⊖
Floodway conditions	⊖	⊖	⊖	○
Channel migration	⊖	⊖	⊖	⊖

- ⊖ = Critical area functions and public health and safety would be maintained as properly protected or at risk.
- = Critical area functions and public health and safety would improve relative to current conditions.
- = Degraded conditions would result for critical area functions and protection of public health and safety.

**Table 1-3. Comparison of the trends for stream and riparian area conditions by alternative.**

Streams and Riparian Areas	Near-term (5 Years)				Long-term (50 Years)			
	No-Action Alternative	Alternative 1 Regulatory Alternative	Alternative 2 City Programs Alternative	Alternative 3 Council-Modified Alternative	No-Action Alternative	Alternative 1 Regulatory Alternative	Alternative 2 City Programs Alternative	Alternative 3 Council-Modified Alternative
Water Quality	Temperature	●	●	●	●	●	○	●
	Sediment and turbidity	●	●	●	●	●	●	●
	Chemical contaminants and nutrients	●	●	●	●	●	●	●
Habitat Access	Physical barriers	●	⊖	●	⊖	●	○	⊖
	Substrate	●	●	●	●	●	●	●
Habitat Element	Large woody debris (LWD)	●	●	○	●	●	○	●
	Pool frequency	●	●	●	●	●	●	●
	Pool quality	●	⊖	○	●	●	○	●
	Off-channel habitat	⊖	⊖	⊖	⊖	⊖	○	⊖
	Refugia	●	⊖	⊖	⊖	●	⊖	●
Channel Condition and Dynamics	Width/depth ratio	●	●	⊖	●	●	⊖	●
	Stream bank conditions	Unknown	Unknown	⊖	●	Unknown	⊖	●
Flow and Hydrology	Floodplain connectivity	●	⊖	⊖	⊖	●	○	⊖
	Change in peak/base flows	●	⊖	⊖	●	●	○	●
	Increase in drainage network	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
	Road density & location	●	⊖	●	⊖	●	●	⊖
Watershed Condition	Disturbance history	●	⊖	●	⊖	●	●	⊖
	Riparian reserves	●	⊖	●	⊖	●	●	⊖
	Natural disturbances	●	Unknown	Unknown	Unknown	●	Unknown	Unknown
	Total impervious area	●	⊖	●	⊖	●	●	Unknown
	Riparian breaks	●	⊖	●	⊖	●	●	Unknown

⊖ = Critical area would be maintained as properly functioning or at risk.

○ = Critical area functions would improve relative to current conditions.

● = Degraded conditions would result for critical area functions.

**Table 1-4. Comparison of the trends for wetland conditions by alternative.**

Wetlands	Near-term (5 Years)				Long-term (50 Years)			
	No-Action Alternative	Alternative 1 Regulatory Alternative	Alternative 2 City Programs Alternative	Alternative 3 Council-Modified Alternative	No-Action Alternative	Alternative 1 Regulatory Alternative	Alternative 2 City Programs Alternative	Alternative 3 Council-Modified Alternative
Water Regime <sup>a</sup>	●	●	●	●	●	○	●	○
Average water level fluctuation	●	●	●	●	●	○	●	○
Water Quality	●	●	●	●	●	○	●	○
Watershed impervious area	●	●	○	●	●	○	○	○
Conductivity	●	●	○	●	●	○	○	○
Total phosphorus (TP)	●	●	○	●	●	○	○	○
Total suspended solids (TS)	●	●	○	●	●	○	○	○
Ammonia (NH3-N)	●	●	○	●	●	○	○	○
Zinc (Zn)	●	●	○	●	●	○	○	○
Habitat	●	●	●	●	●	○	○	○
Coverage of nonnative species	●	●	●	●	●	○	○	○
Wetland area (acres)	●	●	●	●	●	○	○	○
Area of upland habitat adjacent to a wetland	●	●	●	●	●	○	○	○
Physical Modifications	●	●	●	●	●	○	○	○
Acres of wetlands filled	●	●	●	●	●	○	○	○

<sup>a</sup> The city plans to revise its stormwater regulations in 2006 to provide incentives for low-impact development projects and to place additional limitations on allowed impervious area. Although these actions will benefit hydrologic indicators, they are not proposed as part of the critical areas update and are not considered in this EIS.

- = Critical area functions and public health and safety would be maintained as properly functioning or at risk.
- = Critical area functions and public health and safety would improve relative to current conditions.
- = Degraded conditions would result for critical area functions and protection of public health and safety.

Table 1-5. Comparison of the trends for shoreline conditions by alternative.

Shorelines	Near-term (5 Years)				Long-term (50 Years)			
	No-Action Alternative	Alternative 1 Regulatory Alternative	Alternative 2 City Programs Alternative	Alternative 3 Council-Modified Alternative	No-Action Alternative	Alternative 1 Regulatory Alternative	Alternative 2 City Programs Alternative	Alternative 3 Council-Modified Alternative
Water Quality	Temperature/dissolved oxygen	●	●	●	●	Unknown	○	●
	pH	●	●	●	●	●	Unknown	●
Habitat Access	Chemical contaminants	●	●	●	●	Unknown	●	●
	Nutrients/total phosphorus	●	●	●	●	●	●	●
	Physical barriers	●	⊖	○	⊖	●	⊖	⊖
Habitat Element	Nonnative species (in-water plants and animals)	●	●	Unknown	●	●	●	●
	Shoreline upwelling	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
	Overhanging vegetation	●	●	●	●	●	●	●
	Substrate composition	●	●	●	●	●	●	●
Shoreline Conditions	Large woody debris	●	●	●	●	●	●	●
	Shoreline vegetation, riparian structure, and total impervious area (TIA)	●	●	●	●	●	●	●
	Shoreline profile	●	●	●	●	●	○	●
	Shoreline ambient light	●	●	●	●	●	●	●

⊖ = Critical area functions would be maintained as properly functioning or at risk.

○ = Critical area functions improve relative to current conditions.

● = Degraded conditions would result for critical area functions.

**Table 1-6. Comparison of the trends for wildlife habitat conservation area conditions by alternative.**

Wildlife Habitat Conservation Areas	Near-term (5 Years)				Long-term (50 Years)			
	No-Action Alternative	Alternative 1 Regulatory Alternative	Alternative 2 City Programs Alternative	Alternative 3 Council-Modified Alternative	No-Action Alternative	Alternative 1 Regulatory Alternative	Alternative 2 City Programs Alternative	Alternative 3 Council-Modified Alternative
Road Density	●	●	●	●	●	⊖	●	⊖
Area of habitat	●	●	●	●	●	○	○	●
Average core area	●	●	●	●	●	○	○	⊖
Ratio of core area to core edge length	●	●	●	●	●	○	○	●
Landscape connectivity	●	●	●	●	●	○	○	⊖
Priority habitat area	●	●	●	●	●	●	○	●
Coverage of nonnative species	●	●	⊖	●	●	●	○	●

⊖ = Critical area functions would be maintained as properly functioning or at risk.

○ = Critical area functions would improve relative to current conditions.

● = Degraded conditions would result for critical area functions.

## 6.0 Methods of Analysis

### 6.1 Methods

The environmental impacts associated with proposed alternatives to update the City of Bellevue critical area ordinance were evaluated using a method adapted from a model provided in *Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale* (NMFS 1996). The model uses selected indicators to describe existing conditions and to evaluate the effects of future activities. The model was adapted to evaluate the risk to public health and safety from geologic hazards and frequently flooded areas, as well as the risk to ecological functions that are provided by shorelines, streams, wetlands and wildlife habitat resulting from the Regulatory Alternative, the City Programs Alternative, and the Council-Modified Alternative, compared to the No-Action Alternative.

To capture the overall trend of an alternative's impacts on existing conditions, each alternative is characterized in this EIS based on whether it would degrade, maintain, or improve critical area functions or public health and safety in the near-term and in the long-term, compared to the No-Action Alternative.

Matrices are provided in Chapter 5 summarizing these comparisons of trends for critical area conditions expected to result from implementation of the No-Action Alternative, the Regulatory Alternative, the City Programs Alternative, and the Council-Modified Alternative. These comparisons are based on the results of the risk evaluation describing the effect each alternative would have on existing conditions, provided in *Risk Analysis of Regulatory, City Programs and Best Available Science Alternatives for Improving Critical Areas Protection* (Herrera 2005b), together with the addendum to this analysis (Herrera 2006). These results provide the basis for the information documented in this EIS.

### 6.2 Assumptions

Two time periods were used to analyze environmental impacts on the critical area indicators: a near-term period of 5 years and a long-term period of 50 years.

It is important to note that the analysis results obtained using the NMFS (1996) adapted model were based on evaluating the impact of each alternative on an indicator over an entire drainage basin. A number of the ecological indicators, particularly for riparian areas and shorelines, rate higher when evaluated at a smaller scale such as a stream or shoreline reach or for individual wetlands.

Both a redevelopment rate and an analysis of available vacant lands were used to determine the potential benefits of extending critical areas buffers. The analysis of vacant lands was limited to the Kelsey Creek watershed but afforded a general picture of the potential for increased critical areas protection resulting from increasing the size of regulated buffers. Geographic information system (GIS) analysis was used to estimate the following measurements:

- Total wetland area and stream length within the Kelsey Creek watershed
- Total area of existing and proposed wetland buffers
- Total area of existing and proposed stream buffers, total area of existing and proposed shoreline (Lake Washington and Lake Sammamish) buffers
- Total area of vacant land available within each of these existing and proposed buffers
- Length of streams adjacent to vacant land.

GIS files of wetlands, streams, and parcels, and a land use table developed by the City of Bellevue were used in this analysis. Existing wetland and stream classifications were used when available, and estimates based on proximity and connectivity to adjacent resources were made to classify remaining resources. Buffers were applied to wetlands and streams based on classification and resulting areas were recorded. Vacant lands determined with the land use table and GIS parcel file were intersected with wetland, stream, and shoreline buffers to determine total available vacant land within each.

The ability to apply new buffers upon redevelopment was an assumption that affected some sections of the draft EIS as well as conclusions about the Regulatory Alternative. These conclusions have been corrected in the descriptions of impacts provided in this final EIS. Although the impact of redevelopment on improved function was overstated in the draft EIS for the Regulatory Alternative, the impacts of all the alternatives on critical areas protection are analyzed in this final EIS with the assumption that in existing developed areas at least some redevelopment would occur.

The consequences of redevelopment vary for each alternative, based on the definition of a developed lot and which nonconforming structures would be allowed. Under the No-Action Alternative, any remodel or construction that exceeds certain structure value thresholds would require that the property comply with existing buffer regulations. Under the Regulatory and Council-Modified alternatives, existing primary structures would be allowed to be reconstructed or remodeled within that footprint. The footprint of existing primary structures would be carved out of the wider buffer requirements of those alternatives.

Based on city-wide permit data for Bellevue, it is expected that, in single-family areas approximately 0.3 percent of the existing housing stock would be redeveloped each year (Paine 2005). In the near-term (designated as 5 years), this would result in replacement of 1.5 percent of the housing stock. In the long-term (designated as 50 years), approximately 15 percent of single-family housing units would be replaced with new single-family houses. It is also assumed that all privately owned vacant parcels would be developed over the long-term.

Parcels that include areas protected under existing and proposed critical areas regulations were identified using City of Bellevue critical areas maps (Bellevue 2005c) and King County parcel information (King County 2005). Of the parcels identified, some would have adequate area to

provide full buffers as required by the critical areas regulations, but others would not have adequate area to develop without intruding to some degree on the required buffers. For this analysis, it was assumed that 50 percent of the land area on lots with critical areas and buffers would be protected as land is redeveloped. The remainder of those lots either would be outside the required buffer or would have development allowed under the exceptions provided in the code for lots where development would otherwise be unduly restricted by the regulations.

This information was used to calculate the rate that land that could come into conformance with critical area regulations as a result of redevelopment. For streams, redevelopment would result in approximately 10 acres of protected area that would be added to the buffers of streams after 5 years, and 100 acres after 50 years, if buffer requirements for redevelopment were the same as the widths required by the Regulatory Alternative for new development.

For wetlands, the mapped inventory of wetlands does not include all wetlands in the city. Without a full inventory of wetlands, it is impossible to predict precisely how much more land would be affected. Based on the available inventory of wetlands, this represents a minimum of 1.75 acres of protected area on currently developed lots that would be added to the buffers of wetlands after 5 years, and a minimum of 17.5 acres after 50 years. These acreages are therefore a rough estimate of the land area that could be affected if redevelopment were required to comply with the same wetland buffer widths required for undeveloped parcels under the Regulatory Alternative.

It is further assumed that under the proposed regulations, native vegetation in stream and wetland buffers would be protected from removal, and that the native riparian forest would reestablish itself. Due to the degree of degradation in the ecosystem at present, the presence of urban uses and invasive nonnative plants, domestic animals, and people, additional buffers provided though regulation may not provide all of the functions provided by a buffer in a pristine environment. In addition, buffers can only counteract local effects of urbanization, and changes to basin-wide hydrology due to artificial drainage systems (such as for roads or buildings) can reduce the effectiveness of buffers in protecting stream hydrology and water quality.

Bellevue clearing and grading regulations require the use of best management practices to protect against increased slope instability, soil erosion, stream sedimentation, and excessive stormwater runoff, as a result of development. These measures both limit risks to people and property, but also reduce the risk of ecological damage to critical areas such as streams and wetlands. In addition, it is expected that the city will update its stormwater regulations in 2006 to meet current Department of Ecology guidelines.

In addition to the proposed alternatives for increasing protection of critical areas, the analysis also assumes vigorous application of current stormwater regulations. While there are existing areas of highly erosive flows, most new lots are required to provide stormwater control. In addition, new or major redevelopment may actually improve flows in some areas due to better stormwater controls.

## 7.0 Major Conclusions, Areas of Controversy, and Issues to Be Resolved

The three action alternatives evaluated in this final EIS would improve protection of natural resources in critical areas and would also improve protection of people and structures located in geologically hazardous areas. Consequently, implementing these alternatives is not anticipated to have adverse impacts on geology, water resources, or plants and animals.

In the area of land use, all three action alternatives would reduce the availability of land for development; however, this impact would be small compared to the overall development potential in the city and is not expected to affect the city's ability to meet its housing or economic development goals. The loss of developable land could also be offset by proposed land use code changes (under the Regulatory Alternative and the Council-Modified Alternative) that would allow clustering of housing units as a means of recovering density that would otherwise be lost due to land use restrictions in critical areas.

The analysis of natural resource impacts in this EIS includes conclusions about the effects of the action alternatives relative to the No-Action Alternative derived from the "best available science" (BAS). The effects on each specific type of critical area, as well as conclusions about any adverse impacts that would result from the alternatives, are documented. The information and conclusions documented in this EIS are based on a BAS analysis, which is required under the Growth Management Act and uses a different way of looking at the effect of regulations than is typically used under SEPA.

Under SEPA, a proposed action, such as the adoption of new regulations or implementation of a plan or project, is compared with a No-Action alternative, in other words, an alternative that reflects conditions expected if the proposed regulatory or program changes are made. A determination is then made whether the proposed actions would have greater or lesser impacts than not taking any action, and whether adverse impacts are considered significant.

For the BAS analysis, the effects of the alternatives are compared to objective measures of properly functioning ecological systems. Because Bellevue is a largely urbanized area, many ecological functions have already been impaired by development. Therefore, the BAS analysis begins with the conclusion that many functions are at risk or not properly functioning, and then goes on to evaluate what effect the alternatives would have on changing that status.

The BAS analysis concludes that the functions and values of streams, wetlands, and shorelines would continue to degrade with the consistent application of the No-Action Alternative over the analysis period. From a SEPA standpoint, this may not constitute an impact; however, in actuality, the No-Action Alternative would have a cumulative adverse impact that would degrade environmental quality over time. The BAS analysis also shows that none of the alternatives alone would have the effect of reversing the trend toward degradation of some critical area functions. Because the proposed alternatives would not reverse most of the effects of

urbanization, many ecological functions would remain at risk or not properly functioning. This would be the case even though the regulations would protect these functions from further degradation, and may even improve conditions to a degree. When compared to the No-Action Alternative, the determination that a particular ecological function would remain at risk or would continue to be not properly functioning should not be read as meaning that the new regulations would cause an adverse impact under SEPA.

For geologically hazardous areas, critical area regulations are intended to protect human welfare, including occupied structures, utilities, and roads that people depend upon, as well as to prevent damage to natural resources. For these areas, the BAS analysis concludes that the Regulatory Alternative and Council-Modified Alternative generally provide sufficient protection to ensure that the risk of harm to essential public facilities and other development would be minimized (in other words, that they would be “properly protected”). No adverse impacts are expected from the implementation of the new regulations proposed under both action alternatives.

For streams, wetlands, and shorelines, and particularly areas that historically have provided habitat for salmonid species, none of the action alternatives alone would provide adequate protection to reverse the current trends toward degradation of some ecological functions. This is primarily because the regulations would not reverse past impacts, and not because future development under either alternative would have adverse impacts. All action alternatives would have an overall positive effect on streams, wetlands, and shorelines relative to what would occur under the No-Action Alternative. Furthermore, although some adverse effects would still be allowed in some instances (e.g., filling of wetlands for road projects) the overall positive effect would offset these continued adverse impacts.

The standard for meeting GMA requirements is to provide protection of existing critical area functions and values. Measures to improve conditions are not required. Some combination of the Regulatory Alternative, the City Programs Alternative, and the Council-Modified Alternative would be the most effective way to improve conditions should the city choose to. For example, for shorelines, the regulatory requirement for a 50-foot buffer would provide better shoreline protection if combined with a stewardship program designed to facilitate the gradual development of a multistrata shoreline buffer area along Lake Washington and Lake Sammamish.

The cumulative effects of the proposed critical areas regulations, together with other regulatory programs such as the storm and surface water utility code, would generally be positive. Over a 50-year period, redevelopment would bring more properties into compliance with the new regulations under either the Regulatory Alternative or the Council-Modified Alternative, thus reducing the risks to protected resources. The City Programs Alternative would also have benefits in the long run, in some cases even reversing previous effects of urbanization, through such practices as placing woody debris in streams or reducing peak storm flow rates that damage habitat.

## **Part 2 Description of Alternatives**

## 8.0 Assumptions and Background

The following chapters describe the four alternatives analyzed in this EIS. The alternatives include a No-Action Alternative, a Regulatory Alternative, a City Programs Alternative, and a Council-Modified Alternative. These alternatives share some common assumptions regarding development and redevelopment rates.

Under the No-Action, Regulatory, and Council-Modified alternatives, any vacant parcels would be subject to the wider buffer requirements of the respective alternative.

Under the No-Action Alternative, no expansion of nonconforming commercial structures is allowed. Under the Regulatory and Council-Modified alternatives, commercial and multifamily structures could be expanded into a buffer if supported by an approved critical areas report.

The ability to apply new buffers upon redevelopment was an assumption that affected some sections of the draft EIS as well as conclusions about the Regulatory Alternative. These conclusions have been corrected in the descriptions of impacts provided in this final EIS. Although the impact of redevelopment on improved function was overstated in the draft EIS for the Regulatory Alternative, the impacts of all the alternatives on critical area protection are analyzed in this final EIS with the assumption that in existing developed areas at least some redevelopment would occur.

The consequences of redevelopment vary for each alternative, based on the definition of a developed lot and which nonconforming structures would be allowed. Under the No-Action Alternative, any remodel or construction that exceeds certain structure value thresholds would require that the property comply with existing buffer regulations. Under the Regulatory and Council-Modified alternatives, existing primary structures would be allowed to be reconstructed or remodeled within that footprint. The footprint of existing primary structures would be carved out of the wider buffer requirements of those alternatives.

Based on City of Bellevue permit data, it is expected that, in single-family areas, approximately 0.3 percent of the existing housing stock would be redeveloped each year (Paine 2005 personal communication). In the near-term (designated as five years), this would result in replacement of 1.5 percent of the housing stock. In the long-term (designated as 50 years), approximately 15 percent of single-family housing units would be replaced with new single-family houses. It is also assumed that all privately owned vacant parcels would be developed over the long-term. This would affect approximately 309 parcels and 0.89 percent of the city land area in 5 years and approximately 3,097 parcels and 15 percent of the city land area over 50 years. If redevelopment is more restricted in critical areas and their buffers, the rate of redevelopment is likely to be lower in those areas, although the degree to which the rate of redevelopment would be reduced is not known.

Parcels that include streams and wetlands protected under existing and proposed critical areas regulations were identified using City of Bellevue critical areas maps (Bellevue 2005c) and King

County parcel information (King County 2005) for the entire city. Of the parcels identified, some would have adequate area to provide full buffers as required by the critical areas regulations but others would not have adequate area to develop without intruding to some degree on the required buffers. An average lot size of 0.59 acres was used to calculate the land area that would be redeveloped. For this analysis, it was assumed that 50 percent of the land area on lots with required buffers would be protected. The remainder of those lots would either be outside of the required buffer, or would have development that would be allowed under the exceptions provided in the code for lots where development would otherwise be unduly restricted by the regulations.

This information was used to calculate the rate that land that could come into conformance with critical area regulations as a result of redevelopment. For streams, redevelopment would result in approximately 10 acres of protected area that would be added to the buffers of streams after 5 years, and 100 acres after 50 years, if buffer requirements for redevelopment were the same as the widths required by the Regulatory Alternative for new development.

Parcels with known wetlands or adjacent to known wetlands numbered 415 for the city. Assuming a 0.3 percent redevelopment rate means that about 0.74 acres per year would be subject to redevelopment. The mapped inventory of wetlands does not include all wetlands in the city. Without a full inventory of wetlands, it is impossible to predict precisely how much more land would be affected. But based on the available inventory of wetlands, this represents about 1.75 acres of protected area on currently developed lots that would be added to the buffers of wetlands after 5 years, and about 17.5 acres after 50 years. These acreages are therefore a rough estimate of the land area that could be affected if redevelopment were required to comply with the same wetland buffer widths as those required on undeveloped parcels under the Regulatory Alternative and Council-Modified Alternative.

It is further assumed that under the Regulatory Alternative and the Council-Modified Alternative, native vegetation in stream and wetland buffers would generally be protected from removal, and that the native riparian forest would reestablish itself. Due to the degree of degradation in the ecosystem at present, and the presence of urban uses and invasive nonnative plants, domestic animals, and people, additional buffers provided though regulation can only be expected to provide some of the functions provided by a buffer in a pristine environment. In addition, buffers can only counteract local effects of urbanization, and changes to basin-wide hydrology due to artificial drainage systems (such as those for roads or buildings) can reduce the effectiveness of buffers in protecting stream hydrology and water quality. The city expects to address basin-wide hydrology issues in an update of the stormwater regulations in 2006.

Additional assumptions underlying the analysis of alternatives are discussed in the Regulatory Context section of the EIS.

## 9.0 No-Action Alternative

The No-Action Alternative is defined as the conditions that would exist if none of the action alternatives were implemented. Under the No-Action Alternative, remaining new development would continue to be regulated by the existing critical areas regulations in the near-term (5 years) and the long-term (50 years). Also, nonregulatory programs that benefit or protect critical areas would continue at their current levels of operation.

## 10.0 Alternative 1 – Regulatory Alternative

Alternative 1, the Regulatory Alternative, comprises several Land Use Code amendments for geologically hazardous areas, frequently flooded areas, streams and riparian areas, wetlands, shorelines, and wildlife habitat conservation areas. The following sections describe the changes proposed for the regulation of each type of critical area under the Regulatory Alternative. Appendix A of the draft EIS includes the complete text of the city's draft ordinances for the Regulatory Alternative.

### 10.1 All Critical Areas

Under the Regulatory Alternative, the land use code requirements for front, rear, and side yard size outside of critical areas could be decreased in favor of providing the fullest possible protection of critical areas while still allowing development of individual lots. Lot coverage and impervious surface standards that are normally applied on an individual lot basis could also be modified to allow calculation that includes open space tracts set aside to protect critical areas. In addition, the Regulatory Alternative clarifies the method for calculating density allowed on residential, multi-family, subdivisions, and commercial lots with critical areas (for the portion of the lot outside of the critical area and its buffer).

The Regulatory Alternative adds a provision which allows density to be clustered on smaller lots in a subdivision that provides a tract protecting critical areas. This provision reduces the regulatory burden on individuals while making the responsibility for maintaining the critical area tract a collective responsibility. The city would have the ability to enforce requirements for maintenance of the tract.

The Regulatory Alternative provides an exception to the regulations for the small number of cases where strict application of the critical regulations would prohibit development of a site. The existing code contains a similar provision.

The Regulatory Alternative includes new rules for redevelopment that would apply to structures and uses that are already within or near critical areas in cases where there is conflict with the location or design of existing structures. Structures and uses that do not comply with the Regulatory Alternative would be considered nonconforming. Under the Regulatory Alternative, rules for redevelopment of nonconforming structures and uses would apply in the following situations:

- Property owners are limited as to what new actions they can take with respect to locating structures, paving, or otherwise disturbing the protected area beyond normal landscaping.
- Expansion of a structure already within a critical area or its setback would be allowed, with specific guidance on the location and amount of

expansion allowed. Any expansion closer to the critical area would require mitigation.

- Remodeling and reconstruction would be allowed without requiring that the structure be brought into compliance with new regulations. Consideration would be given to those properties that are significantly impacted by the presence of a critical area or its setback.
- Reconstruction following damage or destruction by fire or other sources may trigger compliance with new regulations, potentially using the same value threshold that applies to remodels, or allowing reconstruction in the same footprint within 1 year after destruction.

## 10.2 Geologically Hazardous Areas

The city currently regulates steep slopes, landslide hazard areas, and coal mine hazards. Under the Regulatory Alternative, the current exemption would be maintained for small, isolated slopes inclined at 40 percent or greater. Although this exemption is not explicit in the existing code, current practice exempts isolated slopes when they are 1,000 square feet or less in area and not more than 10 feet in elevation. The exemption allows these slopes to be modified by grading so that they may be developed. Steep slopes associated with stream systems or wetlands are not exempted under this process.

Under the Regulatory Alternative, the director would have additional flexibility to exempt isolated steep slopes (40 percent or greater) or portions of such slopes between 10 feet and 20 feet in elevation, based upon a critical area report by a geotechnical engineer or licensed engineering geologist in concert with a qualified habitat biologist concludes the area is not wildlife habitat or could be reasonably expected to become wildlife habitat. Steep slopes associated with stream systems or wetlands would not be exempted under this process. No specific exemption is proposed for man-made slopes except as would be allowed by this process.

Additional criteria would be added to the Land Use Code to aid in identification for landslide hazard areas. Under the Regulatory Alternative, the city would incorporate the consideration of additional factors in identifying landslide hazard areas on slopes less than 40 percent that have a vertical relief of 10 feet or greater. Proposed criteria include (but are not be limited to):

- Areas of historic failures, including those areas designated as Quaternary slumps, earthflows, mudflows, or landslides
- Areas that have shown movement during the Holocene Epoch (past 13,500 years) or that are underlain by landslide deposits
- Slopes that are parallel or subparallel to planes of weakness in subsurface materials

- Slopes exhibiting geomorphological features indicative of past failures, such as hummocky ground and back-rotated benches on slopes
- Areas with seeps indicating a shallow ground water table on or adjacent to the slope face
- Areas of potential instability because of rapid stream incision, stream bank erosion, and undercutting by wave action.

The Regulatory Alternative would add a new minimum toe-of-slope buffer of 75 feet from slopes of 40 percent or greater or slopes with identified landslide hazard. The 75-foot setback requirement could be modified by a critical areas report prepared by a geotechnical engineer or licensed engineering geologist that approves the location of the proposed development and concludes that risk from potential landslides and slope failure is minimal. Where the landslide hazard is more than moderate, the setback would be based on the potential risk as determined by a geotechnical engineer or engineering geologist.

Under the Regulatory Alternative, the existing section of the code that establishes the method for determining the amount of a site that can be developed when steep slopes are present would be eliminated. The code would be simplified by clarifying a different method for calculating the density allowed on multi-family and commercial lots with critical areas. This would not change the amount of development allowed, just the density allowed outside of the critical area and its buffer. In some cases allowable density outside of the critical area and its buffer would increase and in others it would decrease.

Additional regulations or reporting requirements may be needed with respect to seismic hazards associated with ground shaking, fault rupture, liquefaction, and seiche. At a minimum, a critical areas report prepared by a geotechnical engineer or licensed engineering geologist, and based on geological map analysis and field investigation, would be required to address potential hazards associated with seismic activity.

### 10.3 Frequently Flooded Areas

The Regulatory Alternative establishes a standard to ensure that there would be no rise in flood levels, increasing protection against the risk of offsite flooding resulting from development. Revisions to LUC 20.25H.070 provide greater detail on base flood elevations through proposed revisions to flood insurance studies and flood insurance rate maps (FIRMs). The coupling of proposed updates to FIRMs (LUC 20.25H.070.A1) would increase protection for floodways. The Regulatory Alternative includes proposed exceptions to restrict use and general requirements to improve existing construction located within an area of special flood hazard (LUC 20.25H.110.A).

## 10.4 Streams and Riparian Areas

Under the Regulatory Alternative, the city would adopt the state-created stream typing system, replacing the A, B, C system that the city currently uses. The proposed rating system was created by the state, with particular emphasis on the presence of fish in streams. The state stream typing system is based on a multi-parameter model that uses geomorphic parameters such as basin size, gradient, elevation, and other indicators. It was developed based on thousands of field surveys of fish presence and fish habitat.

Adopting the state typing system would bring the city in line with many other jurisdictions in the area and would allow property owners to call on a wider number of consultants to assist in typing streams on their properties. The existing Bellevue-specific typing system is understood by relatively few professionals. The Regulatory Alternative would also increase the width of streamside buffers for each stream type (see Table 2-1).

**Table 2-1. Proposed and existing buffers for streams.**

Washington State Stream Rating	Buffer under the Regulatory Alternative (feet)	Buffer under Existing Bellevue Code (feet)
Type S	100	50
High-quality basin	N/A	N/A
Type F	100	50–10
Type N	50	50–25
Type O	25	10–0

Note: In addition to the indicated buffers, a 10- to 20-foot structure setback applies.

Under the Regulatory Alternative, where a legally established right-of-way, a railroad right-of-way, or other similar infrastructure of a linear nature transects a stream corridor critical area buffer, the edge of the right-of-way determines the extent of the buffer, if the part of the critical area buffer on the other side of the roadway provides insignificant biological or hydrological function in relation to the portion of the buffer adjacent to the stream corridor. In other words, the buffer areas terminate at a road or railroad right-of-way if the portion of the buffer cut off by the road or railroad right-of-way provides no significant biological or hydrological functions.

Under the Regulatory Alternative, property owners could propose stream buffer enhancement, such as increasing native vegetation in the buffer, as mitigation for impacts from a project. Rules allowing modifications to buffer requirements would be clarified and where equal or better results could be obtained by an alternative approach, greater flexibility would be provided for modifying buffer requirements. Flexibility in development standards would also be provided for development outside of stream buffer areas. For example, smaller lot sizes would be allowed and a separate critical area tract could be created through a *conservation subdivision*. In existing lots, noncritical area setbacks could be reduced in order to preserve development potential while providing required buffers. This flexibility does not exist in the current Land Use Code.

## 10.5 Wetlands

Under the Regulatory Alternative, the city would adopt the state wetland typing system in place of the existing A, B, C system that the city currently uses. The proposed rating system differentiates between wetlands based on their sensitivity to disturbance, their significance, their rarity, the ability to successfully replace them, and the functions they provide. The rating system considers three major groups of functions that wetlands perform (improving water quality, hydrologic function, and wildlife habitat).

Adopting the state typing system would bring the city in line with many other jurisdictions in the area, and would allow property owners to call on a wider number of consultants to assist in typing wetlands on their properties. Similar to the current Bellevue stream-typing system, the existing Bellevue-specific wetland typing system is understood by relatively few professionals. The more detailed methods for assessing wetland functions are divided into 15 different functions (referred to as the *functional assessment*). The level of detail regarding functions found in these assessment methods is not needed for the simpler categorization done in the proposed rating system. The new system simplifies wetland categorization for Bellevue property owners seeking to use the prescriptive regulations for wetlands based on type.

The Regulatory Alternative would also increase the width of wetland buffers for each category of wetland based on scoring used by the state wetland rating system (Table 2-2).

**Table 2-2. Proposed wetland buffers.**

Category	Wetland Characteristic	Buffer
I	Natural heritage wetlands	190 feet
	Bogs	190 feet
	Forested	Based on score for habitat or water quality functions
	Habitat score of 29 to 36	225 feet
	Habitat score of 20 to 28	110 feet
	Water quality score of 24 to 32 and habitat score of less than 20	75 feet
	Not meeting any of the above	75 feet
II	Habitat score of 29 to 36	225 feet
	Habitat score of 20 to 28	110 feet
	Water quality score of 24 to 32 and habitat score of less than 20	75 feet
	Not meeting any of the above	75 feet
III	Habitat score of 20 to 28 points	110 feet
	Not meeting any of the above	60 feet
IV over 2,500 square feet	Score for functions less than 30 points	40

Under the Regulatory Alternative, property owners would be able to suggest improvements to wetlands, for example, enhancing native vegetation in the wetland in return for increased flexibility in the amount and location of development allowed outside of that wetland and its buffer. This flexibility does not exist in the current Land Use Code. Under the Regulatory Alternative, the Land Use Code would contain rules for redevelopment of nonconforming structures and uses similar to those previously described for streams.

Development on sites with a wetland or wetland critical area buffer would be subject to increased performance standards for light, noise, runoff, buffer plantings, and pesticide use. These standards would apply to the whole site, even the portion of the site that is not within the critical area.

The Regulatory Alternative establishes new minimum setbacks for structures, measured from the edge of the critical area buffer. For each wetland category, as follows:

- |   |                       |                |
|---|-----------------------|----------------|
| ▪ | Category I wetlands   | 20 feet        |
| ▪ | Category II wetlands  | 20 feet        |
| ▪ | Category III wetlands | 15 feet        |
| ▪ | Category IV wetlands  | none required. |

In Bellevue wetlands, the primary setback is the buffer; the structure setback is required to provide outdoor space between the buffer and the structure, because there is usually human activity around a structure. Under the Regulatory Alternative, structure setbacks would be reduced for some wetland areas where the wetland buffers would be increased, resulting in an overall increase in setback relative to the setback under the existing code.

Under the Regulatory Alternative, where a legally established right-of-way, railroad right-of-way or other similar infrastructure of a linear nature transects a stream corridor (or wetland) critical area buffer, the edge of the right-of-way would determine the extent of the buffer, if the part of the critical area buffer on the other side of the roadway provides insignificant biological or hydrological function in relation to the portion of the buffer adjacent to the stream corridor. In other words, the buffer areas would stop at a road or railroad right-of-way if the portion of the buffer cut off by the road or railroad right-of-way provides no significant biological or hydrological functions.

## 10.6 Shorelines

Under the Regulatory Alternative, the city would adopt prescriptive moorage standards that are in alignment with the Army Corps of Engineers regional general permit. Because the Corps and Washington Department of Fish and Wildlife (WDFW) each have permitting authority over moorage located waterward of the ordinary high water mark, adopting city standards that are consistent with the regional general permit would streamline the permitting process for citizens. Requirements would include the following:

- One moorage per parcel or one joint-use moorage for two or more parcels. Newly platted development of two or more dwellings would have joint use moorage where feasible.
- Only piers and ramps would be permitted within the first 30 feet from shore. All floats and ells must be 30 feet waterward of the ordinary high water mark. No skirting would be allowed on any structure.
- Surface Coverage (includes all floats, ramps, and ells) would be 480 square feet for single property owners; 700 square feet for two property owners (residential); and 1,000 square feet for three or more residential property owners. Widths and lengths would be as follows:
  - Piers: 4 feet wide and fully grated. There is an allowance for 2-foot-wide finger piers.
  - Ramps: Must not exceed a width of 3 feet and must be fully grated.
  - Ells: Must be in water with depths of 9 feet or greater at the landward end of the ell: (a) 6 feet by 20 feet with a 2-foot strip of grating down the center, (b) 6 feet by 26 feet long with grating.
  - Floats: Must be in water with depths of 10 feet or more at the landward end of the float; 6 feet by 20 feet long with a minimum of 2 feet of grating down the center.
  - Piers: The length of the pier is limited by the maximum square footage (surface coverage) allowed (see items above).

Moorage that does not meet prescriptive standards would be considered nonconforming. A critical areas report would be required for those seeking to deviate from the prescriptive moorage standards. Not all prescriptive standards may be modified through the critical areas report process, and an upper threshold would be established for permissible modifications, potentially based on a percentage of the overall value. This approach is consistent with the city's approach to nonconforming structures in other contexts, including in other critical areas.

The Regulatory Alternative establishes new standards that require changes when residential moorage (a dock) is being substantially repaired. Grated decking would be required in the first 30 feet from the shore or the dock would have to be narrowed to 4 feet in width; skirting would have to be removed; and piles within 18 feet of the shore in a yet-to-be-specified depth of water would have to be removed. When less than 50 percent of existing piling is being replaced, similar standards would apply as for dock repair and piles would have to generally be placed as far from shore as possible. For replacement of more than 50 percent of piles, full compliance with the regulations for new docks would be required.

Under the Regulatory Alternative, there would be a shoreline buffer requirement of 50 feet. In some circumstances a modification of the buffer may be allowed with mitigation, which would likely include planting appropriate native shoreline vegetation. Such modifications would in no event allow the buffer to be reduced below 25 feet.

The recommended 50-foot buffer requirement would apply to all remaining new development, with accommodation made for areas where most existing development does not comply with the 50-foot buffer requirement. In the case where a vacant parcel is surrounded by parcels built with a smaller setback, the new development would be allowed to have a setback consistent with that of surrounding parcels, so long as the resulting setback is no closer than 25 feet to the ordinary high water mark. This accommodation for existing neighborhood character is similar to the approach taken in some other jurisdictions.

As with other critical areas, expanding the existing shoreline setback would result in some existing structures becoming nonconforming, and the approach to managing these nonconformities under the Regulatory Alternative would be also be similar to that previously described. Following the general principles previously discussed regarding nonconformities associated with stream and wetland critical areas, expansion of existing nonconforming shoreline structures would be allowed, based on a hierarchical approach that would influence the location of any expansion. In all cases, mitigation would be required. Mitigation would likely involve planting the buffer area with native vegetation to offset the impacts of the disturbance in the buffer area.

Under the Regulatory Alternative, development of new bulkheads generally would be prohibited; however, minor repair of existing bulkheads would be allowed. Priority would be given to the use of bioengineered shoreline stabilization techniques that incorporate plant and other natural materials to stabilize the shoreline. However, when a bulkhead fails or other major work is undertaken, the new bulkhead would be required to meet updated standards. Under current code, if a wall fails, it may be replaced.

## **10.7 Wildlife Habitat Conservation Areas**

The Regulatory Alternative would add a wildlife habitat overlay to all designated critical areas to ensure wildlife habitat functions and values are considered where current rating systems do not take into account the full range of habitat values (for example, steep slopes or riparian buffers). The objective is to ensure protection of mature upland forest and other critical habitat necessary for sustaining species associated with those habitat types. For example, buffer reductions might not be permitted to the degree otherwise allowed where existing habitat is of high quality (e.g., mature conifers in slope setbacks, mature trees in stream buffers), especially if the slope below is also fully forested.

Special management plans may also be required where a priority species is nesting or using habitat on a regular basis. The proposed Land Use Code would include a series of incentives to promote retention of the large blocks of remaining forest canopy that are not already contained in

critical areas. Targeted areas would include upland forested slopes of 25 to 40 percent with limited development potential. Incentives would be designed to encourage forms of development that include a high degree of lot clustering; aggregated vegetation retention; and special development standards and low impact development techniques to conserve native forested species and retain forested areas for recreational and aesthetic purposes.

The Regulatory Alternative would add to the Land Use Code a package of incentives aimed at preserving habitat linkages between patches of habitat and other isolated natural areas, parks, preserves, open spaces, or large tracts. These wildlife corridors facilitate movement of animals between essential breeding, feeding, and roosting habitat while helping to minimize negative effects of urbanization. The development of wildlife corridors may also provide opportunities for needed recreational linkages and provide needed buffering between adjoining neighborhoods and uses.

Under the Regulatory Alternative, both city and private development projects would apply science-based management recommendations to mitigation projects for special status species in Bellevue. Up to 23 special status species may be present at this time in Bellevue; of these, 13 are known to reside and breed in the city. Most of these species are birds (e.g., bald eagle, peregrine falcon, common loon, pileated woodpecker, Vaux's swift, merlin, red-tailed hawk), but there also are five mammals, some amphibians and reptiles, and four fish species (chinook salmon, coho salmon, bull trout, and river lamprey). With the exception of the fish and a few water birds, most in the list are associated, or closely associated, with all of the nonurban habitat types in Bellevue: upland conifer-hardwood forests, riparian areas, herbaceous wetlands, open water, and pasture land.

Under the Regulatory Alternative, when a proposal occurs on a site with species of local importance, an applicant would be required to submit a habitat management plan that documents how the proposal would avoid or mitigate impact on the habitat or species in question. The plan must address species distribution, habitat requirements, limiting factors, specific management recommendations, and key relationships between habitat requirements and management recommendations. Special monitoring and adaptive management may be required as well. Application of this provision would require initial biological review prior to submittal to determine whether a special status species exists on the site.

## 11.0 Alternative 2 – City Programs Alternative

Alternative 2, the City Programs Alternative, assumes that the major component of the city's response to the state Growth Management Act (GMA) requirement to update critical area policies and regulations considering best available science would consist of programs and investments focused on preventing further degradation of Bellevue's critical areas. Under the City Programs Alternative, it is assumed that the city would increase the magnitude of effort above current levels for city programs and investments in critical areas.

These programs and investments would be undertaken by the city, in lieu of making substantial amendments to the city's existing critical area regulations in LUC Part 20.25H. The existing Land Use Code, as it pertains to critical areas for streams, wetlands, shorelines, and wildlife, would be maintained under the City Programs Alternative. The City Programs Alternative does not contain programs or investments targeted at geological hazards, and it is assumed that the city would amend the regulations in LUC Part 20.25H that pertain to geologically hazardous areas, as outlined under the Regulatory Alternative, to protect these critical areas under Alternative 2, the City Programs Alternative. A comprehensive description of the City Programs Alternative is contained in Appendix B of the draft EIS.

The City Programs Alternative includes four major categories of programs and investments:

- Acquisition
- Rehabilitation/maintenance
- Education/stewardship
- Monitoring.

Table 2-3 provides details about the focus of the four categories. It also provides examples of the programs proposed under each category for streams, wetlands, shorelines, and wildlife, and an assumed level of investment or target to be achieved through the programs over time. The programs in these four categories would be prioritized and some, but not necessarily all of the programs, would be implemented over time (not all in the first year or two and not all every year) to improve protection of Bellevue's critical areas over the long-term.

### 11.1 Acquisition

Through the acquisition program, the city could acquire up to approximately 13 acres of shoreline and associated buffer areas (Lake Washington and Lake Sammamish), 30 acres of wetland and wetland buffer areas, 207 acres of stream and stream buffer areas. In addition, conservation easements would be established in wetland areas and less developed basins (for example, Goff Creek/Richards Creek).

## 11.2 Rehabilitation/Maintenance

The rehabilitation/maintenance element would increase the level of investment in wetland, wetland and streamside buffers, and shoreline rehabilitation projects, such as removing invasive plants and replanting with native species, or replacing hardened shoreline armoring with bioengineered structures. Capital improvement spending to provide or improve fish passage would increase relative to current levels, as would spending for stream channel modification capital improvement projects (for example, large woody debris installations, and erosion/sediment control projects). Several drainage and stormwater management and maintenance activities would increase over current levels, including the annual cleaning of stormwater catch basins and oil/water separators. Stormwater-related capital improvement projects would incorporate low-impact development (LID) technologies where feasible based on soils and slopes.

## 11.3 Education/Stewardship

Under the City Programs Alternative, the city would initiate or increase its current level of effort for stewardship, education, and outreach activities, many with an action component to involve schools, neighborhoods, and businesses in the protection and rehabilitation of streams, wetlands, and shorelines. In addition to raising awareness of the values of critical areas in property owners and the general public, these programs would engage volunteers in a broad array of planned public or private rehabilitation activities, ranging from reducing invasive nonnative plants to controlling sources of water pollution.

## 11.4 Monitoring

The city would develop and implement a monitoring program for streams, wetlands, shorelines and wildlife. The monitoring program would also track use of the education and stewardship programs. Shorelines and city-owned wetlands would be inventoried, and landscape analysis would be performed, focusing on wildlife habitat connectivity. In addition to establishing key baseline data, the monitoring program would provide data for guiding future actions (adaptive management plan), for example, through an investigation of stream buffer width conditions to identify those leading to improvements in water temperature for streams. The monitoring program could supplant fixed buffer sizes with variable buffer widths determined on a site-specific basis.

Table 2-3. City Programs Alternative.

Category	Program	Purpose/Goal	Level of Investment	Target
Acquisition	Stream acquisition.	Replace over time the acreage that would have been regulated by expanded buffers; focus on connectivity to also serve wildlife function.	As necessary to meet target over redevelopment timeframe of 50 years.	207 acres
	Wetlands acquisition.			30 acres
	Shoreline acquisition.			Lake Sammamish – 5.89 acres Lake Washington – 7.35 acres
Rehabilitation/Maintenance	<p>Projects under this element of the City Programs Alternative include:</p> <ul style="list-style-type: none"> <li>▪ Streamside buffer, wetland, wetland buffer and shoreline rehabilitation projects (i.e., enhanced native plantings, removal of invasive species, removal of hardened shorelines) designed to maintain or enhance existing functions and values on property owned or controlled by the city;</li> <li>▪ In-stream enhancement projects (i.e., placement of large woody debris; removal of fine sediments);</li> <li>▪ Fish passage barrier removal;</li> <li>▪ Water quality improvement projects.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improve function of property in city ownership, and as acquired over time. Once rehabilitation projects performed, include sufficient maintenance dollars to retain value of the project over time;</li> <li>▪ Improve in-stream habitat and remove fish barriers;</li> <li>▪ Improve/maintain water quality and respond to flood control issues as needed.</li> </ul>	<p>Total amount available:</p> <ul style="list-style-type: none"> <li>▪ \$1,493,000 annually; allocated as follows:</li> <li>▪ Stormwater catch basin cleaning – \$445,000.</li> <li>▪ Oil/water separator maintenance – \$8,000.</li> <li>▪ Remainder (\$1,040,000) to be allocated among critical areas based on assessment of risk to particular area if development regulations are not amended.</li> </ul>	
Education/Stewardship	<p>Efforts within this aspect of the City Programs Alternative include:</p> <ul style="list-style-type: none"> <li>▪ Private stewardship programs (efforts to encourage and offset costs for rehabilitation of critical areas on private property). Includes money for native plantings and technical assistance for rehabilitation projects.</li> <li>▪ Education programs to educate critical area property owners and general citizenry about values of critical areas; school and community outreach programs; and volunteer coordination programs to assist with planned public or private rehabilitation projects.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase incentives for private property owners to better manage the critical areas on their property. Includes city-provided technical assistance, native plant materials, and waived permit fees.</li> <li>▪ Continue community education and outreach to maintain interest in and support for city's environmental stewardship efforts.</li> </ul>	<p>Total amount available: \$1,028,000 annually, allocated as follows:</p> <ul style="list-style-type: none"> <li>▪ Private stewardship programs – \$514,000.</li> <li>▪ Education programs – \$514,000.</li> </ul>	

Table 2-3 (continued). City Programs Alternative.

Category	Program	Purpose/Goal	Level of Investment	Target
Monitoring	<p>Monitoring program to include the following elements. Monitoring scale and timeline for each indicator to be established. Monitoring results would be used to improve effectiveness of city programs.</p> <p>Streams:</p> <ul style="list-style-type: none"> <li>■ Velocities</li> <li>■ Buffer widths and contiguity</li> <li>■ Biological sampling (diatoms or benthic index)</li> <li>■ Temperature.</li> </ul> <p>Wetlands:</p> <ul style="list-style-type: none"> <li>■ Inventory and type city-owned</li> <li>■ Gather data from new typed privately-owned</li> <li>■ Biological sampling</li> <li>■ Buffer widths and contiguity.</li> </ul> <p>Shorelines:</p> <ul style="list-style-type: none"> <li>■ Prepare shorelines inventory required for Shoreline Management Act update.</li> </ul> <p>Wildlife (upland habitat):</p> <ul style="list-style-type: none"> <li>■ Prepare landscape analysis focusing on connectivity.</li> </ul> <p>Other:</p> <ul style="list-style-type: none"> <li>■ Retain and track utilization data for education and stewardship programs.</li> </ul>	<p>Establish key baselines to assess effectiveness of City Programs Alternative over time; would provide information for next required critical areas update.</p>	<p>As necessary to fund described program.</p>	

## 12.0 Alternative 3 – Council-Modified Alternative

Alternative 3, the Council-Modified Alternative, comprises several Land Use Code amendments for geologically hazardous areas, frequently flooded areas, streams and riparian areas, wetlands, shorelines, and wildlife habitat conservation areas. Appendix A includes the complete text of the ordinances for the Council-Modified Alternative.

### 12.1 All Critical Areas

The Council-Modified Alternative would be the same as the Regulatory Alternative, with the following modification:

- Tree pruning within a critical area buffer may be allowed, provided that it is performed in accordance with an approved vegetation management plan.

### 12.2 Geologically Hazardous Areas

The Council-Modified Alternative would be the same as the Regulatory Alternative, with the following modifications:

- The regulated area at the toe of both slopes of 40 percent or greater and slopes with an identified landslide hazard would be classified as a 75-foot structure setback. (The 75-foot buffer as proposed in the Regulatory Alternative requires protection of existing vegetation at the toe of the slope, while the structure setback proposed for the Council-Modified Alternative does not.)
- Tree pruning is allowed within geologic hazard areas and geologic hazard buffers, so long as it is performed in accordance with the director's guidance. Allowed pruning methods include tree topping where trees have historically been topped. Removal of the canopy cannot be so extensive that it would alter the presence of native understory species.

### 12.3 Frequently Flooded Areas

The standards under the Council-Modified Alternative would be the same as under the Regulatory Alternative.

## 12.4 Streams and Riparian Areas

The Council-Modified Alternative would be the same as the Regulatory Alternative, with the modifications shown in Table 2-4:

**Table 2-4. Proposed and existing buffers for streams.**

Washington State Stream Rating	Buffer on Undeveloped Lots under Regulatory Alternative and Council-Modified Alternative <sup>a</sup> (feet)	Buffer on Developed Lots under Council-Modified Alternative (feet)	Structure Setbacks on Developed Lots under Council-Modified Alternative (feet)	Buffer under Existing Bellevue Code (feet)
Type S	100	50	50	50
Type F	100	50	50	50-10
Type N	50	25	25	50-25
Type O	25	25	0	10-0

<sup>a</sup> In addition to the indicated buffer, a 10- to 20-foot structure setback applies.

On undeveloped lots under the Council-Modified Alternative, the restrictions on development or vegetation management within stream buffers would be the same as under the Regulatory Alternative, except that tree pruning could be allowed with an approved vegetation management plan. For example along Type S streams a 100-foot buffer and a 20-foot structure setback would apply, requiring a new structure to be at least 120 feet from the stream.

Under both the Regulatory Alternative and the Council-Modified Alternative, a structure could be built within the footprint of an existing principal structure that is already located within a buffer or structure setback. New primary structures located on developed lots already in compliance with buffer and setback requirements would need to remain in compliance, as would any new accessory structures. In both alternatives, the footprint of existing primary structures would be carved out of the wider buffer requirements, and the structure could not be expanded into the buffer unless mitigation is provided. Mitigation is typically provided in the form of vegetation enhancement in the buffer.

On developed lots under the Council-Modified Alternative, the minimum distance between a structure and a given stream type would be slightly less than under the Regulatory Alternative. For instance, along Type S streams a 50-foot buffer and a 50-foot structure setback would apply, requiring a new structure to be at least 100 feet from the stream, rather than 120 feet as required under the Regulatory Alternative.

In addition, unlike a buffer requirement, a structure setback does not limit the placement of new impervious surfaces. Although the total impervious surface allowed on an individual lot would be the same as allowed under the Regulatory Alternative, impervious surfaces such as patios, driveways, sport courts, and surface parking could be located within the structure setback, and thus could be up to 50 feet closer to the stream than under the Regulatory Alternative. Consequently, on developed lots that have native vegetation protected by buffer requirements,

only approximately 50 percent of the area protected under the Regulatory Alternative would be protected under the Council-Modified Alternative. In addition, at least some of the impervious surface allowed on a lot would be expected to be located within the structure setback.

An example may help to illustrate the difference between the Regulatory Alternative and the Council-Modified Alternative. A typical developed single-family residential lot in Bellevue is approximately 7,200 square feet in area. For this example, assume that the lot is 60 feet wide by 120 feet deep and adjacent to a Class S stream. The house typically occupies approximately 30 percent of the lot area, and driveways and walks providing access to the house occupy approximately another 10 percent. These features would be allowed to remain and be replaced in their existing footprint under either alternative. Because the proposed limit on impervious surfaces is 50 percent of the lot area for most residential areas, on this typical lot the owners could add another 10 percent (720 square feet) of lot coverage with impervious surfaces. This added lot coverage might be in the form of a patio, surface parking, or sport court.

Under the Regulatory Alternative, the owner of this lot would not be allowed to place new impervious surfaces within the 100-foot buffer adjacent to the stream. New impervious surfaces, such as patios, driveways, sport courts, and surface parking, would be allowed within the 20-foot structure setback adjacent to the buffer. The owners could add some of these types of features to the outer part of the buffer if they produce a mitigation stewardship plan that shows that the buffer functions lost by placing the new impervious surfaces would be replaced by some enhancement to the remaining buffer. If the area in question is lawn, the functions affected may be infiltration, runoff rate, pollutant attenuation, and/or water temperature regulation.

Under the Council-Modified Alternative, the new impervious surfaces could be placed as close as 50 feet to the stream, and there would be no requirement to mitigate these effects by enhancing the buffer. The 50-foot structure setback area would be 60 feet wide on the typical lot, and it is likely that the house would already occupy a portion of the setback (since approximately 64 percent of lots adjacent to streams were found to have structures closer than 100 feet to the stream [Bellevue 2006]). In this example, the additional impervious surface allowed represents approximately 24 percent of the setback area, and the remainder must remain pervious.

## 12.5 Wetlands

The Council-Modified Alternative would be the same as the Regulatory Alternative, with the following modifications:

- The definition of developed properties when used in relation to wetlands and wetland buffers would include only those properties where the wetland and buffers are in a native growth protection area or easement. An undeveloped site would be any site where the wetland and wetland buffer have not previously been included within a native growth protection

area (NGPA) or native growth protection easement (NGPE), regardless of whether the site contains a primary structure.

- On properties where an NGPE or NGPA has been previously approved and recorded, the required buffers would be defined in the NGPE or NGPA.
- Structure setbacks on developed properties where an NGPE or NGPA has been previously approved and recorded would be:
  - Category I or II– 20 feet from edge of NGPE or NGPA
  - Category III– 15 feet from edge of NGPE or NGPA
  - Category IV – None.

The effect of these modifications to the standards described in the Regulatory Alternative is that on lots developed under current critical area regulations, the NGPE or NGPA required by code would remain the required buffer for the foreseeable future. Buffers have been protected through NGPEs and NGPAs primarily in subdivisions created since 1987. Such subdivisions with NGPEs and NGPAs are not expected to undergo significant rates of redevelopment within the timeframes of this EIS. Therefore, the effect on wetland protection of this difference in protective buffers between the Regulatory and Council-Modified alternatives is not expected to be significant.

The Council-Modified Alternative would continue to allow reconstruction or remodeling within the footprint of existing primary structures that are noncomplying. However properties considered developed, that is already having a primary structure but large enough to be subdivided, would be subject to the revised buffer requirements of the Council-Modified Alternative if subdivided.

## 12.6 Shorelines

The Council-Modified Alternative would be the same as the Regulatory Alternative, with the following modifications:

- On developed properties, the required buffer would be 25 feet from the ordinary high water mark.
- On developed properties, the structure setback would be 25 feet from the landward edge of the required buffer.
- The city would explore a pilot program to streamline permitting for docks in conjunction with federal and state permitting requirements.

On developed properties, structures would therefore be prohibited within 50 feet from the ordinary high water mark, and vegetation would be protected in the waterward 25-foot portion of that area.

Although the total impervious surface allowed on an individual lot would be the same as allowed under the Regulatory Alternative, impervious surfaces such as patios, driveways, sport courts, and surface parking could be located within the structure setback, and thus could be up to 25 feet closer to the shoreline than under the Regulatory Alternative. Consequently, on developed lots (which constitute most of the lots in the shoreline) the native vegetation protected by buffer requirements under the Council-Modified Alternative would be approximately 50 percent of the area protected under the Regulatory Alternative, and at least some of the impervious surface allowed on a lot could be expected to be located within the structure setback.

An example may help to illustrate the difference between the Regulatory Alternative and the Council-Modified Alternative. Again using the typical developed single-family residential lot in Bellevue (approximately 7,200 square feet in area), assume that the lot is 60 feet wide by 120 feet deep and adjacent to a shoreline. The house typically occupies approximately 30 percent of the lot area, and driveways and walks providing access to the house occupy approximately another 10 percent. These features would be allowed to remain and be replaced in their existing footprint under either alternative. Because the proposed limit on impervious surfaces is 50 percent of the lot area for most residential areas, on this typical lot the owners could add another 10 percent of lot coverage with impervious surfaces, or 720 square feet. This lot coverage might be in the form of a patio, parking space, or sport court.

Under the Regulatory Alternative, the owner of this lot would not be allowed to place the new impervious surfaces within 50 feet of the shoreline. The owners would be allowed to add some of these types of features to the upper part of the buffer if they produce a vegetation management plan showing that the buffer functions lost by placing the new impervious surfaces would be replaced by some enhancement to the remaining buffer.

Under the Council-Modified Alternative, the new impervious surfaces could be placed as close as 25 feet to the shoreline, and there would be no requirement to mitigate adverse effects by enhancing the buffer. The 25-foot structure setback area would be 60 feet wide on this typical lot, and it is likely that the house would already occupy a portion of the setback (since approximately 60 percent of lots were found to have structures closer than 50 feet to the shoreline [Bedwell 2006]). In this example, the additional impervious surface allowed represents approximately 48 percent of the setback area, and the remainder must remain pervious.

Under the No-Action Alternative, the Regulatory Alternative, and the Council-Modified Alternative, it is possible for property owners to add hardened paths to access their docks, thus further increasing impervious surfaces within Bellevue shoreline areas.

## 12.7 Wildlife Habitat Conservation Areas

The standards specific to wildlife protection under the Council-Modified Alternative are the same as under the Regulatory Alternative. Both rely on protection of critical areas and buffers to protect wildlife habitat. However, because the Council-Modified Alternative would provide reduced protection for stream and shoreline buffers on developed property compared to the Regulatory Alternative, it would be less protective of wildlife habitat.

# **Part 3      Errata**

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## 13.0 Errata

Corrections have been made to three tables in the draft EIS:

- Table 1-3. Comparison of the trends for stream and riparian area conditions by alternative
- Table 1-5. Comparison of the trends for shoreline conditions by alternative.
- Table 1-6. Comparison of the trends for wildlife habitat conservation area conditions by alternative.

As they appeared in Tables 1-3 and 1-5 in the draft EIS, the ratings for habitat access/physical barriers and habitat elements/large woody debris were incorrect. As it appeared in Table 1-6 in the draft EIS, the rating for road density was incorrect. The corrected tables are included in this final EIS.

In the Regulatory Alternative analyzed in the draft EIS, the city carried an option to exclude the footprint of existing primary structures from critical area buffers and structure setbacks (see Section 20.25H.035.B on page 6 of 6 in Appendix A to the draft EIS). This alternate option was accepted by the planning commission and confirmed by the city council and is included in the current draft of the ordinance (see 20.25H.035.B). The effect of this footprint exclusion is essentially that existing structures are allowed in perpetuity and not required to comply with the expanded critical area buffers and structure setbacks, even upon redevelopment.

The ability to apply new buffers upon redevelopment was an assumption that affected some sections of the draft EIS as well as conclusions about the Regulatory Alternative. These conclusions have been corrected in the descriptions of impacts provided in this final EIS.

**Part 4    Alternative 3 –  
Council-Modified Alternative**

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## 14.0 Affected Environment, Impacts, and Mitigation for Alternative 3: Council-Modified Alternative

This part of the final EIS describes the affected environment, impacts, and mitigation of the proposal for Alternative 3, the Council-Modified Alternative. The other alternatives—the No-Action Alternative, the Regulatory Alternative (Alternative 1), and the City Programs Alternative (Alternative 2)—are analyzed in the draft EIS, and that analysis is not repeated here. This section analyzes the Council-Modified Alternative in the same manner in which the other alternatives are analyzed in the draft EIS.

### 14.1 Soils and Geology

#### 14.1.1 Affected Environment

The existing conditions for soils, geology, and geological hazard areas are described in the draft EIS. The same existing conditions apply for the Council-Modified Alternative.

#### 14.1.2 Impacts

##### 14.1.2.1 Alternative 3 – Council-Modified Alternative

###### *Near-Term and Long-Term Impacts*

###### Geologically Hazardous Areas Regulations

For all types of geologic hazard areas except erosion hazards and landslide-prone areas, the Council-Modified Alternative would have the same impacts as the Regulatory Alternative. The Council-Modified Alternative would allow clearing of vegetation in the 75-foot structure setback at the toe of steep slope areas, which, when associated with an erosion hazard or a landslide hazard, could result in slightly greater risk to public safety compared to the Regulatory Alternative.

Prior studies show that forest conditions can influence erosion, sediment retention on hillslopes, and the length of landslide and debris flow runout. Studies also show that the incorporation of woody debris into the leading front of a debris flow can increase the rate of sediment deposition (Montgomery and Buffington 1998; Lancaster et al. 2001), which could decrease the runout length. May (1998) found that runout distance is greater for debris flows that originate in or travel through clear-cut forests in the Oregon Coast Range. Bunn and Montgomery (2004) measured 5 to 11 times the volume of sediment and wood in old-growth channels than in industrial-forest (clear-cut) channels.

Iverson (2003) describes several models of landslide runout, in which the runout length depends on a friction factor related to the resisting forces. Debris flows with a higher friction factor dissipated energy at a faster rate, which reduced the runout length. Woody debris that increases the friction factor would tend to have the same effect on runout length. Iverson's (2003) models

suggest that woody debris has the greatest effect on smaller landslides, as the effect decreases in larger landslides due to increasing landslide thickness.

Many factors can influence the length and style of landslide runout, including slope angle, failure mechanism, landslide size, runout-path geometry, and landslide composition (i.e., water, soil, and organic material). Because woody debris tends to affect the landslide composition through an increase in frictional resistance, restricting the removal of vegetation from the toe of steep slopes could reduce the runout length and hazard risk to structures and their occupants. Restrictions on vegetation removal could also protect sensitive stream habitat by reducing the likelihood of punctuated delivery of fine sediment to streams.

An analysis of all parcels within 75 feet of the toe of slopes steeper than 40 percent (excluding areas already protected by a 50-foot stream buffer) indicates that the Council-Modified Alternative could affect 1,011 parcels (less than 2 percent of all parcels in the city).

### **14.1.3 Mitigation**

There would be no significant adverse geological impact under the Council-Modified Alternative. Therefore, no mitigation is required. The Council-Modified Alternative is more protective than the No-Action Alternative. The application of critical areas policies on a case-by-case basis in regulating development within critical areas would help to minimize any minor impacts that might be associated with development under any alternative. Future changes to stormwater management regulations could also address potential erosion impacts on a basinwide scale, including erosion hazard areas.

### **14.1.4 Significant Unavoidable Adverse Impacts**

No significant unavoidable adverse impacts on geological resources are expected to result from implementation of the Council-Modified Alternative.

## **14.2 Water Resources**

### **14.2.1 Affected Environment**

The existing conditions for water resources are described in the draft EIS. The same conditions apply for the Council-Modified Alternative.

### **14.2.2 Impacts**

#### **14.2.2.1 Council-Modified Alternative**

##### *Near-Term Impacts*

##### **Frequently Flooded Areas**

The Council-Modified Alternative is identical to the Regulatory Alternative with regard to frequently flooded areas. The Council-Modified Alternative establishes a standard to ensure that there would be no rise in flood levels, increasing protection against the risk of offsite flooding

resulting from development. Revisions to LUC 20.25H.070 provide greater detail on base flood elevations through proposed revisions to flood insurance studies and flood insurance rate maps (FIRMs). The coupling of proposed updates to FIRMs (LUC 20.25H.070.A1) would increase protection for floodways.

The Council-Modified Alternative includes proposed exceptions to restrict use and general requirements to improve existing construction located within an area of special flood hazard (LUC 20.25H.110.A). The Council-Modified Alternative would maintain public health and safety in the near term.

### Streams and Riparian Areas

The impacts of the Council-Modified Alternative on streams and riparian areas would be the same as described in the draft EIS for the Regulatory Alternative. However, the Council-Modified Alternative is less protective of stream buffers. Therefore, under the Council-Modified Alternative there would be an increased risk to some ecological indicators, such as water temperature, sediment and turbidity, and chemical contaminants and nutrients. Nonetheless, the Council-Modified Alternative would improve protection compared to the No-Action Alternative, because remaining undeveloped properties would be subject to significantly more protective buffer requirements. In addition, the Council-Modified Alternative has the potential to extend buffer area outside the carve-out for the primary structure footprint which, would add buffer area beyond what would likely occur under the No-Action Alternative over time.

For developed properties in commercial areas, the No-Action Alternative could be more protective because of the current requirements for redevelopment of properties. Under the No-Action Alternative, properties would be required to comply with stream buffer regulations when a certain threshold of a structure's value is exceeded. However, property owners are likely to stay under any threshold in order to avoid having to comply with existing regulations (Berens et al. 2006).

Commercial properties are more likely to exceed the redevelopment value threshold. Redevelopment of commercial properties would likely have stream-specific benefits, including rehabilitation of riparian buffer areas. Rehabilitation of riparian areas, particularly those areas located adjacent to salmon spawning grounds, would likely benefit existing salmon populations by improving the ecological functions that stream riparian areas provide (e.g., water quality moderation). In addition, these rehabilitated riparian areas would provide protection against future impacts associated with the redeveloped commercial properties.

However, the percentage of developed commercial properties located adjacent to Bellevue streams is very small compared to the total miles of streams within the city. Areas that may meet the criteria for redevelopment in the foreseeable future include the Bellevue-Redmond corridor and Richards Creek valley. Because these areas represent a minority of properties located adjacent to streams within the city, no measurable improvement to stream protection is expected to result. Therefore, redevelopment of commercial properties located adjacent to streams is not likely to outweigh the beneficial effect of wider stream buffers on the overall condition of Bellevue streams.

On developed lots under the Council-Modified Alternative, the minimum distance between a structure and a given stream type would be slightly less than under the Regulatory Alternative. For instance, along Type S streams a 50-foot buffer and a 50-foot structure setback would apply, requiring a new structure to be 100 feet from the stream, rather than at least 120 feet as required under the Regulatory Alternative (see the description of the Council-Modified Alternative, in the Background and Assumptions section, for a specific example). Additionally, under the Regulatory Alternative, property owners could use the outer buffer area in exchange for enhancements in the inner buffer (closer to the stream). The Council-Modified Alternative eliminates this incentive because the outer buffer area becomes a structure setback, available for some nonstructural uses, with an increased risk to some ecological indicators.

Consequently, only a combination of alternatives or the implementation of targeted programs could maintain or improve stream and riparian area conditions. Effectiveness monitoring, performed for various habitat indicators at all streams, would be needed to determine the effect of the Council-Modified Alternative on Bellevue streams and riparian areas.

#### Wetlands

The near-term impacts of the Council-Modified Alternative on water resources would be the same as the near-term impacts under the Regulatory Alternative, with the following difference. On developed properties where a native growth protection easement (NGPE) or a native growth protection agreement (NGPA) has been previously approved and recorded, the required buffers would be defined in the NGPE or NGPA. The effect of this modification to the Regulatory Alternative on wetland protection is expected to be minimal, because within the timeframes covered by the risk analysis, there is a small likelihood that properties conditioned with NGPEs or NGPAs would be redeveloped and therefore subject to the regulatory requirements for wider wetland buffers.

Under the Council Modified Alternative, remaining undeveloped areas would be subject to more protective wetland buffer requirements. Given the scope of the modifications and prevailing land use patterns, it is expected that the Council-Modified Alternative and the Regulatory Alternative would be equally protective in the near term and more protective than the No-Action Alternative.

#### Shorelines

The impacts of the Council-Modified Alternative on shorelines would be the same as described in the draft EIS for the Regulatory Alternative. However, the Council-Modified Alternative would be less protective of shoreline buffers. Therefore, under the Council-Modified Alternative there would be an increased risk to some ecological indicators, such as water temperature, chemical contaminants and nutrients, and pH. Nonetheless, the Council-Modified Alternative would improve protection compared to the No-Action Alternative, because current regulations do not include shoreline buffer protection. The Council-Modified Alternative would allow for protection of existing natural vegetation on remaining undeveloped properties, and natural areas located on developed properties would have a greater chance to remain.

For example, although the total impervious surface allowed on an individual lot would be the same as allowed under the Regulatory Alternative, impervious surfaces such as patios, driveways, sport courts, and surface parking could be located within the structure setback, and thus could be up to 25 feet closer to the shoreline than under the Regulatory Alternative. Hence, on developed lots (which comprise most of the lots in the shoreline), the native vegetation protected by buffer requirements under the Council-Modified Alternative would be approximately 50 percent of the area protected under the Regulatory Alternative. Also, the Council-Modified Alternative eliminates the stewardship option, which is a vegetation enhancement incentive that is part of the Regulatory Alternative. In addition, there would be no requirement to mitigate these effects by enhancing the buffer.

Consequently, only a combination of alternatives or the implementation of targeted programs could maintain or improve stream and riparian area indicators. Effectiveness monitoring, performed for various habitat indicators as well as cumulatively at the lake shoreline ecosystem scale, would be needed to determine the effect of the Council-Modified Alternative on Bellevue shoreline conditions.

#### Other Critical Area Regulations

In the near-term, the Council-Modified Alternative regulations for geologic hazard areas would also contribute indirectly to greater protection of water resource indicators through limitations on development, particularly in landslide and erosion hazard areas.

Provisions of the Council-Modified Alternative that allow for conservation tracts to be created with subdivisions could improve the management of critical areas around water resources if they are properly cared for by homeowner associations or similar organizations. These tracts would have conservation as a primary objective, as opposed to the typical condition under current regulations where the critical areas are divided among individual lots, to be managed separately.

Other provisions of the Council-Modified Alternative establish new guidelines for allowing exceptions to the critical area regulations and change the allowable density and noncritical area setbacks outside critical areas. These provisions allow more flexibility in developing lots that contain critical areas and thus increase the degree of development slightly over that allowed under current regulations. In the near-term, these provisions are not expected to affect a significant amount of land; they would be examined on a case-by-case basis to ensure that they do not adversely affect water resources.

#### *Long-Term Impacts*

##### Frequently Flooded Areas

The Council-Modified Alternative is identical to the Regulatory Alternative with regard to frequently flooded areas. The Council-Modified Alternative revisions to LUC 20.25H.070 would improve floodway protection conditions in the long-term as redevelopment alters existing development conditions. The Council-Modified Alternative would improve public health and safety in the long-term.

### Streams and Riparian Areas

The impacts of the Council-Modified Alternative on streams and riparian areas would be the same as described in the draft EIS for the Regulatory Alternative. However, the Council-Modified Alternative would be less protective of stream buffers than the Regulatory Alternative. For example, any existing vegetation on lots with houses located outside the buffer would have a greater preservation chance under the Regulatory Alternative than under the Council-Modified Alternative. The Council-Modified Alternative eliminates the stewardship option, which is a vegetation protection incentive included in the Regulatory Alternative. Hence, general or localized water quality improvements would not be expected, and the Council-Modified Alternative would not retard the trend toward degradation. Nonetheless, the Council-Modified Alternative would improve protection compared to the No-Action alternative.

### Wetlands

For the same reasons as for the near term, the impacts of the Council-Modified Alternative on water resources would be the same as under the Regulatory Alternative in the long term, and similarly more protective than the No-Action Alternative.

However, redevelopment scenarios under the No-Action Alternative could be more protective than under the Council-Modified Alternative, because properties would be required to comply with wetland buffer regulations when certain structure value thresholds are exceeded; whereas the Council-Modified and Regulatory alternatives allow all noncompliant structures to be remodeled or reconstructed within the same footprint. Although the buffer requirements in existing regulations are smaller, over time, more properties would be expected to have to comply with those requirements; whereas structures can always be rebuilt within the existing footprint under the Council-Modified Alternative.

However, experience shows that Bellevue property owners typically will stay under any value thresholds in order to avoid having to comply with existing regulations (Berens et al. 2006). That trend would be expected to continue under the No-Action Alternative. Therefore, in actuality, only a small number of properties would meet the redevelopment threshold. Properties likely to meet this threshold are commercial properties where market forces direct a significant change in use, triggering major development that exceeds existing thresholds. Because this situation potentially represents a minority of properties located adjacent to wetlands within the city, no measurable improvement to wetland protection is expected to result. Consequently, despite this factor, the Council-Modified Alternative is expected to improve conditions over the No-Action Alternative overall.

### Shorelines

The impacts of the Council-Modified Alternative on shorelines would be the same as described in the draft EIS for the Regulatory Alternative. However, the Council-Modified Alternative would be less protective of shoreline buffers than the Regulatory Alternative but more protective than the No-Action Alternative, because current regulations do not include shoreline buffer protection. The Council-Modified Alternative would allow for protection of existing natural

vegetation on remaining undeveloped properties, and natural areas located on developed properties would have a greater chance to remain.

#### Other Critical Area Regulations

As described for the near-term, the Council-Modified Alternative regulations for geologic hazard areas would also contribute indirectly to greater protection of water resource indicators in the long-term through limitations on development, particularly in landslide and erosion hazard areas.

Provisions of the Council-Modified Alternative that allow for conservation tracts to be created with subdivisions could improve the management of critical areas around water resources. Other provisions establish new guidelines for allowing exceptions to the critical area regulations and change the allowable density and noncritical area setbacks outside critical areas. These provisions allow more flexibility in developing lots that contain critical areas and thus increase the degree of development slightly over that allowed under current regulations.

In the long-term, these provisions would affect a greater amount of land, but they would continue to be examined on a case-by-case basis to ensure that they do not adversely affect water resources.

#### 14.2.3 Mitigation

The Council-Modified Alternative would have slightly greater impacts on water resources than the Regulatory Alternative, and thus some additional mitigation measures may be appropriate. The Council-Modified Alternative would be more protective than the No-Action Alternative without mitigation. Mitigation could include the following measures:

- Require improvements to buffer vegetation when clearing or new impervious surfaces are proposed within the structure setbacks on developed lots adjacent to streams and shorelines.
- Prohibit or restrict additional impervious surfaces in structure setbacks.
- Provide a stewardship program to encourage both commercial and residential property owners adjacent to streams and shorelines to enhance vegetated buffers, and implement a monitoring program to measure the success of the program in improving buffers over time.
- Provide incentives such as height increases or footprint increases to property owners for incorporating critical area protection beyond regulated requirements or for incorporating ecological restoration of critical areas and buffers.

#### **14.2.4 Significant Unavoidable Adverse Impacts**

No significant unavoidable adverse impacts on water resources are expected to result from implementation of the Council-Modified Alternative.

### **14.3 Plants and Animals**

#### **14.3.1 Affected Environment**

The existing conditions for plants and animals are described in the draft EIS. The same conditions apply for the Council-Modified Alternative.

#### **14.3.2 Impacts**

As explained in the draft EIS, critical area (habitat) ecological indicators are used to assess impacts on plant and animal species because these species are affected by and depend upon the conditions of their habitat for their survival. In other words, habitat conditions determine the degree to which a species may successfully rear, forage, and reproduce. Water quality, which is discussed in Water Resources, also affects the survival of species.

##### ***14.3.2.1 Council-Modified Alternative***

###### ***Near-Term Impacts***

###### **Streams and Riparian Areas**

In general, there would be a greater risk of harm to plant and animal species under the Council-Modified Alternative than under the Regulatory Alternative, although the Council-Modified Alternative would improve riparian protection compared to the No-Action Alternative. Although under the No-Action Alternative redevelopment requirements could result in more buffer protection of some stream riparian areas over time, the total affected area is expected to be small. This is because property owners will avoid the redevelopment value thresholds of the No-Action Alternative to avoid more stringent property use restrictions. In addition, the Council-Modified Alternative has the potential to extend buffer area outside the carve-out for the primary structure footprint, which would add buffer area beyond what would likely occur under the No-Action Alternative over time.

**Habitat Access**—The impacts of the Council-Modified Alternative would be the same as described in the draft EIS for the Regulatory Alternative.

The impacts of the Council-Modified Alternative on other habitat elements would be the same as described in the draft EIS for the Regulatory Alternative.

**Channel Condition and Dynamics**—The impacts of the Council-Modified Alternative would be the same as described in the draft EIS for the Regulatory Alternative except for stream bank conditions, which would be degraded. Increased setbacks are not expected to prevent bank erosion or incised stream reaches due to high peak flows. Unlike the buffer requirement, the

structure setback does not limit the placement of certain types of new impervious surfaces, which may result in increased stream bank erosion. Furthermore, although a 50-foot structure setback would apply, tree pruning could be allowed with an approved vegetation management plan.

**Flow and Hydrology**—In contrast to the Regulatory Alternative, which would maintain existing peak and base flow, the Council-Modified Alternative would degrade this flow and hydrology element. Unlike the buffer requirement, the structure setback does not limit the placement of certain types of new impervious surfaces, which may result in increased stream bank erosion.

**Watershed Conditions**—The impacts of the Council-Modified Alternative would be the same as described in the draft EIS for the Regulatory Alternative, except for the total impervious area and riparian breaks. The impacts of the Council-Modified Alternative on the total impervious area are unknown. The conditions of riparian breaks would be maintained in the near-term.

#### Wetlands

The near-term impacts of the Council-Modified Alternative on plants and animals would be the same as described in the draft EIS for the Regulatory Alternative, and similarly, would be an improvement over the No-Action Alternative. This is because remaining undeveloped properties would be subject to significantly more protective wetland buffer requirements than under the No-Action Alternative. Although under the No-Action Alternative redevelopment requirements could result in more buffer protection of some wetlands over time, the area affected is expected to be small. This is because property owners will avoid the redevelopment value thresholds of the No-Action Alternative to avoid more stringent property use restrictions. In addition, the Council-Modified Alternative has the potential to extend buffer area outside the carve-out for the primary structure footprint, which would add buffer area beyond what would likely occur under the No-Action Alternative over time.

A number of indicators, such as the coverage of nonnative species, wetland area, and the area of adjacent upland habitat, are expected to remain degraded in the near term, because the existing character of the city is highly urbanized, and the Council-Modified Alternative would not reverse past land use practices.

#### Shorelines

The impacts of the Council-Modified Alternative on shorelines would be the same as described in the draft EIS for the Regulatory Alternative. However, the Council-Modified Alternative would be less protective of shoreline buffers. Consequently, there would be an increased risk to plant and animal species because the Council-Modified Alternative would allow further degradation of shoreline conditions. Nonetheless, the Council-Modified Alternative would improve protection compared to the No-Action Alternative because it would provide protective buffers for shorelines where none now exist.

Continued shoreline degradation would likely further imperil the remaining salmonid populations that use and depend upon Bellevue shorelines, primarily because the vast majority of city shorelines have been developed to the detriment of shoreline habitat. Developed shorelines

are likely to remain occupied by development for the foreseeable future. Human activities in shoreline areas cause cumulative loss of habitat functions as shoreline vegetation is cleared.

#### Wildlife Habitat Conservation Areas

There are no direct differences in wildlife habitat protection requirements between the Regulatory Alternative and the Council-Modified Alternative. However, protection of wildlife habitat is largely dependent on the regulatory protections afforded streams, shorelines, wetlands, buffers, and setbacks. The Council-Modified Alternative's provisions for reduced protection of stream and shoreline buffers reduce protection of wildlife habitat compared to the requirements of the Regulatory Alternative. In addition, the Council-Modified Alternative would allow vegetation removal and pruning within the structure setback from a steep slope, whereas the Regulatory Alternative would restrict removal of vegetation within the required 75-foot buffer from the toe of a steep slope. Without mitigation, the reduced buffer requirements and less restrictive uses allowed within the structure setbacks for streams and shorelines in the Council-Modified Alternative would result in reduced areas of protected habitat, reduced landscape connectivity, and an increase in coverage of nonnative species in the near term compared to the Regulatory Alternative, but would be an improvement over the No-Action Alternative in the near term.

#### Other Critical Area Regulations

Regulations for geologic hazard areas and frequently flooded areas would increase the critical areas slightly under the Council-Modified Alternative, adding setbacks at the toe of landslide hazard areas and further restricting development within floodplains. In the near-term, these additional requirements would contribute toward protection of habitat indicators.

Provisions that allow for conservation tracts to be created with subdivisions could improve the management of critical areas, benefiting plants and animals if they are properly cared for by homeowner associations or similar organizations.

Other Council-Modified Alternative regulations provide new guidelines for allowing exceptions to the critical area regulations and change the allowable density and noncritical area setbacks outside critical areas. These provisions allow more flexibility in developing lots that contain critical areas and thus increase the degree of development slightly over that allowed under current regulations. In the near-term, these provisions are not expected to affect a significant amount of land, and they would be examined on a case-by-case basis to ensure that they do not adversely affect plants and animals.

#### *Long-Term Impacts*

##### Streams and Riparian Areas

The long-term impacts of the Council-Modified Alternative on habitat access, habitat elements, channel condition and dynamics, and flow and hydrology would be the same as described for the near-term, except that over time more extensive use of the structure setback area for non-habitat-supporting uses could increase. Consequently, there would be a greater risk of harm to plant and

animal species under the Council-Modified Alternative compared to the Regulatory Alternative, although the Council-Modified Alternative would improve protection compared to the No-Action Alternative.

**Watershed Conditions**—The impacts of the Council-Modified Alternative would be the same as described in the draft EIS for the Regulatory Alternative, except for riparian breaks. The impacts of the Council-Modified Alternative on riparian breaks are unknown.

#### Wetlands

The long-term impacts of the Council-Modified Alternative on plants and animals would be the same as described in the draft EIS for the Regulatory Alternative and would be an improvement over the No-Action Alternative. The relevant indicators are coverage of nonnative species, wetland area, and area of upland habitat adjacent to a wetland. As with the Regulatory Alternative, these indicators are expected to remain in a degraded condition in the near-term, because the existing character of the city is highly urbanized, and the Council-Modified Alternative would not reverse past land use practices.

Theoretically, the No-Action Alternative has some potential to reverse past land use practices when redevelopment that exceeds existing thresholds for a structure's value. In contrast, the Council-Modified Alternative allows all noncompliant structures to be remodeled or reconstructed within the same footprint. So although the buffer requirements of existing regulations are smaller, over time, more properties would be expected to have to comply with those requirements.

However, properties likely to meet this threshold are commercial properties where market forces direct a significant change in use that would trigger existing value thresholds. This represents a minority of properties located adjacent to wetlands within the city; therefore no measurable improvements to wetland protection are expected to result. Consequently, overall, the Council-Modified Alternative is still expected to improve conditions over the No-Action Alternative in the long term.

#### Shorelines

The impacts of the Council-Modified Alternative on shorelines would be the same as described for the near-term, except that over time more extensive use of the structure setback area for non-habitat-supporting uses could increase. Consequently, there would be a greater risk of harm to plant and animal species under the Council-Modified Alternative compared to the Regulatory Alternative, although the Council-Modified Alternative would improve protection compared to the No-Action Alternative.

#### Wildlife Habitat Conservation Areas

The long-term impacts of the Council-Modified Alternative on habitat area, reduced landscape connectivity, and increase in coverage of nonnative species would be the same as described for the near-term, except that over time more extensive use of the structure setback area for non-

habitat-supporting uses could increase, further degrading the resource, compared with the Regulatory Alternative, over the long term.

Under the No-Action Alternative, some critical area buffers would likely come into compliance with existing regulations through meeting existing redevelopment thresholds, possibly increasing the availability and connectivity of wildlife habitat in some locations. However, experience has shown such situations to be rare and largely confined to commercial properties facing market-driven, large-scale change. This condition is likely in very few areas of the city and therefore is not expected to represent an improvement over the Council-Modified Alternative over the long term.

#### Other Critical Area Regulations

The Council-Modified Alternative regulations for geologically hazardous areas and frequently flooded areas would contribute slightly to protection of habitat indicators, for the same reasons described for the near-term.

Council-Modified Alternative provisions that allow for conservation tracts to be created with subdivisions could improve the management of critical areas benefiting plants and animals. Other provisions establish new guidelines for allowing exceptions to the critical area regulations and change the allowable density and noncritical area setbacks outside critical areas. These provisions allow more flexibility in developing lots that contain critical areas and thus would increase the degree of development slightly over that allowed under current regulations.

In the long-term, these provisions would affect a greater amount of land, but they would continue to be examined on a case-by-case basis to ensure that they do not adversely affect plants and animals.

#### 14.3.3 Mitigation

The Council-Modified Alternative would have slightly greater impacts on plants and animals than the Regulatory Alternative, and thus some additional mitigation measures may be appropriate. The Council-Modified Alternative would be more protective than the No-Action Alternative without mitigation. Mitigation could include the following measures:

- Require improvements to buffer vegetation when clearing or new impervious surfaces are proposed within the structure setbacks on developed lots adjacent to streams and shorelines.
- Prohibit or restrict additional impervious surfaces within structure setbacks.
- Provide a stewardship program to encourage both commercial and residential property owners adjacent to streams and shorelines to enhance vegetated buffers, and implement a monitoring program to measure the success of the program in improving buffers over time.

- Provide incentives such as height increases or footprint increases to property owners for incorporating critical area protection beyond regulated requirements or for incorporating ecological restoration of critical areas and buffers.

#### **14.3.4 Significant Unavoidable Adverse Impacts**

No significant unavoidable adverse impacts on plants and animals are expected to result from implementation of the Council-Modified Alternative.

### **14.4 Land and Shoreline Use**

#### **14.4.1 Affected Environment**

The affected environment for land and shoreline use are described in the draft EIS. The same conditions apply for the Council-Modified Alternative.

#### **14.4.2 Impacts**

##### ***14.4.2.1 Council-Modified Alternative***

##### ***Near-Term and Long-Term Impacts***

##### **Land Use Policies**

The impacts of the Council-Modified Alternative are generally the same as those described in the draft EIS for the Regulatory Alternative. The proposed land use policies are generally consistent with existing land use policies, including housing and environmental policies, in the near-term and the long-term.

The Council-Modified Alternative would be less restrictive on the location of housing and improvements near critical areas than the Regulatory Alternative and thus would have a slightly smaller impact on land use. As described above, environmental protection provided by the Council-Modified Alternative would be slightly less than under the Regulatory Alternative, primarily for two reasons. First, buffers would be reduced on developed lots and next to shorelines and streams. Second, impervious surfaces for patios, driveways, sport courts, and surface parking would be allowed within the setback without any mitigation, as well as planting of nonnative vegetation.

##### **Other Land Use Impacts**

The Council-Modified Alternative is identical to the Regulatory Alternative with regard to conservation tracts within subdivisions and thus would have similar effects. Under the Council-Modified Alternative, the lot size is allowed to shrink to 65 percent of the required lot area through clustering, although the minimum lot dimensions are maintained, giving the appearance of a full-size lot abutting a wetland or stream. Modest increases in lot coverage relative to the amount of reduction in lot area could give a perception of higher development intensity on the remaining buildable part of the lot, despite the fact that lot width dimensions and most setbacks

are not reduced. Combined with the possibility of small increases in total dwelling unit count derived from the higher development factor, some noticeable change in development intensity may occur, especially on infill properties surrounded by existing low-density development.

The Council-Modified Alternative would have slightly less impact on the availability of developable land than the Regulatory Alternative, primarily on already developed lots. Thus the Council-Modified Alternative would primarily increase the rate or likelihood of redevelopment on developed lots, although it would neither increase nor decrease the number of developable lots, compared to the Regulatory Alternative. Consequently, the impacts on development would be essentially the same as under the Regulatory Alternative.

#### **14.4.3 Mitigation**

No mitigation for land use impacts is necessary for the Council-Modified Alternative.

#### **14.4.4 Significant Unavoidable Adverse Impacts**

No significant unavoidable adverse land use impacts are anticipated to result from the Council-Modified Alternative.

## **Part 5 Comments and Responses**

## 15.0 Comment Letters and Responses

### Letter #1 – Molly Balko

1-1—The regulatory alternative will generally not contain these incentives. The City Programs Alternative does include incentives to help property owners manage in a way that is sensitive to fish and wildlife needs.

Letter 1

From: Christensen, Jeanie  
Sent: Wednesday, June 22, 2005 11:25 AM  
To: Berens, Mary Kate; Bedwell, Heidi; Paine, Michael  
Subject: FW: Critical Areas Ordinance Update Involvement

She has just been added to our electronic interested parties list. Thanks!

Jeanie Christensen  
Land Use - PCD  
City of Bellevue  
Phone 425-452-4392  
Fax 425-452-5247

-----Original Message-----  
From: JChristensen@ci.belleuve.wa.us [mailto:JChristensen@ci.belleuve.wa.us]  
Sent: Wednesday, June 22, 2005 11:17 AM  
To: mmb@bluefirecommunications.com  
Subject: Critical Areas Ordinance Update Involvement

Thank you for your comments regarding the Critical Areas Ordinance update process. Your comments will be forwarded to the Planning Commission. If you've requested additional information, staff will respond to you by the end of the next business day. If you'd like to speak directly with a staff person you may contact:

Kate Berens Legal Planner kberens@ci.belleuve.wa.us 425-452-4616  
Michael Paine Planning Manager mpaine@ci.belleuve.wa.us 425-452-2739  
Heidi Bedwell Associate Planner hbedwell@ci.belleuve.wa.us 425-452-4862

Continue to check the City's website for additional information  
<http://www.cityofbelleuve.org/page.asp?view=7481>

Comments from Molly Balko included:  
Question: What information would you like to receive from the City to help you make decisions about how to manage your property near critical areas in a way that is sensitive to fish & wildlife habitat needs?  
Response:  
What is provided on the web so far is great, and I look forward to the hearing on July 6. I also appreciate the flyer in the mail, which alerted me to the changes in the first place. Overall, I appreciate clear definitions of the streams and wetland typing. That helps me understand how much change will affect my property.

1-1 Question: What incentives could the City provide to encourage you to manage your property (or design your projects) in a way that is sensitive to fish & wildlife habitat needs (examples: technical assistance, plant material, grants etc.)?  
Response:  
This is huge for me, as I would like a yard that is both aesthetically pleasing and protective of sensitive areas. I have attended streamside planting events with the Bellevue Stream Team specifically to learn how the city handles those cases. All of the above incentives (technical assistance, plant material, and grants) would be a great help; but I think many people would appreciate even the first two incentives if offered. On my request, I was sent some great materials on native plants from the city (via my Stream Team contact), but it seemed overwhelming until I saw how that information was applied at the streamside planting event.

Question: In your experience, what changes have you seen in the environment while enjoying the natural areas of Bellevue? How have those

1

**Letter #1 – Molly Balko**

1-2—Any outreach strategy will include a comprehensive approach to informing and educating systems about proposed changes.

changes impacted your experience, and would you characterize them as positive or negative changes?  
Response:  
I haven't seen changes in the environment while enjoying the natural areas of Bellevue.

1-2 | Question: Provide suggestions for strategies/values/concerns that the City should consider as it drafts regulations implementing the critical area policies.  
Response:  
Education of the public in a non-threatening way will be key.

Question: General Comments  
Response:  
Thank you!

Molly Balko has submitted a response.

SUBJECT:  
Critical Areas Ordinance Update Involvement

If the message from Molly Balko is not appropriate, please report it to [webmaster@ci.belleuve.wa.us](mailto:webmaster@ci.belleuve.wa.us)

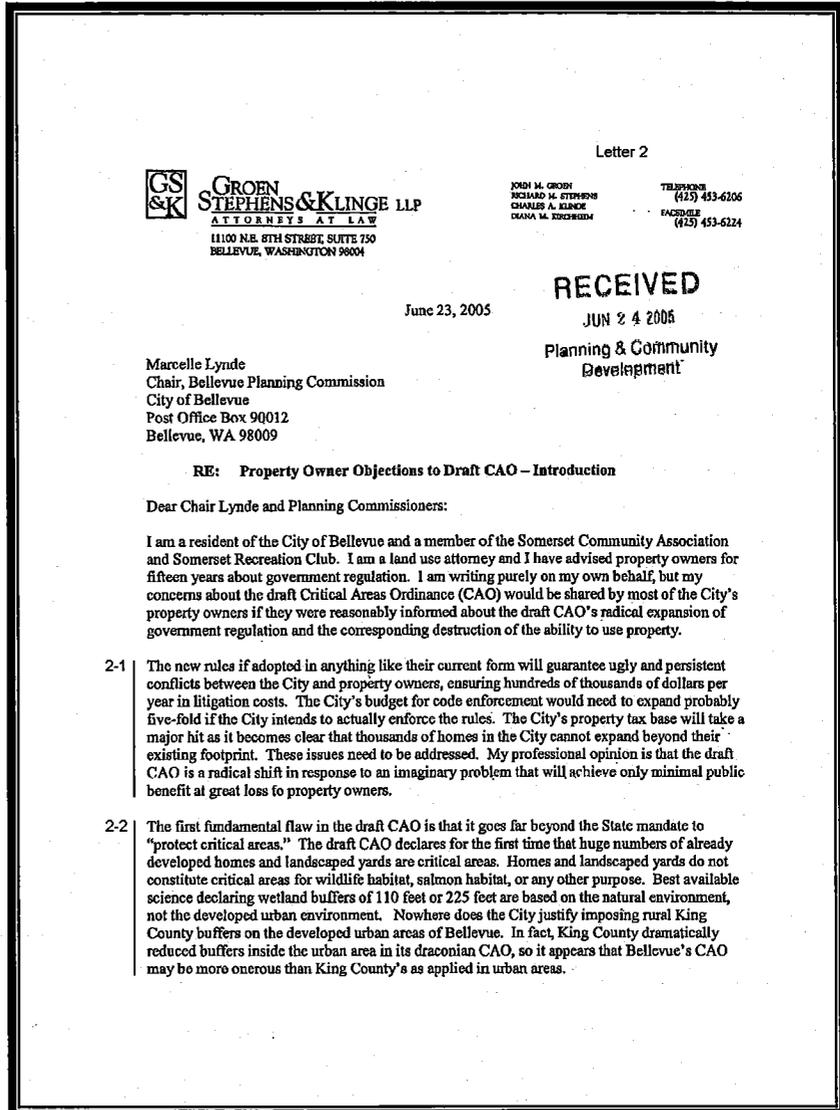
Contact Information for Molly Balko if given is  
E-Mail: [mab@bluefircommunications.com](mailto:mab@bluefircommunications.com)  
Telephone:

## Letter #2 – Charles A. Klinge

2-1—There is little evidence that this would be the case. The Critical Areas Ordinance (CAO) update is an elaboration of existing regulations that have been in place since 1987. Existing and prior regulations have generated very little litigation around this issue over the years, and we do not expect this to change appreciably. The few takings challenges raised have been unsuccessful. More important, in contrast to the existing ordinance, the proposed new ordinance provides enhanced flexibility in the form of an “off-ramp” or alternative process that allows an applicant to depart from prescriptive regulations where they may be particularly onerous or the result may achieve little environmental benefit. We believe this flexibility will provide an additional safety-valve that should reduce litigation, not increase it.

There is little evidence that this would be the case. Enforcement actions may increase initially after adoption, as they often do when a new regulations are implemented, but the long-term impact of the change is not predicted to be significant. This is because there are very few property owners who will be dealing with critical areas regulations for the first time; most property owners have adapted to the prior regulations (they have been in effect for 18 years) and they are accustomed to having critical areas on their property and working with the restrictions. In addition, there are a fixed number of parcels affected by critical areas and that is not changing substantially (with one exception noted below) so we do not expect a large increase in the enforcement case load. In addition, the city is committed to providing a significant amount of updated public information to help property owners adapt to those changes that do occur.

There are a few possible exceptions. Lakeshore property owners will have part of their property designated as a critical area for the first time; previously they were subject only to the Shoreline Management Act requirements. But the required buffer area is not unlike the shoreline structure setback that exists today, so it is unlikely that large numbers of new enforcement actions will be generated by this group. Likewise, property owners with modest slopes (15 to 40 percent) that exhibit characteristics associated with significant landslide hazard might find themselves under regulation for the first time. However, the likelihood of this occurring is limited, since the impact will be confined to a very small number of sites. Similarly, residents located at the base of steep slopes and not currently required to provide a setback to guard against slope failure or surface sliding may find that they must first have a geotechnical engineer visit their site and ascertain the safety of the slope before building at its base.



Another area where some new enforcement cases may be generated is tied to a part of the ordinance that Mr. Klinge did not identify: the proposed impervious surface limit. This is an area not previously regulated and one which covers all the parcels in the city, not just those with critical areas. However, the standard was set based on the amount of impervious area exhibited by the “typical” single-family home in Bellevue, so we do not anticipate an unusual amount of enforcement around this issue.

Again there is little evidence for this claim. Our experience is that developed properties abutting critical areas tend to out-pace valuation gains made by properties without critical areas. This is true because critical areas are perceived to be “amenities” and not liabilities and are often associated with other benefits, e.g., views and open space. Furthermore, the flexibility provided by the proposed ordinance to existing single-family development allows for considerably improved opportunities for expansion over that provided by the existing ordinance. (See especially 20.25H.065)

2-2—This is simply not the case. While it is true that enlarged buffers, by definition, expand the amount of critical area on a property and can in some cases affect “already developed homes and landscaped yards,” this is not a substantially changed condition from that which exists today. For example, many homes or yards along the city’s streams and wetlands are within existing buffers and would also be within expanded buffers should they be adopted.

The city is obligated to update its Critical Areas Ordinance and must, as required by RCW 36.70A.172, “include the best available science in developing policies and development regulations to protect functions and values of critical areas.” Consequently, the buffer dimensions selected are not arbitrary, but instead rely on the consideration of a range of science-based management recommendations in a reasoned process that takes into account both the constraints of an urban area and other Growth Management Act (GMA) goals. The department recognizes that in an urbanized environment, there are multiple constraints to protecting functions and values of critical areas and that regulatory means are necessary but not sufficient. As a result, we identify that it will take a combination of land use regulations, incentives, and programmatic actions to achieve incremental environmental improvements over time. The goal is not to achieve pristine conditions, as Mr. Klinge repeatedly contends, but rather to protect habitat sufficient to maintain current levels of function over time.

This statement is inaccurate. The proposed wetland buffers are modeled after the flexible option developed by the Department of Ecology that establishes recommended buffers based on three primary factors: 1) the type of wetland and the functions and values needing protection; 2) the type of adjacent land use and its expected impacts; and, 3) the physical character of the buffer. The scientific literature focuses on the impacts of urbanization on wetlands found throughout a watershed and does not solely focus on natural undisturbed areas. The proposed wetland buffers are not the same as those applied by King County for the rural areas. In fact, the proposed buffers are similar to those adopted by King County for its urbanized areas and in some cases are less restrictive. In addition, the flexibility inherent in the “off-ramp” provided by the critical area report would allow the buffer widths to be reduced further, provided an equal or better result is the outcome.

2-3— This contention greatly overstates the impact. Under the Planning Commission approach, development not conforming to the proposed buffers would be considered nonconforming but that does not mean the development is “illegal.” Nonconforming development may remain, and in many cases, be repaired or expanded, based on the rules outlined at 20.25.065.A. Routine repair is allowed without triggering any need to come into compliance with the new regulations. Likewise, remodeling is allowed up to a specific and relatively high threshold: one hundred percent of the replacement value of the structure. When this threshold is crossed in any three year period, the structure must come into compliance with the regulations, including relocation outside the buffer area, but only when such relocation is feasible. Expansion of a nonconforming structure is also allowed but there is a hierarchy of choices with respect to expansion; expansion into the critical area is permitted only when no feasible alternative exists. Mitigation is naturally a requirement if critical area functions and values are affected.

Staff has proposed an alternative approach that is similar in many respects, but with one distinct difference. Where a site contains development that does not conform to the proposed buffer, the buffer would be modified to follow the line of existing development. As a result, the structure would never be judged “nonconforming” because it would never be located within the buffer.

2-4—This is a legitimate criticism and will be remedied shortly. A strikeout draft was not done because the ordinance, while building on the old, is organized differently and includes many new elements, so staff believed that a strikeout draft would add to confusion. We had always planned to do a topical comparison of major changes and will do so soon. Documents developed up to this point do highlight the significant elements in the ordinances and attempt to highlight the circumstances in which the regulations may apply to most property owners. There is also a detailed comparison of the old and new ordinances in the draft environmental impact statement.

There is little doubt that detailed site specific critical areas mapping would be a helpful tool. However, such mapping is very expensive and exists only for streams at this point in time. Online topography is available in the permit center, so staff can generally inform property owners of the impacts of steep slopes and streams on their development plans.

Marcelle Lynde, Chair  
June 23, 2005  
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- 2-3 For critical areas and buffers, the City's draft CAO basically declares every kind of improvement as illegal, including minor landscape improvements (new pathways) and home expansions (outside existing footprint). The draft CAO declares these usual and ordinary property improvements illegal to justify demands to either bring the entire property into conformance with the new CAO, or at a minimum, to demand expensive restoration of the newly declared critical area back to its natural state. But, the Growth Management Act does not require already developed areas to be turned back into nature. The United States Supreme Court declared this type of arbitrary, leveraged demand “out-and-out extortion” in *Nollan v. California Coastal Commission*. The State appellate court applied this rule to critical areas regulations in *Honesty in Environmental Analysis (HEAL) v. Central Puget Sound Growth Management Hearings Board*.
- 2-4 You might ask yourself why there is no public uproar. I am a trained land use attorney with 15 years experience. I have now spent over eight hours reviewing the materials and trying to put some thoughts on paper. The complications of the draft CAO are astronomical. The City provides no document comparing the old CAO to the draft CAO, so that requires time consuming comparisons. The City provides no maps that show the new buffers being imposed on developed lots. The numerous exceptions and cross-references make the draft CAO a nightmare to understand for me, let alone a typical property owner with an hour to spare.
- 2-5 The City provides incomplete and arguably slanted Fact Sheets and Commonly Asked Questions, which fail to alert property owners to the proposed radical expansion of power. The Commonly Asked Questions information sheet on Existing Single-Family Residences tries to pacify concerned property owners by ensuring them that: “You can continue to mow your lawn, . . . plant annual flowers and ornamental plants in existing landscape beds, . . . [and] continue to use your patio or existing play area.” Nowhere in any explanation sheet does the City explain what property owners can't do. In all these new critical areas under the draft CAO, it is illegal for single-family homeowners to construct anything new in their yards, such as a pathway, a fountain, a sitting area, or really to change any landscaping at all. That information sheet also answers a reassuring “yes” to the question, “Can I remodel my home?” Then, in the fine print, a mild warning is given that “if your home is located entirely or partially within the buffer of a critical area,” then the City will demand “moving those structures out of critical areas over time.” This advice is deceiving because property owners do not know where the critical areas and buffers are located, and reviewing the available maps does not help (if they download properly) since they do not show buffers and do not identify affected lots.
- For example, all slopes 15% or greater with more than 10 feet of rise are listed as critical areas if they “also display any” of six highly technical geologic characteristics. My own landscaped backyard has some 15+% slope and the slope likely continues for more than 10 feet of rise total. How would any property owner, except a geotechnical engineer, be able to determine whether a backyard showed “movement during the Holocene Epoch,” or exhibited “geomorphological features indicative of past failures”? If my backyard is a “landslide hazard,” even if I don't know it, it is illegal for me to modify the landscaping or construct a patio within the slope area or newly created buffers (75' top of slope, 50' toe of the slope). The City information sheets do not

This is a debatable point and one that needs additional attention as you review the draft. The decision on how to organize an ordinance like this is a difficult one and depends on a number of factors including: target audience, functionality for staff and the public, drafting style and the existing code into which it must fit. Cross-referencing is one technique used to avoid repetition of the same elements over and over as would otherwise be required if each critical area section, for example wetlands, was self-contained. That said, we think the organizational format should be reviewed and revamped as necessary to ensure that it can be easily understood by staff and the public alike.

2-5—We do not believe the public information provided to date is inaccurate or “slanted.” With any such massive change, it is always easy to find some specific elements that were left out or lacking in sufficient description. On balance, we believe the public information provided is adequate to the task.

As outlined above, existing uses and activities that are present today on properties can continue. Even expansion of homes into the proposed buffer may be allowed given the requirements outlined above. The one hundred percent valuation threshold is not a change from existing code except in the case of single-family development located adjacent to a riparian corridor. The current code exempts this development from the nonconforming provision.

If you recall, the direction the commission gave to staff was to define development that does not conform to the proposed buffers as nonconforming. Under this direction the regulations were drafted to allow nonconforming development to remain, and in many cases, be repaired or expanded. Staff has presented an alternative approach for sites that contain development that does not conform to the proposed buffer, the buffer would be modified to follow the line of existing development. As a result, the structure would not be located within the buffer, and would remain a conforming structure.

Recognizing that buffer widths are increasing, the proposed regulations also amend the way lot coverage is calculated from the existing code. Only the critical area and riparian corridor is subtracted from the lot area for purposes of calculating lot coverage. The existing code requires both the critical area and buffer to be subtracted. The result of this change may allow structures to expand without the lot coverage penalty in the current code.

In addition to this and other changes, the new ordinance also includes other options for expanding improvements. It includes a stewardship option (see 20.25H.070.C.12) for those property owners who wish to enhance the degraded buffer on their property in exchange for flexibility in locating additional nonstructural improvements. This choice is not “out-and-out extortion” as Mr. Klinge suggests, but rather a decision that property owners can choose to make.

2-6—This contention misstates the facts. As the commission has discussed, getting meaningful public involvement can be difficult. Citizens tend to become involved only when there are tangible issues, when they consider the issues significant and when they feel their participation has a reasonable chance of making a difference. This reality is complicated further by the realization that it is impossible to solve complex problems like critical areas protection without having adverse effects on at least some interests. The key to success is to ensure an open and fair process.

Staff conducted a wide-ranging public outreach. (Refer to Attachment A for the table detailing those efforts specifically conducted for the regulatory update.) As you can see, three direct mailings were sent to over 4,000 property owners who own property adjacent to some of Bellevue's lakes, streams and wetlands. Public notice of hearing and the draft environmental impact statement (EIS) were sent to the Bellevue School District, the East Bellevue Community Council, Bellevue Chamber of Commerce, Bellevue Downtown Association and numerous local and state agencies. Articles were placed in *It's Your City*, *Neighborhood Newsletter*, and community association newsletters, including the Somerset Community Association, describing the update and letting groups know that staff would be willing to come to their meetings to discuss the update.

2-7—This statement is a mischaracterization of the principles underlying the update effort. As previously discussed with the Planning Commission, the city's critical areas update goal is to ensure that the city's approach to protecting critical area functions and values is accomplished through regulations, programs and incentives that:

- Are Bellevue-appropriate: Regulations and programs should recognize that Bellevue is an urban center, and should be designed to preserve the environmental functions that exist today, rather than require a return to pre-development conditions;
- Consider neighborhood character: The city's history of environmental protection has resulted in neighborhoods that reflect natural areas juxtaposed with the built environment. Efforts to protect critical areas should focus on preserving or creating places and neighborhoods that people enjoy. Programs and regulations should recognize that nature in cities enhances livability and personal well-being;
- Represent balance: The impact of regulatory changes should not overburden Bellevue landowners and should be balanced against other GMA goals, including economic development, housing, and jobs

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tell the public that they may need a geotechnical engineer to remove invasive ivy to plant lawn. Without real information, the public will be deceived, and will not complain.

- 2-6 The current process is a stealth process without any meaningful outreach to the property owners that will be severely impacted. I have heard nothing from the Somerset Community Association so I can't believe the City informed the SCA that hundreds of homes on the hill will be severely impacted by the new greatly expanded slope rules, including scores of homes that will be nonconforming and unable to expand. Has the City informed the property owners in the Forest Drive and Lakemont neighborhoods that new stream buffers and steep slope rules will preclude landscape modifications, deck construction, and other normal home improvements? Has the City informed the Bellevue School District that when the BSD rebuilds Tyes Junior High huge areas of the existing play fields will be lost to required buffer creation? Has the City contacted Newport Youth Soccer and other soccer and baseball groups to tell them that they are going to have to do with fewer fields because we need the fields for habitat buffers? Has the City contacted the property owners in Newport Shores, Meydenbauer Bay, Lake Sammamish, and the rest of the shoreline to inform those property owners that 50 feet from the water will be a no touch buffer allowing maintenance only and no new improvements (not even landscape modifications), and that home improvements might require converting their landscaped backyards to be native growth habitat zones?

- 2-7 The draft CAO represents severely flawed public policy. State law requires protection of critical areas within the context of balancing that protection with all GMA Goals, including encouraging development in urban areas and protection of property rights. I am greatly concerned that the draft CAO made it to public release in this form and hope that the Planning Commission has not encouraged staff with these radical concepts. It may be that City staff is following the misguided demands of the State with the typical one-size fits all approach based on creating regulations as if the City of Bellevue were pristine forest, instead of an urban area. The Planning Commission must change direction abruptly and send the draft CAO back to the drafting room. Thank you for considering these comments and please include this letter as part of the record in preparation for the public hearing set for July 6<sup>th</sup>. Please feel free to contact me if you have any questions or would like clarification of my comments.

Sincerely,

GROEN STEPHENS & KLINGE LLP

*Charles A. Klinge*  
Charles A. Klinge  
klinge@GSKlegal.pro

CAK:lch

cc: City Council Members  
Planning Commissioners  
Superintendent Dr. Michael Riley, Bellevue School District  
Somerset Community Association

growth. City programs can ensure shared responsibility for and shared benefit from environmental protection efforts;

- Are **predictable and flexible**: Consistent with other city efforts to improve the permitting experience for citizens, the regulatory amendments are designed to be user-friendly and predictable. The regulations will create two paths: the “cookbook” path with clear standards requiring minimal additional technical expertise, and the “flexible” path that allows for site-specific solutions to unique circumstances; and
- Are **inclusive**: The city’s critical areas update process should seek and include input from a variety of stakeholders. This commitment began with the Citizens Advisory Committee, which set the tone for the regulatory amendments through its recommended environmental element policies. The commitment continued with mailings to affected property owners, an updated website, and open houses designed to educate citizens and prepare them to comment on the proposal.

We have taken a deliberate approach to the critical areas update process in order to ensure that the city’s response to the Growth Management Act also fits with long-standing Bellevue principles of environmental protection and sustainability. In addition, the city’s approach to critical areas protection has helped define the neighborhood character that residents describe today as being fundamental to the creation of places where people enjoy being. This recognition that urban development can happen in a way that is sensitive to and preserves significant natural features has led to a vision of the city being embedded in the natural environment represented by the “city in a park” theme that underlies Bellevue’s development and planning decisions.

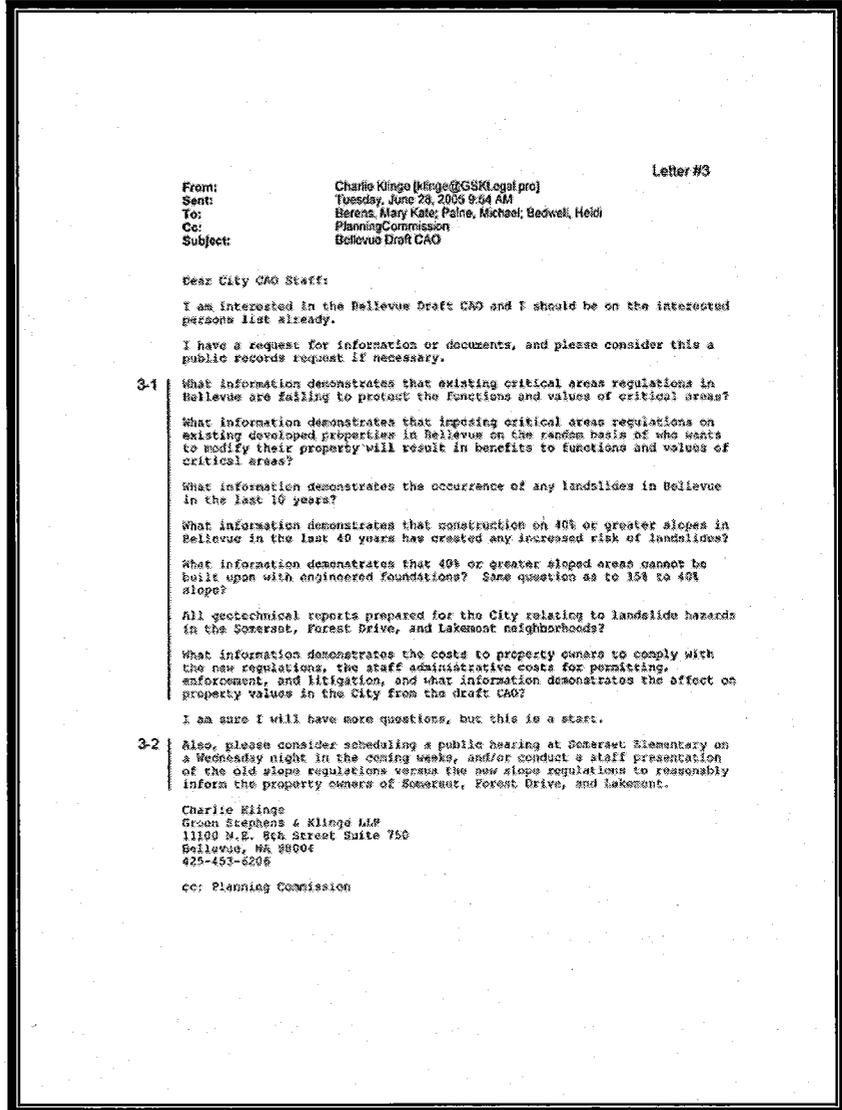
Consequently it is decidedly not the case that the ordinance before you is a typical one-size fits all approach. Prescriptive standards are provided to show a clear and smooth path through the process as well as the “off ramp” option that allows flexibility to change the prescriptive standards. In fact, it is a tailored and comprehensive approach to addressing protection of critical areas that includes a range of protective elements and a host of changes designed to improve flexibility for property owners. Within the overall context of critical area protection, every effort has been made to minimize the impact of regulations on individual property owners. It is important to note that with very few exceptions, the proposed regulations do not represent new limitations on sites with critical areas. The city has been regulating these properties since 1987. The proposal builds on these existing regulations in an effort to better reflect the current state of knowledge about critical areas and the impacts of development on those areas.

It is also important to note that the regulation of use and development near critical areas is only one part of a three-pronged strategy elaborated in the comprehensive plan that also includes incentives and city programs. The draft environmental impact statement includes a program-based alternative that includes programs in four broad categories: acquisition, rehabilitation and maintenance, education and best management practices and along with some specific regulations. Since investment aimed at these areas has positive benefit on the functions and values of critical areas, we expect the policy debate to focus on finding the right balance between regulation and city efforts to protect or enhance the environment.

**Letter #3 – Charlie Klinge**

3-1—Commenter was provided with information as part of a public records disclosure request.

3-2—Three public open houses were held in June 2005 to inform and educate the public about the proposal in preparation for the public hearing. One of those open houses was held at Sunset Elementary School near the Somerset neighborhood.



**Letter #4 – Renay Bennett**

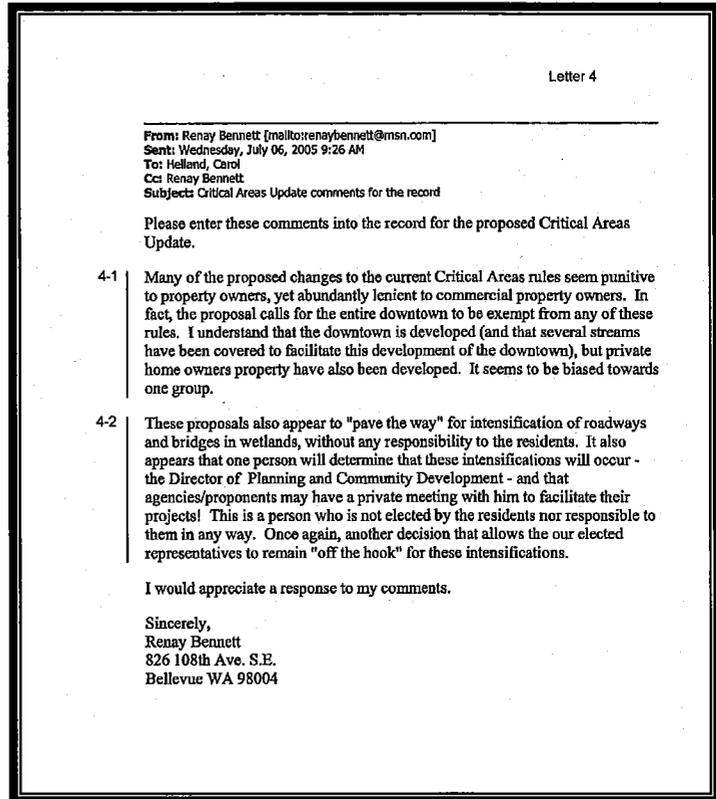
4-1—Treatment of commercial areas/downtown: As you point out, the downtown is exempt from these critical areas ordinances. This proposal updates the city's existing critical areas protections, which do exempt downtown already. That was a policy decision made in 1987 when the provisions were originally adopted, that has not been reconsidered with this effort. The city's remaining commercial areas are covered by the provisions, I think in an equitable way with residential properties. In fact, the rules applicable to existing development are more generous for existing residential development than for commercial development. Single-family residential homes may be expanded into a critical area in some cases where there is no feasible alternative, while multifamily and commercial development does not have that opportunity. The expanded stream, wetland and shoreline buffers apply throughout the city, to residential and commercial properties. Finally, the impervious surface standards apply citywide, to residential and commercial, and the approach used to establish those limits was the same for residential and commercial: we reviewed information in our code, maps, and aerial photographs to develop an idea of the "typical" amount of impervious

surface by zoning category, and used that number to develop the impervious surface limits. As you know, the majority of Bellevue's land area is in single-family zoning, so the proposal certainly impacts homeowners. However, commercial areas with critical areas are subjected to the same rules, and in the case of existing development, have less flexibility under the proposal than single-family.

4-2—Roadways/bridges in critical areas (including wetlands): The existing regulations currently allow for roads to be built through critical areas and critical area buffers, including wetlands, where the road constitutes an "essential public utility." A road is an essential public utility where "no feasible alternative location exists based on an analysis of technology and system efficiency." Under the existing regulations, such roads are a permitted use, meaning they do not require a permit that requires public notice or comment (although in some cases SEPA will apply).

The proposal maintains this general philosophy towards roads (and other utilities) in critical areas. That is, the roads would be allowed where no technically feasible alternative exists. There are two key differences in today's proposal though. First, the road would only be allowed through a "critical areas land use permit" which will be a process II decision requiring public notice and comment. Second, the existing code language regarding "an analysis of technology and system efficiency" has been clarified and improved (in my mind) by the more specific criteria set forth in the proposal. Under the proposal, the applicant must demonstrate that no technically feasible alternative exists, as follows (see Section 20.25H.070.B.1.a in the proposed ordinance):

- a. New or expanded facilities and systems are allowed within the critical area or critical area buffer only where no technically feasible alternative with less impact on the critical area or critical area buffer exists. A determination of technically feasible alternatives will consider:
  - i. the location of existing infrastructure;
  - ii. the function or objective of the proposed new or expanded facility or system;



- iii. demonstration that no alternative location or configuration outside of the critical area or critical area buffer achieves the stated function or objective, including construction of new or expanded facilities or systems outside of the critical area;
- iv. whether the cost of avoiding disturbance is disproportionate as compared to the environmental impact of proposed disturbance; and
- v. the ability of both permanent and temporary disturbance to be mitigated.

The above language is intended to make more clear what the city means when it says no feasible location exists. The proposal also increases the amount of mitigation that would be required for new roads that impact wetlands or wetland buffers.

Finally, you reference the ability for a proponent of a road project to have a private meeting with the director to facilitate the project. It is not clear what in the ordinance prompted that comment, but the city would certainly routinely meet with applicants of a proposal to discuss that proposal. City staff is also available and willing to meet with residents and other interested citizens about any particular project. Decisions are made in light of the information provided by any party, applicant or interested citizen, considering the decision criteria in the ordinance. In the case of new roads and utilities, in fact, opportunities for public notice and involvement will increase because of the proposed requirement for a Process II critical areas land use permit.

**Letter #5 – Dan Hardin**

5-1—Recommended buffer is 50 feet with no structure setback.

According to available data, at least as to the primary structures (homes) on shoreline property, approximately 50 percent of the lots along both Lake Washington and Lake Sammamish could meet the recommended 50-foot buffer.

The ordinance contains many provisions designed to allow continued uses in the expanded shoreline buffer area, where those uses were legally established, including an allowance to maintain existing landscaping and landscape features (like arbors and patios).

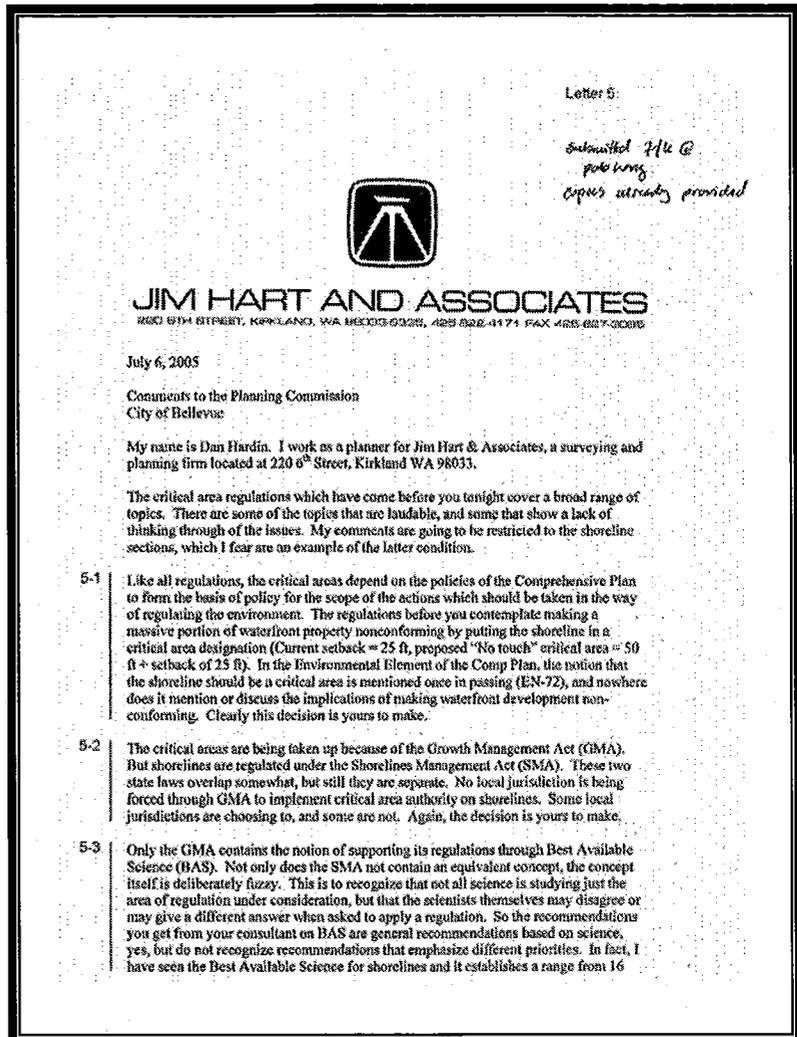
The expanded shoreline buffer is necessary to recognize and protect the functions and values of particularly the near-shore environment and the impacts of the quality of that environment on salmonid populations.

The regulatory alternative was modified so that primary structures (houses) within the expanded buffer area would not be labeled “nonconforming” and would allow remodeling without regard to valuation thresholds. This approach address concerns about nonconformities caused by the expanded buffers.

5-2—Several comprehensive plan policies recognize that where city shorelines provide critical area functions and values, they should be regulated as critical areas.

The state legislature passed legislation in 2003 establishing that until a jurisdiction completes is mandatory update of its shorelines policies and regulations under the Shoreline Management Act (SMA), shorelines providing critical area functions and values should be protected by regulations adopted using best available science.

Bellevue shorelines do provide critical area functions and values.



Regulating shorelines as critical areas and having a critical area buffer, in contrast with the 25-foot structure setback under existing regulations is consistent with the above. The distinction between a buffer and a setback is important, however, under the city’s current shoreline regulations, many restrictions exist for uses of the 25-foot structure setback, making it more like a buffer (including restrictions on clearing and grading and removal of native vegetation).

Protections in the ordinance for existing uses and landscaping (see above) and the flexibility offered by the critical areas report option help offset the impacts of this change

5-3—The city is required to protect critical areas within the shoreline under GMA, at least until the required SMA update is complete.

The recommended ordinance is consistent with the SMA guidelines developed by the Department of Ecology for updating SMA regulations; these guidelines require regulations that ensure “no net loss of function,” the recommended ordinance regulations, developed using best available science, are consistent with that guidance, and the intent is to not revisit these changes as part of the SMA update.

5-4—In many cases, best available science would support an approach to buffers that required a buffer to be established on a case by case basis, according to site-specific information.

The city’s consistent approach to developing the recommended ordinances was to ensure that there was at least one clear path that a property owner could follow in developing property with minimal need to hire consultants and experts. A standard buffer width is thus needed to allow that choice for property owners.

The critical areas report process allows those owners seeking greater flexibility to suggest site-specific modifications to the standard requirements, with support of qualified professionals.

5-5—Typically, detailed information about materials supporting an application or proposal are contained in the city’s submittal requirements. These submittal requirement documents would explain in detail the contents of a critical areas report.

The submittal requirement details are developed after an ordinance is adopted, but should be supported by some authority in the code.

feet to over 300 feet of natural vegetation to filter runoff. Again, the decision is yours to make.

5-4 | Herrera Environmental Consultants made the recommendation that resulted in the critical area “No touch” zone of 50-feet. They also made the recommendation as one of four choices. Also, they said it was a range of 50-100 ft to reflect it was part of a larger range, and then made the recommendation that the City should conduct lake specific studies to set the requirement to the shoreline values of the community (Risk Analysis, p 27). Again, the decision is yours to make.

The Consultant also recommended a variable width of buffer to offer more flexibility. A “one size fits all” approach doesn’t fit well. A flat shoreline is different from one that is a cliff. Is the buffer to filter runoff from waterfront properties, or to get at global warming (Risk Analysis, p 87)? Again, the decision is yours to make.

5-5 | Staff has incorporated a “critical area report” mechanism into its procedures. This is ostensibly to add flexibility to the critical area. The report must be written by a “qualified professional.” Since staff must review this work, they often must hire another consultant to tell them whether it’s OK. I don’t have to tell you who pays for that. The interesting part is there are no standards for a successful critical area report, nor any standards for review. Since staff must apply this to all cases where non-conformities exist, will the situation get better or worse? The decision is yours to make.

My client, Alan Harper, is a waterfront property owner at 11041 SE Lake Road. The regulations the staff have come up with are, frankly, unfair to all waterfront residents. They are not unfair because they only apply to rich people, or property poor people, they would be unfair to anyone in similar circumstances. Who would think that making a whole class of legal property owners into non-conforming property owners in one stroke of the pen is fair or advisable? The decision is yours to make.

Thank you.

The regulatory alternative was modified to ensure that the critical area report process is useable, including: ordinance contains guidance about minimum critical area report contents, guidance about the decision criteria used to determine if the requested flexibility can be granted, and a clear allowance for phasing critical area report requirements. For example, where a project relies on mitigation measures to meet the critical area report approval

*Part 5—Comments and Responses*

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criteria, allow for the initial report to include conceptual mitigation, with a requirement for a detailed mitigation plan, showing specific planting locations and other “construction” details, upon approval of the proposal.

**PC Minutes #6 – Charles Klinge**

6-1—Written comments will be accepted and responded to at any time until the Planning Commission finalizes its recommendation. To ensure that any comment is considered, and responded to allowing full Planning Commission consideration, it was suggested that any additional comments be submitted by 5 p.m. on Wednesday, July 27.

6-2—The legislation referred to, ESHB 1933, was adopted in 2003, and indicates that a local jurisdiction need not regulate critical areas in the shoreline under GMA after that jurisdiction has completed its mandatory SMA update, due for Bellevue in 2009. State agencies responsible for administering GMA and SMA provided guidance to jurisdictions about compliance with the various laws, and the city's approach is consistent with that guidance.

The new guidelines developed by the Department of Ecology for compliance with the SMA include standards for protecting critical areas within shoreline jurisdiction, and although "best available science" is not a term specifically used, the guidelines indicate that local regulations should ensure "no net loss of function." The intent of the regulations recommended here affecting the shoreline is to comply with both standards, so that no further amendments to these particular sections are required during the SMA update process in 2009.

6-3—Staff agrees that the law is clear that regulations based on best available science are required only to protect critical area functions and values, and a shoreline is not automatically a critical area.

The city's best available science reports indicate that shorelines in Bellevue provide critical area functions, including habitat for salmonid species and other protected species like the bald eagle, and therefore are critical areas.

6-4—The SMA creates two different sets of standards that guide local jurisdictions' creation of regulations implementing this state-wide policy. First, SMA establishes substantive requirements, including limitation on structure height in the shoreline, a preference for water-dependent uses in the shoreline, and a general restriction against construction waterward of the ordinary high water mark. Second, the SMA establishes a permitting regime that is adopted by local jurisdictions. Under the SMA permitting regime, generally work with a value of more than \$10,000 requires a "substantial development permit."

The SMA does exempt single family residences, a "normal protective bulkhead," and a dock associated with residential uses from the permitting regime of SMA. It is important to note, however, that any work carried out under the exemption must be consistent with the local jurisdiction's shoreline regulations and the SMA generally, therefore, these things are not exempt from the substantive requirements of SMA.

**PC Minutes #6, oral testimony offered at public hearing on July 6, 2005 by Charles Klinge:**

- 6-1 | Mr. Charles Klinge, 14104 SE 46<sup>th</sup> Street, said it would be impossible to respond in five minutes to a 38-minute staff presentation.
- 6-2 | He said the state Department of Ecology has been informing jurisdictions that they must act to regulate shorelines, but in fact the legislature has told them not to do so. The legislature (2003.321.1) has stated that critical areas within the jurisdiction of the SMA shall be governed by the SMA, and the critical areas outside the jurisdiction of the SMA shall be governed by the GMA. In other words, critical areas ordinances are not to be used to regulate shorelines until the Shoreline Master Program is updated, something that does not have to be done until 2009.
- 6-3 | The legislature also said shorelines of statewide significance may include critical areas, but shorelines of statewide significance are not critical areas simply because they are shorelines of statewide significance. The staff proposal makes all shorelines critical areas in direct opposition to the direction of the legislature.
- 6-4 | The SMA exempts single family residences up to 35 feet under certain circumstances. In addition, bulkheads are not regulated under the SMA. Making single family residences nonconforming by the way a critical area buffer line is drawn is a bad thing. Staff has tried to spin it positively.
- 6-5 | There is no best available science that says backyards should be turned back into critical areas; it will not create habitat. Existing developed backyards are not in fact critical areas; they do not serve as buffers. The city of Kent recently decided its regulations are sufficient and elected not to change them in line with the best available science pushed by the Department of Ecology; their conclusion was that the science is not directed to urban areas.
- 6-6 | Nowhere in the best available science is it said that development on a 40 percent slope is contraindicated. Development on such slopes has occurred all over Somerset and none of them have fallen off the hill.
- 6-7 | Steep slopes should not be called out as wildlife habitat given that all areas in fact serve as wildlife habitat. The idea of flexibility is therefore thrown out the window without any basis. Steep slopes should not automatically be classified as geologic hazards.

Further, the guidelines developed by the Department of Ecology for local jurisdictions required to update their regulations contains a variety of substantive requirements for work that is exempt from the permitting regime, including standards for shoreline stabilization (bulkheads). The proposed regulations were formulated considering those guidelines, again with the goal of avoiding having to revise any of these affected provisions during the SMA update in 2009.

6-5—Buffers can provide many functions, not all of which depend on the existence of native or dense vegetation, including water quality functions.

The proposed ordinance does accommodate existing legally established “yard uses” by allowing continued maintenance of landscaped areas and grass, and continued use and maintenance of patios, play areas, fences, and similar other features.

Flexibility exists for new uses or landscape features to be added to the outside buffer area in exchange for enhancements of the buffer area near the critical area as well. The regulations try to recognize that single-family uses on many of these sites will be maintained in perpetuity, and are designed to balance incremental improvements to the critical area with continued use and enjoyment of the property.

6-6—Best available science does indicate that slopes present a safety hazard in the event of failure. Consistent with the city’s approach to developing these regulations, a top and toe of slope setback allows a property owner to develop land consistent with the safety risks, without hiring additional consultants or experts.

The proposed ordinance does recognize that with more site specific information about soil types, vegetation, slide history and other details, modification of the required setback, and even elimination of any setback, may be allowed so long as the structure is appropriately engineered.

The city has regulated steep slopes (those greater than 40 percent) since at least 1987 under the existing sensitive areas regulations.

6-7—The staff presentation may have oversimplified this statement by using the general term “wildlife.” The intent of the ordinance is to prevent disturbance of slopes or their buffers act as habitat, or habitat connections, for species of local importance.

Species of local importance are designated in Section 20.25H.150 of the proposed ordinance.

The Regulatory Alternative was modified to make clear that “wildlife” of interest when considering habitat value of slopes is habitat associated with species of local importance.

## PC Minutes –

7-1—The proposed ordinances were developed independently of the county and the county ordinances. The city undertook its own best available science analysis, and considering the information available about critical areas in Bellevue, the Bellevue Comprehensive Plan policies and the goal articulated at the outset of the project to build on Bellevue's strengths to create regulations that recognize Bellevue's urban status and provide both predictability and flexibility.

The ordinance deviates from the county's in many respects, which cannot be completely cataloged here. Some of the more controversial county provisions, including a requirement to retain a significant portion of rural property undisturbed, is not included in the Bellevue ordinances.

7-2—The proposed ordinance specifically allows for footprint expansions, even within a critical area buffer, for single-family residences where no alternative exists.

Under the staff approach to existing residences, remodeling of an existing house would be entirely outside the critical area, and not subject to special rules; under the Planning Commission approach, remodeling would still be allowed, but at a certain threshold (100 percent of the replacement value of the structure) would trigger the need to comply, to the extent feasible, with new regulations.

The regulatory alternative was modified so that primary structures (houses) within the expanded buffer area would not be labeled "nonconforming" and would allow remodeling without regard to valuation thresholds. This approach provides an increment of additional accommodation for existing development affected by expanded critical area buffers.

7-3—Protection of critical areas is not solely designed to accommodate or protect fish. Critical areas provide a variety of functions, including water quality, protection from erosion, air quality, habitat for other types of species, and recreational values.

The quality of critical areas is indeed impacted by a wide variety of factors, only a portion of which are controlled or managed by these land use code regulations. The city does undertake programs on its own property and in the duties that it carries out to address other factors that impact critical areas. Other impacts are generated by sources outside of the city limits and city jurisdiction. Review and control of each of these factors will play a role ultimately in the health of critical areas, and these regulations do just a part of that.

**PC Minutes #7, oral testimony offered at public hearing on July 6, 2005 by Judith Phinney:**

- 7-1 | Ms. Judith Phinney, 17300 135<sup>th</sup> Street, Woodinville, said she decided to get involved when she heard mention of 300-foot setbacks under the King County approach. The King County Council had already decided on their ordinance the day it was presented to the public, so the public comments did no good. She warned the Commission that Bellevue residents will not see the proposed regulations as being fair. The state Attorney General will likely be helping people who have had their land rights taken away. County residents were told that the critical areas ordinance would only apply to rural areas, but now Bellevue is reviewing its regulations; what came to the rural areas is coming to the urban area of Bellevue. The proposed rules appear to just be a copy of the King County rules.
- 7-2 | It is unfair to ask existing property owners in an urban area to increase setbacks and not extend beyond the existing footprint. It costs big bucks to buy a house, and soon 60 percent of the people will not be able to afford a house. It is much less expensive to remodel a home, and many times the children must provide a home for the parents. Because of the regulations in the rural areas, however, many are selling and moving out. It is not a good idea to have rules that will remove families from their land. Some \$12.5 million was spent on Longfellow Creek, but when the fish hit the creek they died. Bear Creek has been unsuccessful in increasing salmon runs. Planning has simply not been successful. Pure water does not mean more fish. The *Seattle Times* cited a study showing the heavily developed Duwamish Waterway in the Seattle industrial area obtained one of the best salmon runs in the area. The group called Rural Majority thinks an advocate is needed, but that is not the case, neither in the rural areas or in Bellevue. Each property owner should know how to take care of their property. The city should study ways to better do that and then ask the property owners to comply, not demand like Communists. Perhaps the city is interested in a for-profit billing because the city needs more money.
- 7-3 | Studies have shown that up to ten feet can still benefit a creek; it does not have to be 300 feet for potential habitat when there is not even any fish in the water. That is debatable science instead of due process. Best available science should not be allowed to rule over due process. The rules should be tried first on Bellevue public property, and then the residents should be asked to try them. It is not true that a five-acre rural property with one home is as valuable as a five-acre urban property with 20 homes; rural properties are losing value because the property owners are not allowed to use them for certain purposes. Horse owners are suffering from the new rules. In Washington State, all political power is inherent in the people, and government derives its just power from the consent of the governed. The government is established to maintain and protect individual rights. Bellevue should not attempt to take over the role of the federal and state government regarding shorelines. The constitution secures property rights, not the Department of Ecology.
- 7-4 | ???

7-4—This is true; best available science acknowledges that different functions of a critical area are impacted by buffers of different widths. Some functions can be protected by relatively small buffers, or none at all (i.e., if all water quality functions are addressed through engineered solutions, then a buffer is not needed to protect that function); however, not all or even a majority of functions can be protected at buffers of such small widths.

The buffers recommended in the ordinance take into account the range reported in best available science, and balance that with other city goals, and with the city's largely developed and urban status.

## PC Minutes –

8-1—The commitment to public process has been a key component of the critical areas update, and Ms. Hague's information does not accurately reflect the efforts the Planning Commission has undertaken.

The following summarizes the extensive city efforts undertaken to involve the public and affected property owners throughout the policy and regulatory stages of the update process:

- Citizens Advisory Committee (CAC) representing a wide spectrum of interests was appointed by the Bellevue City Council to prepare a recommendation for updating the city's critical areas policies. The committee was co-chaired by Nan Campbell and Steve Dennis and from December 2001 through April 2003, the CAC held 22 meetings that were all open to the public, plus two special community meetings;
- The Planning Commission hosted a public open house describing the inclusion of shorelines as critical areas in May of 2004. The open house included a presentation from a scientist about the impacts to shorelines. A panel discussion with the Planning Commission was also held about potential policies. The panel discussion included shoreline property owners, construction industry, and other interested stakeholder groups;
- The city developed and consistently updated its web site with staff email contact information, a comment form, key dates, background and technical information. The web page was also listed under the Featured Items on the city's home page;
- Three direct mailings were sent to over 4,000 property owners who own property adjacent to some of Bellevue's lakes, streams and wetlands notifying them of the planning commission study sessions, the public open houses and the public hearing;
- The Planning Commission held 14 study sessions between November 2004 and June 2005 in developing the ordinances, all of which were noted on the city website and open to the public;
- The city held three public open houses in June to inform and educate the public about the proposal in preparation for the public hearing;
- Public notice of the hearing and draft environmental impact statement was published in the newspaper and was sent to the Bellevue School District, the East Bellevue Community Council, Bellevue Chamber of Commerce, Bellevue Downtown Association, and numerous local and state agencies;
- Finally, articles were placed in *It's Your City*, *Neighborhood Newsletter*, and community association newsletters, describing the update and letting groups know that staff would be willing to come to their meetings to discuss the update.

The city produced a brief television segment to air on BTV explaining the final Planning Commission recommendation and the council process for final action on the proposal.

8-2—The city has several sources of information that maps critical areas in some format. With the adoption the original sensitive areas ordinance in 1987 the city created the Sensitive Areas Notebook. This document provides applicants and staff with a source of general information indicating that a sensitive area may be present on a particular site. Although the notebook has not been updated since its creation, and thus does not include recently annexed area, or new information, it is a source that provides preliminary guidance. In addition, the city has several geographic information system (GIS) layers of critical areas information. The wetland information is primarily based on the National Wetlands Inventory (NWI) maps. The NWI does not include all wetlands found within the city and has not been updated since 1988, but again, provides a source of preliminary information. A stream layer

**PC Minutes #8, oral testimony offered at public hearing on July 6, 2005 by Jane Hague:**

- 8-1 Ms. Jane Hague, 13646 NE 37<sup>th</sup> Place, said the city of Bellevue has always been very thoughtful in implementing new policies and procedures, and in working collaboratively with its citizens and business owners. She urged the Commission to seek an adequate public process; two study sessions and a public hearing do not begin to meet the level of outreach that is necessary on something as important as the critical areas ordinance. The Commission should first have a major education and outreach to all neighborhood groups so they can feel they understand the proposal and have had an opportunity to respond.
- 8-2 The city should also make sure it has a map of all sensitive areas; absent proper mapping, the city can come off appearing to be reactive. Everyone has a right to know in advance what their status is.
- 8-3 The city should move slowly with regard to waterfront issues and impervious surface standards. Bellevue must comply with the GMA, but it must first protect private property rights, promote affordable housing, and foster economic development; clearly there must be a proper balance found. The citizens should be educated and well informed, and the city should not skimp on its public process.

identifies Type A and B streams (under the current City of Bellevue typing system), and Type 1-5 streams (an interim state typing system related to the typing suggested in the ordinance) inventoried by the Utilities Department in August of 2001. Slopes of 40% and greater, the general location of floodplains and coal mine hazards are also available in a GIS layer. As part of the policy update process, Adolfson and Associates compiled several maps of the critical areas. These maps have been available on the city's critical area web page since the beginning of the regulatory phase of the update. They include wetlands; streams, salmonid distribution and culverts; and geologic hazard areas.

Efforts are underway to ensure that data about critical areas provided by property owners with development applications is captured and used to update existing information.

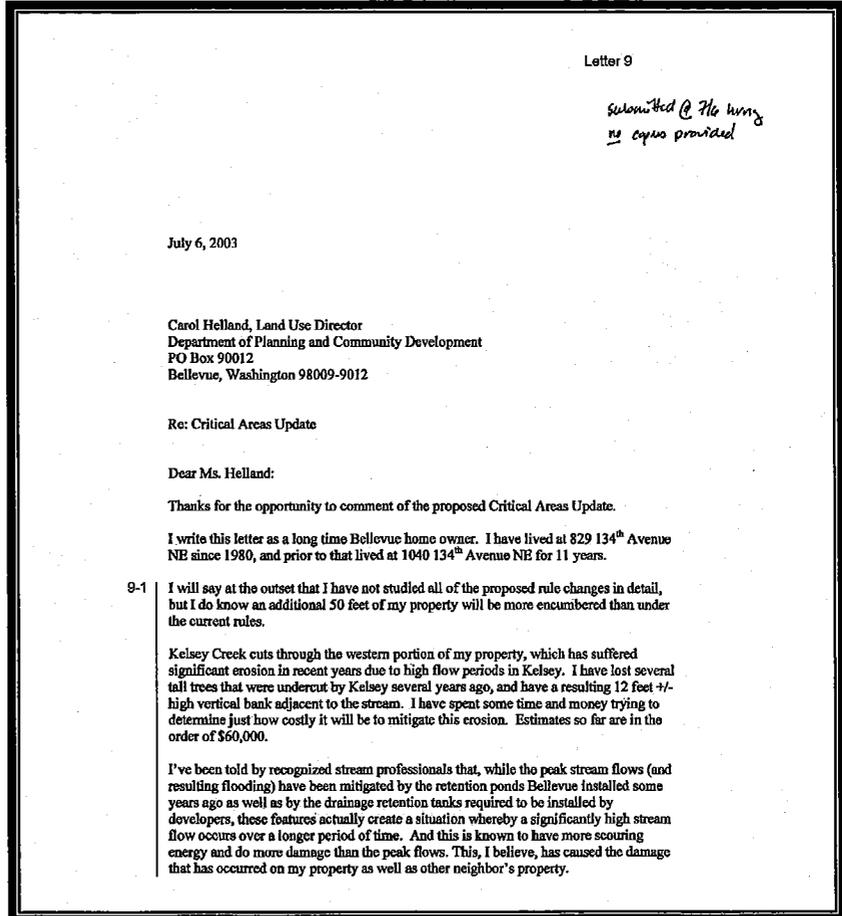
8-3—The city's goals for the critical areas update specifically recognized the need to find the appropriate balance between protecting critical areas and Bellevue's current and future status as an urban center, the need for continued development, and use and enjoyment of private property. These goals are met through the proposed ordinances through the inclusion of flexibility, the continued allowance for existing uses and development, and the selection of buffer widths and other standards, that while informed by and consistent with best available science, are not the most conservative buffers suggested by that science.

**Letter #9 – Tom Kinsman**

9-1—The ordinance contains many provisions designed to allow continued uses in the expanded buffer area, where those uses were legally established, including an allowance to maintain existing landscaping and landscape features (like arbors and patios).

The expanded buffer is necessary to recognize and protect the functions and values of streams and the impacts of the quality of that environment on salmonid populations and other species

The regulatory alternative was modified so that primary structures (houses) within the expanded buffer area would not be labeled “nonconforming” and would allow remodeling without regard to valuation thresholds. This approach address concerns about nonconformities caused by the expanded buffers.



9-2—Streams in Bellevue provide, and as part of a natural system, do provide stormwater conveyance functions. The Utilities Department indicates:

“Case law established the right for development to discharge stormwater runoff to surface water and requires downstream property owners to pass the stormwater from upstream development. The Bellevue City Council appointed a Utility Commission in 1976 to review options for surface water management, including policies related to storm and surface water control.

9-2 The reason for my sharing this with you is to express a concern that there may be nothing in the proposed critical area updates to ease the high flows in the Creek.

If this is the case, I look at the new rules negatively because it appears I am paying double—not only is my property being further encumbered because of the critical area update, but I have to pay significant amounts of money to repair erosion from impacts of Bellevue’s underlying policy of using Kelsey Creek as a storm drainage facility.

Thanks very much again for the opportunity to voice my opinion.



Tom Kinsman  
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The Utility Commission looked at a variety of alternatives for managing stormwater runoff, including constructing large storm sewers, combination of storm sewers and open streams, open streams and onsite flood controls, open streams with regional flood controls, and combinations of the last two options. The commission evaluated the alternatives regarding cost, effectiveness, operations and maintenance, environmental impacts, and other criteria.

A combination of onsite flood controls (private stormwater detention), regional flood control facilities, and open streams was selected. This option protected the environmental benefits of open streams while costing four to ten times less than traditional storm sewer improvements.

Bellevue’s stormwater management program has reduced flooding dramatically in most areas of the city, even with significantly increased urban development. Traditional piped stormwater systems are now being removed in many cities, such as Seattle, to restore open stream channels for environmental benefits and for stormwater runoff.

Bellevue Utilities provides technical assistance to private property owners for stream channel stabilization techniques, natural streamside vegetation restoration, grant opportunities, and private drainage problems. The Planning and Community Development Department provides information about regulations and permit processes in sensitive environmental areas, such as stream corridors.

In addition, one function of buffers is to allow for the natural stream channel migration processes to proceed without putting development at risk

The regulatory alternative was modified to allow activities in critical areas should be reviewed to ensure that they allow for stream bank stabilization projects where necessary to protect existing structures, with a preference for use of natural materials for such stabilization. Second, similar to provisions relating to the shoreline, to allow a property owner to demonstrate that the stream setback should be measured from a point that existed prior to significant erosion of the channel that impacted the location of the top of bank. This allowance may remove a disincentive that exists to allow the natural stream erosion processes to occur.

**PC Minutes –**

10-1—The traditional method for showing changes between existing regulations and proposed regulations is to prepare a strike-draft version of the regulations. The city has done this for three of the four ordinances that comprise the critical areas update (related to shoreline changes, subdivision changes, and general land use changes), which are available on the city website. For the final ordinance, a strike draft was not prepared, because the section was so completely reorganized to present information in a more organized and clear fashion, and terminology and definitions were updated to reflect current industry standard. A matrix was prepared highlighting significant changes, which is attached.

**PC Minutes #10, oral testimony offered at public hearing on July 6, 2005 by Steve Kelly:**

10-1 | Mr. Steve Kelly, 416 156<sup>th</sup> Place NE, asked to see the Land Use Code as it currently is alongside the proposed changes.

10-2 | He asked if the rules regarding slopes are applied differently to loose soils and hardpan. He said the downspouts on his home are channeled into dry wells, not down the street. Neighborhood signs do not bring in new homeowners; the signs should all be similar so as to be recognizable and not just another piece of landscaping.

10-3 | It will not be possible to save all animal species; species come and species go, and that migration of wildlife cannot be stopped through regulations. He quoted John Adams by saying "The moment the idea is admitted into society that property is not as sacred as the law of God, and that there is not a force of law and public justice to protect it, anarchy and tyranny commence."

10-2—Under the proposal, the city would regulate 40 percent slopes and landslide hazards. A determination of whether a slope is a landslide hazard would consider a number of factors, including underlying soil type and structure.

Although the standard regulations apply to all 40 percent slopes, regardless of soil type, through a geotechnical report, setbacks from such slopes may be modified. In determining the extent of modification, or elimination of those setbacks, soil types will play a role.

10-3—Critical areas provide function other than wildlife habitat, see response to 3.c above.

The proposal does not seek to protect all wildlife, but only those designated as species of local importance.

**PC Minutes –**

11-1—Although as set forth above, the city has not mapped all wetlands, generally on private property, the most typical wetland will be a Category III or IV wetland. The rules allow a 2500 square foot or smaller category IV wetland to be filled, and buffers for Category III range from 60 to 110 feet, and for Category IV are 40 feet. These buffer ranges may or may not be accommodated on a particular parcel, based on its size, configuration, and location of existing development.

The critical area report process allows a property owner to suggest modifications to the standards, and would seem to apply to the described site given the lack of buffer and degraded characterization.

Finally, if a critical area and buffer make a property otherwise undevelopable, the city retains a reasonable use exception allowing development.

11-2—The critical areas report process is intended to allow an owner to demonstrate that modified standards lead to at least as much protection to the critical area as the standard provisions.

The current proposal, however, contains a limit on how much a buffer may be reduced, even with a critical area report.

The regulatory alternative was modified so that in order to maximize flexibility, there should be no limit on the amount of buffer modification that may be granted through the critical area report process, so long as adequate levels of protection are shown, and a continued obligation to maintain the recommendations of the report is recorded against the property.

**PC Minutes #11, oral testimony offered at public hearing on July 6, 2005 by Jeffrey S. Jones:**

- 11-1 Mr. Jeffrey S. Jones, 35316 28<sup>th</sup> Avenue South, Federal Way, said he is a professional wetlands scientist and spoke representing Mr. Ed Urquhart, owner of the property at 2045 120<sup>th</sup> Avenue NE. He said the allowed wetlands impacts and mitigation requirements of the proposed code are not an option for most properties in highly developed urban communities. The buffer requirements are larger than those that currently exist, and they exceed the sizes of many small urban properties. Extra land suitable for the creation of wetlands would need to be available to meet the large mitigation exchange ratios. Mr. Urquhart has a hydrologically isolated wetland system dominated by black cottonwood and Himalayan blackberry. Two sides of the triangular wetland have no buffer. Under the proposed code there would have to be a much larger buffer, one that could only be reduced to a minimum of 35 feet with buffer averaging.
- 11-2 The minimum buffer, however, cannot be met, thus impacts to the existing wetland buffer would not be allowed even though the wetland could benefit greatly from mitigation in the form of vegetative enhancement. If the code were to allow impacts to isolated wetlands and wetland buffers when significant improvements to wetland functions would occur from vegetative enhancement and/or other mitigation, it would be a win-win situation for the property owner, the environment and the public. Use of the Washington State Department of Ecology methods for assessing wetland functions for pre- and post-mitigation functional assessment of the wetland should be used. The method accounts for the anticipated positive and negative changes to a wetland so opportunities to improve a wetland are not missed. It must be recognized that restoration of degraded wetlands will not occur without the willingness of property owners and their money. There are a number of isolated wetlands in Bellevue. The public should know that going through the process will achieve the desired end result. Studies cost money and time, and if the end result remains an unknown, many property owners will not opt to go in that direction.

Letter #12 – Jeffery S. Jones

12-1—For the higher quality wetlands, mitigation ratios are high to reflect the important nature of those functions and values and risk to modifying them and trying to recreate them elsewhere.

As above, the typical wetland on private property will require somewhat smaller ratios, of 2 to 1 and 1.5 to 1, similar to the current code mitigation requirements (2 to 1 for Type A and 1.5 to 1 for Type B).

The proposed ordinance also provides for mitigation through enhancement of the remaining wetland on site. No specific mitigation ratio is imposed for wetland enhancement as mitigation. Where no onsite area exists, nor offsite opportunities for wetland mitigation through creating wetlands, wetland enhancement is allowed.

The regulatory alternative was modified to provide clear guidance about the use of wetland enhancement as mitigation, and the relationship between required mitigation ratios, the critical areas report process, and impacts to wetland buffers versus wetlands themselves.

Letter 12



**J. S. Jones and Associates, Inc.**

June 25, 2005

Ms. Katie Behrens, Legal Planner  
City of Bellevue  
Planning & Community Development  
City Hall  
P.O. Box 90012  
Bellevue, Washington 98009-9012

RE: Proposed Critical Areas Code

Dear Ms. Behrens:

As you know, I am commenting on the proposed code on behalf of Ed Urquhart, who owns the Pacific Bag warehouse. Mr. Urquhart needs to increase his tenant's office space, by adding a second floor over a portion of the warehouse. A requirement of the new square footage of office is nine additional parking spaces. Without adding additional office space, Mr. Urquhart will lose his current tenant.

An isolated triangular wetland occupies the north side of the site. The original permit for the warehouse established a 25-foot buffer on the south side of the wetland. The other two sides of the wetland have no buffer and are bounded by railroad tracks. The wetland lacks native soils and is dominated by black cottonwood and Himalayan blackberry.

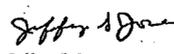
12-1 Mr. Urquhart does not need to impact wetland area, but does need to reduce the buffer to five feet, in three places. Approximately 100 feet of the 200-foot long buffer would remain at the full 25-foot width. Section 20.25H.105.A.3 of the proposed code, allows for mitigation in the form of enhancement of significantly degraded wetlands. The wetland and wetland buffer would benefit significantly from enhancement. A functional improvement can be shown using the Washington State Department of Ecology Functional Assessment Worksheet. Section 20.25.105.B.3 requires buffer impacts to be replaced at a 2 to 1 ratio. Buffer area cannot be replaced. Section 20.2H.110.A requires a minimum 35-foot buffer. Replacement buffer area and minimum buffer widths should not be required when an improvement to wetland functions can be shown and there is no opportunity for replacement and minimum sizes cannot be met.

In its current condition, the wetland is a huge source of cottonwood seed and an eyesore along the Spirit of Washington tracks. Mr. Urquhart is willing to design, implement, maintain and monitor enhancement of the wetland and wetland buffer. Not allowing minimal impacts in exchange for significant improvements misses opportunities for restoring and enhancing wetlands, which would only happen when private property owners are willing to incur the cost.

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253-874-9588 / FAX 253-874-9579

12-1 I suggest that the code be modified to allow mitigation in the form of enhancement for isolated and significantly degraded Category III and IV wetlands. The minimum buffer width and replacement of buffer area should not be applied when a significant improvement in wetland functions can be shown using the Washington State Department of Ecology Functional Worksheet, found in "Methods of Assessing Wetland Functions, Vol. 1, Part 2, Riverine & Depressional Wetlands in the Lowlands of Western Washington – Procedures for Collecting Data.

Sincerely,



Jeffery S. Jones  
Certified Professional Wetland Scientist, No. 1025

cc: Ed Urquhart

**PC Minutes –**

13-1—See response to 10-2.

13-2—Where the ordinance mandates a particular kind of planting, the preference is for native species. Beyond requiring native species and prohibiting noxious species, the ordinance does not dictate species type.

**PC Minutes #13, oral testimony offered at public hearing on July 6, 2005 by Michelle McKee:**

- 13-1 Ms. Michelle McKee, 4430 149<sup>th</sup> Avenue SE, said she has been involved in the environmental movement since the 1970s. She said she is an electrical engineer with a minor in environmental engineering. She said it has been her experience over the years that regulations are imposed without using real science or the best available science; most regulations are crafted to accommodate the needs of special interest groups. Telephone poles in Colorado have been required to be green, and lead has been removed from gasoline even though the problem with gasoline is not the lead but in the mining of it and its transportation in open train cars. Someone wanted a patent for unleaded gas, however, so the law was passed. Those kind of things should be considered. The stability of slopes depend totally on geology, on the rock structure, and on the type of foundation used. It is possible to build a building on any slope with the right foundation; it has been done for many years and still continues. It should be kept in mind that when things are regulated too much all of the solutions are prohibited.
- 13-2 Requiring certain kinds of grasses and vegetation to be planted often means that the natural plant species are choked out, and problems result because the soil is not held as well. Too many times the environment has been damaged by regulations. If a property owner sees something is not working, they can change it, but it takes years to change a regulation that is not working. Catastrophic forest fires have resulted solely from environmental regulations. The regulations do not take into account that humans are a part of nature and are taking care of the environment.

**PC Minutes –**

14-1—Outside of generally prohibiting removal of vegetation in a critical area buffer, the proposal does not impose additional tree retention requirements.

Best available science does suggest that the amount of tree canopy city-wide may impact critical areas, similar to the amount of impervious surface has an impact in critical areas.

The regulatory alternative was not modified. The majority of property in the city is zoned for single-family residential use. Regulations currently do not include a tree retention requirement for such properties, except where required to be retained as part of subdivision approval, or in critical areas. Staff has recommended against the addition of separate tree retention requirements because science suggests that in order to have an appreciable impact at the watershed scale, retention ratios must be quite high, higher than may be appropriate in the urban context

14-2—The existing regulations allow for roads and other utilities and infrastructure to be built through critical areas and critical area buffers, including wetlands, where the road or other facility constitutes an "essential public utility." A road is an essential public utility where "no feasible alternative location exists based on an analysis of technology and system efficiency." Under the existing regulations, such roads are a permitted use, meaning they do not require an permit that requires public notice or comment (although in some cases SEPA will apply).

The proposed amendments maintain this general philosophy toward roads (and other utilities) in critical areas. That is, the roads would be allowed where no technically feasible alternative exists. There are two key differences in today's proposal though. First, the road would only be allowed through a "critical areas land use permit" which will be a Process II decision requiring public notice and comment. Second, the existing code language regarding "an analysis of technology and system efficiency" has been clarified and improved by the more specific criteria set forth in the proposal.

**PC Minutes #14, oral testimony offered at public hearing on July 6, 2005 by John Albertson:**

- 14-1 | Mr. John Albertson, address not given, stated that Bellevue has lost 50 percent of its tree cover in the last 20 years. The proposed regulations are coming to the scene too late. Bellevue was once green but is now a noisy place divided by larger and wider freeways and roads. There are few people left who have any horse sense. Bellevue is a great place to live, and there is still the potential for returning to where it came from. The issue of trees must be addressed. There are people with agendas focused on their properties. The proposed approach goes a long way toward getting the debate going.
- 14-2 | The Department of Planning and Community Development has come a long way in recent years in embracing new sciences and technologies. There is, however, a bit of deck-stacking going on with regard to the proposed flexibility. Section 20.25H.070 uses broad definitions for new uses that are very unwelcome in terms of preserving wetland buffers; they allow too much of a gimme that may not have any basis in best available science. The Commission should review the language of the proposal more in-depth and shy away from furthering agendas.

**PC Minutes –**

15-1—The draft EIS and risk analysis contain an extensive discussion of the existing regulations (the No-Action Alternative) that demonstrates that a variety of indicators relating to the health of the critical areas will continue to trend towards degradation under the existing ordinances.

15-2—A property owner seeking to modify the standard regulations does have to undertake some expense in preparing the required demonstration that the protection of critical areas is at least as good as would result from standard protections. This is a typical practice with applications to vary standards (i.e., variances and reasonable use exceptions).

**PC Minutes #15, oral testimony offered at public hearing on July 6, 2005 by Leslie Lewwallen:**

- 15-1 Ms. Leslie Lewwallen, 5811 116<sup>th</sup> Avenue SE, said the GMA calls for amendment of critical areas ordinances only where necessary. The staff presentation did not offer any proof that the existing regulations are ineffective or not working. Bellevue should follow the lead established by Kent in saying further regulations are not needed.
- 15-2 The proposal is very similar to the King County rural stewardship program which is intentionally written to be squishy. Under the current land use laws, the onus is on the city to show that regulations are necessary. By allowing flexibility, the burden is improperly shifted away from the city onto the property owner in violation of the law.

**PC Minutes –**

16-1—See 8-1.

16-2—See 8-3.

**PC Minutes #16, oral testimony offered at public hearing on July 6, 2005 by Nan Campbell:**

- 16-1** | Ms. Nan Campbell, 480 West Lake Sammamish Parkway NE, said she served as chair of the critical areas citizens advisory committee that recommended the policies the Commission is reviewing. The CAC met for a year and a half and operated with a wide range of members with a broad representation. The committee worked well together and had excellent assistance from staff. She enthusiastically supported the proposed regulations; they appear to offer the right balance of environmental protection and programs that recognize Bellevue as an urban center.
- 16-2** | She said she was very pleased to see how many people turned out for the public hearing and commended the Commission and staff for the work that will take Bellevue into the future and provide for future generations.

**PC Minutes –**

17-1—Both the Regulatory Alternative and the City Programs Alternative provide for long-term protection of critical areas.

17-2—The Regulatory Alternative is intended to minimize the impacts of development on critical area functions.

**PC Minutes #17, oral testimony offered at public hearing on July 6, 2005 by Ted Yellman:**

- 17-1 | Mr. Ted Yellman, 11614 SE 49<sup>th</sup> Street, agreed with the comments of Ms. Campbell. He said there is a need to protect critical areas for future generations. It may impact some people, but there is no evidence that it will significantly affect existing properties. A 50-foot buffer is a reasonable thing to ask for on new development.
- 17-2 | No one has the property right to use their properties in ways that destroy the fish or the ground water.

**Letter #18 – Stacie LeBlanc Anderson**

18-1—The Transportation Department is unaware of any classification or attempt to classify Bellevue Way as a “highway of statewide significance.”

18-2—See response to 14.2 above.

There appears to be no specific exemption from mitigation for environmental impacts for “highways of statewide significance” and it is likely that such mitigation would be required under SEPA, or the federal equivalent, NEPA, if federal funds are used, if it could be argued that the city’s provisions do not apply.

-----Original Message-----  
 From: JChristensen@ci.bellevue.wa.us [mailto:JChristensen@ci.bellevue.wa.us]  
 Sent: Wednesday, July 06, 2005 6:51 PM  
 To: greyskydesign@mac.com  
 Subject: Critical Areas Ordinance Update Involvement

Thank you for your comments regarding the Critical Areas Ordinance update process.  
 Your comments will be forwarded to the Planning Commission. If you've requested additional information, staff will respond to you by the end of the next business day.  
 If you'd like to speak directly with a staff person you may contact:

Kate Berens Legal Planner kberens@ci.bellevue.wa.us 425-452-4616  
 Michael Paine Planning Manager mpaine@ci.bellevue.wa.us 425-452-2739  
 Heidi Bedwell Associate Planner hbedwell@ci.bellevue.wa.us 425-452-4862

Continue to check the City's website for additional information  
<http://www.cityofbellevue.org/page.asp?view=7481>

Comments from Stacie LeBlanc Anderson included:  
 Question: General Comments  
 Response:  
 I would like a staff person from the City of Bellevue to address this question for me a give an answer:

18-1 | Is it POSSIBLE for the State of Washington or Sound Transit to call  
 18-2 | Bellevue Way an "extension" of an HSS (Highway of Statewide Significance) and therefore exempt the City or the State from mitigating noise, wetlands, shorelines, endangered species or other impacts brought about by development or transit?

Please explain the circumstances under which this could or could not be possible, and site documented language in WACs, Federal codes, or City of Bellevue, Sound Transit, RTID or any other applicable documents that support your (the City's) position.

Stacie LeBlanc Anderson has submitted a response.

SUBJECT:  
 Critical Areas Ordinance Update Involvement

If the message from Stacie LeBlanc Anderson is not appropriate, please report it to webmaster@ci.bellevue.wa.us

Contact Information for Stacie LeBlanc Anderson if given is  
 E-Mail: greyskydesign@mac.com  
 Telephone: 425-462-8057

2

**PC Minutes –**

19-1—See response to 9-2 above.

19-2—See response to 7-3 above.

**PC Minutes #19, oral testimony offered at public hearing on July 6, 2005 by Glenn Oliver:**

**19-1** | Mr. Glenn Oliver, 637 Bellevue Way SE, said his concern with the proposed changes is not that they will not protect the environment but that the city in the past has gone to great lengths to expand its control over the use and occupancy of residents. For an example, he said there is a storm drain running through his property which the city calls a creek.

**19-2** | There are no fish present, nor will there ever be, because the only time there is water in the drain is when it is raining. He said he has a covenant with the city for 25 feet, and if the city wants to expand it he will be forced to rescind the covenant. Having the drain classified as a riparian corridor is a problem. The site does not show up on any sensitive area map. If the current proposal is nothing more than a land grab on the part of the city, state law provides that the property be acquired through the proper channels. The drain acts to filter and cool the runoff water before it enters Lake Washington, which is good, but it is not a riparian corridor and it does not support any type of habitat. There is no reason for having to suffer the burden of an additional buffer for an intermittent stream that flows directly to the storm drain. He said it appears his only alternative is to take legal action against the city.

**PC Minutes –**

20-1—A Citizens Advisory Committee (CAC) representing a wide spectrum of interests was appointed by the Bellevue City Council to prepare a recommendation for updating the city's critical area policies. The committee was co-chaired by Nan Campbell and Steve Dennis and from December 2001 through April 2003, the CAC held 22 meetings that were all open to the public, plus two special community meetings.

**PC Minutes #20, oral testimony offered at public hearing on July 6, 2005 by Don Sherrard:**

- 20-1
- Mr. Don Sherrard, 5027 159<sup>th</sup> Place SE, said he served on the critical areas CAC as a scientist and environmentalist. He allowed that while the science used is not perfect it is the best that is available.
  - Public comment was invited on numerous occasions during the nearly two-year study. The proposal is well supported and documented to the extent possible. The person who said planning has not helped should compare Los Angeles or San Jose to Bellevue. He said several years ago when he lived in King County a ditch was approved for location above his property; during the next storm the water ran directly through his garage. It has been argued that property owners should be able to use their properties as they see fit, but that is not always the case; there must always be a recognition of possible damage to the community and to neighboring properties. The state, while responsible for enforcing the Shoreline Management Act, does not effectively do so; the group Save Lake Sammamish a few years ago had to sue the state to enforce the Act to keep developments around the lake from dumping pollution directly into the lake. Good planning is absolutely essential.
  - The proposed document is not perfect but is a good step. The claim that the proposed increase in buffer size will impact existing property owners is not true; no one will have to move their homes or keep from remodeling them.

**PC Minutes –**

21-1—The Regulatory Alternative includes a definition of landslide hazards and contains a provision for a toe of slope setback of 75 feet.

**PC Minutes #21, oral testimony offered at public hearing on July 6, 2005 by Michael Gordon:**

21-1 | Mr. Michael Gordon, 705 Shoreline Drive SE, said there is a very steep slope some 75 feet away from his house. About 15 years ago the slope slid and hit the house below it, knocking it off its foundation. About 12 years ago there was a second slide that narrowly missed another home. People living at the toe of slopes in the Puget Sound area have been killed as a result of slides; numerous homes have been lost. He urged the Commission to move ahead with plans to protect steep slopes and not to make any move that will weaken the current protections. The dangers are real.

**PC Minutes –**

22-1—See responses to 6-2, 6-3, and 6-4 above.

22-2— The city more directly regulates the impacts of new and redevelopment on stormwater through the utilities code. Those provisions are not included in the critical areas update process, but are currently under review as part of the city's compliance with the Clean Water Act (CWA).

**PC Minutes #22, oral testimony offered at public hearing on July 6, 2005 by Frank Seldon:**

- 22-1 | Mr. Frank Seldon, 14021 SE 10<sup>th</sup> Street, allowed that the proposed critical areas ordinance will not apply to his property in any way. He suggested that much of what is being proposed is not necessary. While it may be true that the state does not enforce the Shoreline Management Act as it should, it still has the jurisdiction to do so. The advice of Mr. Klinge offered earlier in the public hearing relative to whether shorelines should be included in the ordinance at all should be carefully considered.
- 22-2 | No changes to the current ordinance are necessary. However, if changes are to be made, they should be along the lines of the staff proposal relative to the treatment of existing residential developments; existing homes should not be made nonconforming. There should also be other ways to address runoff outside of changing the impervious surface limits.

**PC Minutes –**

23-1—See response to 6-2, 6-3 and 6-4 above.

23-2—The standard requirements for new docks include the standards developed by the state and federal agencies that also have jurisdiction over these proposals, in order to streamline the process and provide certainty for an applicant.

The standard requirements are not the exclusive way a new dock could be built in Bellevue; a critical areas report process could be undertaken to modify those standards, similar to the biological evaluation process required by the state and federal agencies.

The Regulatory Alternative was modified so that it is clear that a biological evaluation prepared for a dock proposal for federal and state agencies may be used to satisfy the critical area report requirement for the city.

23-3—The city has established applicable fees and cost recovery objectives to cover the expense of the permitting function. These fees and charges are not established through the land use code, but by the city council in annual fee ordinances.

The city council has authority for considering whether any reduced fee or waiver is appropriate for administering dock or other permit types.

**PC Minutes #23, oral testimony offered at public hearing on July 6, 2005 by Dave Douglass:**

23-1 | Mr. Dave Douglass, a resident of Snohomish, said he works as a permit coordinator for waterfront construction. He allowed that the land use staff in Bellevue are wonderful to work with. He questioned how an exemption for a pier repair or bulkhead can be conditioned if it is categorically exempt in the WAC from requiring a permit.

23-2 | He also questioned why Bellevue is trying to assume the responsibilities of the state and federal governments in protecting critical habitat and protected species. The proposal appears to simply duplicate the process. Several of the requirements proposed for a simple pier repair will knock a project up a level at the Corps of Engineers and require a higher level of permitting there. Pier repair that involves all above water work, not touching the pilings, is called a no effect by the Corps of Engineers; they do not even require any grating. The proposal for Bellevue will require property owners to narrow the nearshore walkway to only four feet wide and install grating.

The Regional General Permit offered by the Corps does make things easier, but they are only suggested guidelines and not requirements; applicants are still allowed to pursue individual permits under the Corps guidelines. If a critical areas report done by a professional biologist is present to city staff with a rendering of not likely to affect listed species, that recommendation should be accepted, but there is nothing in the proposal that says it will be. Currently, such reports generated at the expense of a property owner goes to the Corps, to US Fish and Wildlife, to NOAA and to WVFW, and they argue about it and claim it is a biased report. The proposal relative to the maximum size on piers should be removed. The RGP limits a single family residence pier to 480 square feet; for joint use the limit is 700 square feet, and for moor owners 1,000 square feet. That does not take into consideration that in some shoreline areas the water depth only gradually increases. In one instance the water depth at 228 feet from the shore is only six feet deep; under the proposal, the pier would have to be four inches wide. The Corps guidelines were written based on best available science, but they do not work for everyone. In nearly every case, the best available science reports being used by government to craft regulations were funded by government agencies with a desired outcome.

23-3 | State and federal review agencies work with applicants at no cost, but Bellevue charges for its review work.

**PC Minutes –**

24-1—The proposed regulations establish both a certain path for development through compliance with the general standards, and a flexible path based on site specific information. Because an applicant must develop the site-specific information prior to being able to demonstrate that the proposal leads to at least as much protection of the critical area as standard provisions, there is an inherent amount of uncertainty in that flexibility.

**PC Minutes #24, oral testimony offered at public hearing on July 6, 2005 by Sarah Schrock:**

24-1 Ms. Sarah Schrock, 12604 NE 7<sup>th</sup> Street, offered her support for the staff approach regarding the conformity and nonconformity of existing residences. She allowed that there should be flexibility built in, but pointed out that by allowing flexibility the level of discussion around each individual item will be increased, making the permitting process longer and more cumbersome. It would be better to take the specific flexibilities and formalize them. Residents could then present their plans within the specific flexibility. Expansions of existing dwellings away from or into critical areas are allowed under the proposal, but that flexibility should be more specifically spelled out.

See response to 5-5 above.

**PC Minutes –**

25-1— No response.

**PC Minutes #25, oral testimony offered at public hearing on July 6, 2005 by Lou Phinney:**

25-1 | Mr. Lou Phinney, address not given, said his advice could be summed up in a single word:  
Don't.

**PC Minutes –**

26-1—The proposed regulations do allow a property owner to continue to maintain landscaped areas and landscape features that are located in critical areas.

Flexibility is granted for owners to modify some portions of a critical area buffer in exchange for enhancing other areas of the buffer (typically by enhancing native plantings).

26-2—The city monitors some fish counts now, which can be used to see over time, at least anecdotally what changes have occurred in fish numbers. Any change may or may not be directly attributable to changed regulations.

See response to 7-3 above.

26-3—Proposal does not include recording documents on SF project except where a CA or buffer is modified at the discretion of the director.

**PC Minutes #26, oral testimony offered at public hearing on July 6, 2005 by Steve O'Donnell:**

- 26-1 | Mr. Steve O'Donnell, address not given, suggested that some credit should be given for all of the landscaping private property owners have installed. He said when he purchased his property the vegetation had been completely stripped off of it with the exception of a few fir trees. Since that time thousands have been spent on landscaping. When addressing the no touch zones, some credit should be given to homeowners who have developed their properties; there should be some formula to use.
- 26-2 | He also suggested that there should be some baseline counts for the fish that are to be protected. There should also be some clarity with regard to the purpose and goals of the regulations. If the goal is to increase the number of fish in the streams, there will need to be some baseline figures developed so it can be known the regulations are working. He asked if there is any best available science documentation that shows making the proposed changes will in fact increase the number of fish in the streams.
- 26-3 | He voiced concern over requiring a designation on a deed of trust or title to property and requiring the recording of a covenant or change in status of the title or deed of trust, either prior to or at the time of a sale, that would require disclosure on Form 17 that there are new restrictions or covenants, or that the property has a nonconforming status. Property owners should be listed as an endangered species. They pay thousands per year in property taxes, and changes to property designation should be made very carefully; grandfathering existing properties might be the best approach, or applying the new regulations only to new development. The Commission was urged to exercise great restraint.

**PC Minutes –**

27-1—See responses to 9-2 and 22-2 above.

27-2— The Regulatory Alternative does not include a recording on the title.

**PC Minutes #27, oral testimony offered at public hearing on July 6, 2005 by Joel Ulrich:**

27-1 | Mr. Joel Ulrich, 1060 134<sup>th</sup> Avenue NE, said his property lies along Kelsey Creek. He said every time there is a heavy rainstorm the creek rises very quickly. When the home was purchased in 1968 there were a lot of salmon in the stream, but they are largely gone.

27-2 | The storm runoff from the area shopping malls all ends up in Kelsey Creek, and it happens quickly. When the holding ponds fill up, the water overflows directly into the creek. If the city is serious about restoring habitat, development of the shopping malls must be stopped. To make property owners the villains is missing the point entirely. If the water runoff from the commercial areas is not treated before it flows into the creek, there will never be any fish in the stream. The Commission was encouraged to look at the big picture.

**PC Minutes –**

28-1—See response to 8-1 above.

**PC Minutes #28, oral testimony offered at public hearing on July 6, 2005 by Molly Malchow:**

28-1 Ms. Molly Malchow, 148<sup>th</sup> Avenue NE, said she is a new Bellevue resident living alongside Kelsey Creek. She said she is concerned about erosion and preserving wetland areas. Before any final decisions are made, there should be more opportunity for public comment. Great effort should be put into finding a solution that will work for everyone.

**PC Minutes –**

29-1—See response to 8-2 above.

29-2—See responses to 5-1 and 7-2 above.

**PC Minutes #29, oral testimony offered at public hearing on July 6, 2005 by Doug Ackerman:**

- 29-1 | Mr. Doug Ackerman, a resident of Kirkland, agreed with the comment of Ms. Hague regarding the need to map all critical areas.
- 29-2 | The changes being proposed are scary to many property owners, yet it is clear that even the city is not sure how the regulations will ultimately affect people, or even who is going to be affected. There has been talk that the proposal will not impact current property owners, but that appears to be narrow minded. Any restrictions on the kinds of remodeling that can be done will have a negative impact on property values. Properties are in fact investments, and the proposal could severely damage those investments. The city should be very careful in analyzing how the proposed regulations will impact people.

**PC Minutes –**

30-1—The Planning Commission included a limit on impervious surfaces city-wide in recognition that development throughout the city impacts critical areas.

The downtown is exempt from these critical areas ordinances. This

proposal updates the city's existing critical areas protections, which do exempt downtown already. That was a policy decision made in 1987 when the provisions were originally adopted, which has not been reconsidered with this effort.

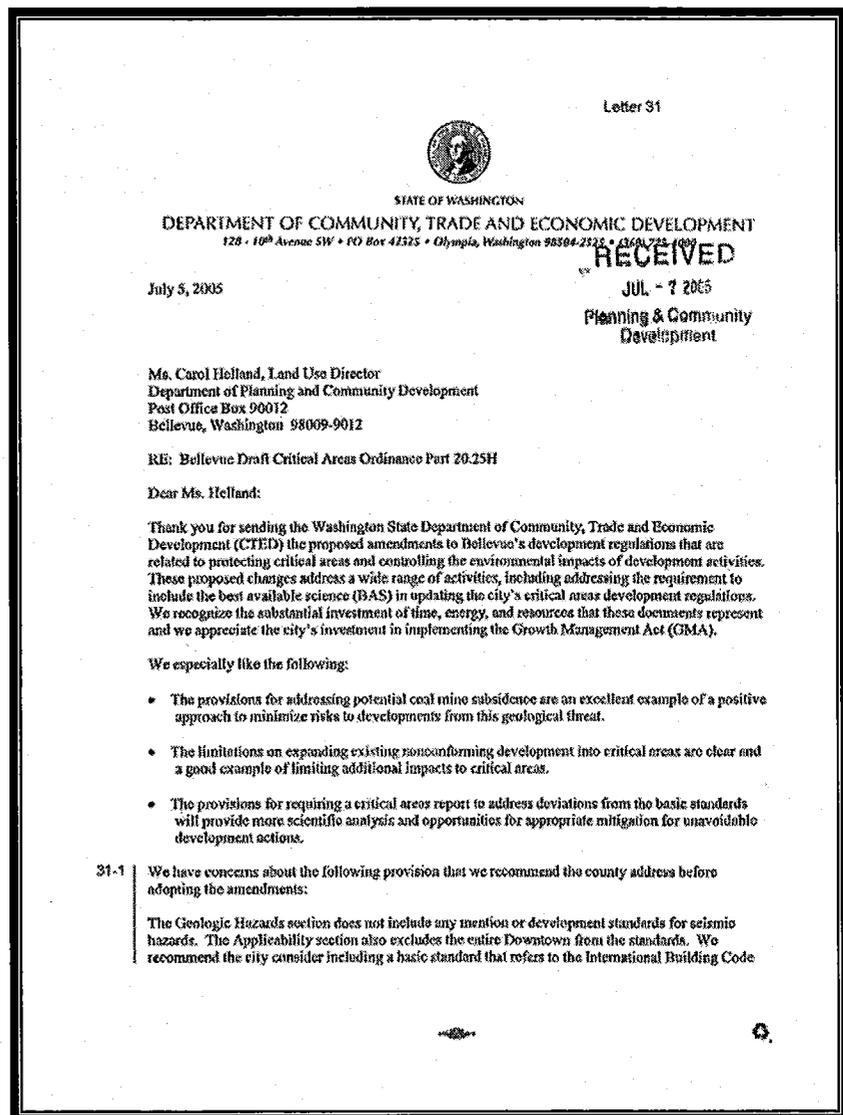
The city's remaining commercial areas are covered by the provisions, in an equitable way with residential properties. In fact, the rules applicable to existing development are more generous for existing residential development than for commercial development. Single-family residences may be expanded into a critical area in some cases where there is no feasible alternative, while multifamily and commercial development does not have that opportunity. The expanded stream, wetland and shoreline buffers apply throughout the city, to residential and commercial properties.

**PC Minutes #30, oral testimony offered at public hearing on July 6, 2005 by Lucy Acoby:**

30-1 | Ms. Lucy Acoby, a resident on West Lake Sammamish Parkway, agreed with the previous speaker. She said the emphasis on improving the environment and safeguarding critical areas should be evenly distributed to all property owners, including commercial properties. The costs should not be shouldered solely by the property owners adjacent to critical areas.

**Letter #31 – Douglas Peters**

31-1—The City of Bellevue has adopted the International Building Code (IBC), and its requirements for seismic hazards apply to new construction and certain redevelopment proposals.



31-2—We believe that the wetland rating system developed by the Department of Ecology takes into account those wetlands that function as part of a broader context.

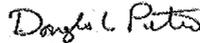
31-3—The comment seems to indicate a misunderstanding that the city does have existing regulations protecting critical areas in place. The current regulations would stay in place until December 1, when the new provisions take effect.

Ms. Carol Holland  
July 5, 2005  
Page 2

- 31-1 for structural siting and design that addresses seismic risks, and a standard that avoids siting any new essential public facilities within high-risk seismic areas, such as on soils subject to liquefaction during ground shaking. As seismic risks in the Pacific Northwest extend throughout the area, the city should consider applying the seismic risk standards to the downtown area.
- 31-2 We have the following suggestions to improve the development regulations that we encourage the city to consider prior to adoption.
- In section .035 A., Category IV wetlands of 2,500 square feet or smaller are exempted from regulation. The available science about small wetlands indicates that they can have a significant habitat function for some species, and they can function in concert with other such small wetlands in assisting with migration of water dependent species. We encourage the city to consider including provisions for addressing groupings of smaller Category IV wetlands within a specific geographic area as a whole rather than as separate wetlands, and thus above the exempt size standard. Pierce County has adopted excellent language for how to address this issue, and could be an example worth considering.
- 31-3 • In section .035 B., a proposed effective date of December 1, 2005 is stated for applicability of the ordinance provisions. We suggest the city consider an earlier date for those basic protective standards that the city has not changed in order to support the overall concept of designating and protecting critical areas since the early 1990s. This approach would be consistent with the provisions of Part 20.25H.065 A.1.c.i.(B) which address incremental expansions into critical area buffers by existing nonconforming uses.

Congratulations to you and your staff for the good work these amendments embody. If you have any questions or concerns about our comments or any other growth management issues, please call Douglas Peters at (360) 725-3046, or Iko Nwankwo at (360) 725-3056. We extend our continued support to Pierce County in achieving the goals of growth management.

Sincerely,



Douglas Peters  
Senior Planner  
Growth Management Services

DP:lw

cc: Michael Paine, City of Bellevue Planning Manager  
Gretchen Lux, Department of Ecology - NWRO  
Kathy Taylor, Puget Sound Action Team  
Iko Nwankwo, Technical and Financial Assistance Manager, Growth Management Services, CTED  
Leonard Bauer, AICP, Managing Director, Growth Management Services, CTED  
David Andersen, AICP, Planning Review Team Manager, Growth Management Services, CTED

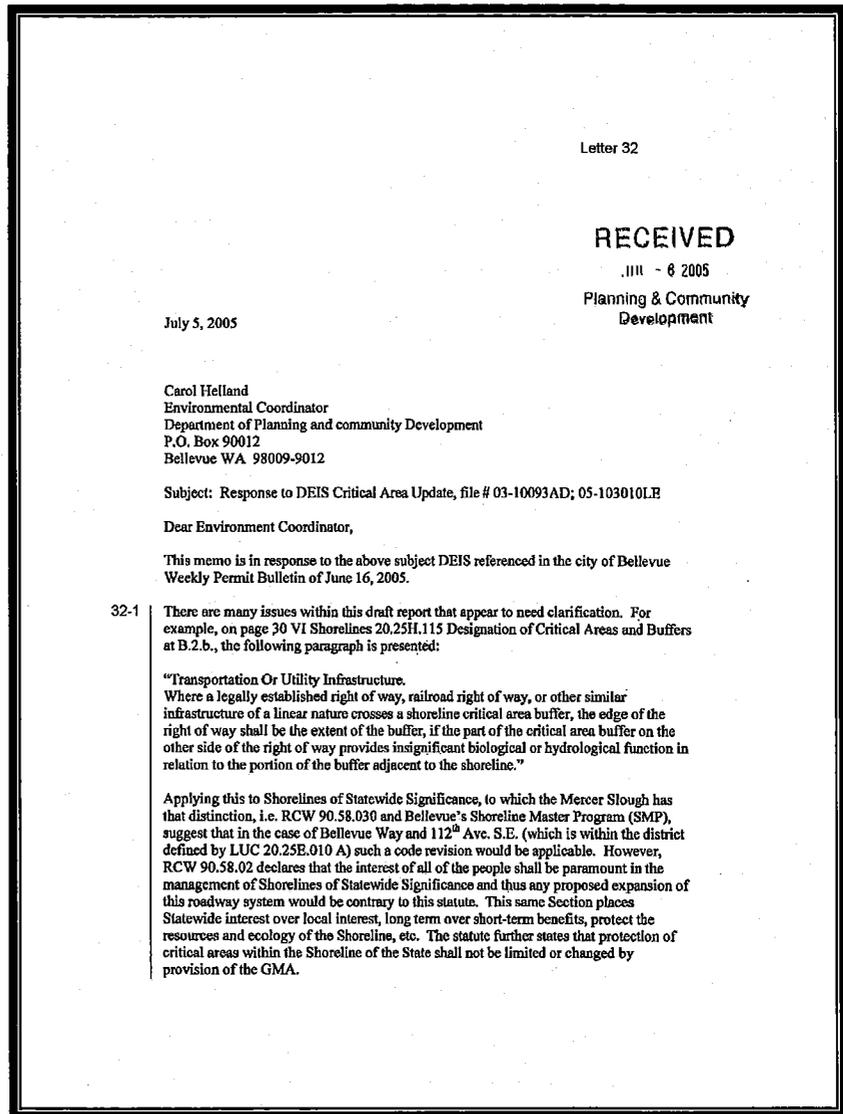
**Letter #32 – Geoffrey J. Bidwell**

32-1—The proposed amendments recognize that there is little value in imposing critical area buffer restrictions on that part of a buffer that is separated from the critical area by a right-of-way, railroad, or similar impediment.

The language cited does not, mean, however, that any as yet developed right-of-way can be exempt from buffer requirements; see response to 14-2 above.

Allowance for essential facilities and roads as described in 14-2 above is not inconsistent with the SMA, no specific prohibition against utility facilities or roads is expressed in the city's shoreline regulations and policies that conflicts with the proposed ordinance; see response to 6-3, 6-4, and 6-5 above regarding relationship between SMA and GMA, and SMA standards of critical area protection.

The Regulatory Alternative was modified so that the provisions regarding repair, maintenance and expansion of existing rights of way has a preference for expansions outside the critical area buffer where legally established right of way within a critical area buffer has not yet been disturbed.



32-2—Proposals to repair and maintain right-of-way are not considered under the nonconforming provisions of the proposed ordinance, but rather under provisions for certain existing uses in 20.25H.060.

Proposals to expand existing rights-of-way into critical areas or critical area buffers is governed under 20.25H.070.

See response to 14-2 and 18-2 above.

32-1 The State Administrative Code WAC 173-26-241 (2) (k) Transportation and Parking states:

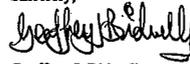
"Plan, locate and design transportation and parking facilities where routes will have the least possible adverse affect...will not result in net loss of ecological function...where other options are available and feasible, new road or road expansion should not be built within the Shoreline jurisdiction."

32-2 405 and other routes are available and feasible. As it stands, Bellevue Way with its 4 lanes is a nonconforming development pursuant to Bellevue LUC 20.25E.055 Paragraph B, which states:

"Nonconforming development may be continued, provided that it is not enlarged, intensified, increased or altered in any way which increases its nonconformity;"

I would appreciate a clarification to the language of the DEIS and the State Shoreline Management Act RCW 90.58, and its implications to Bellevue's SMP with respect to the Mercer Sough and of the City's promotion of Bellevue Way and 112<sup>th</sup> Ave. S.E. for traffic growth through Bellevue's neighborhoods and sensitive areas.

Sincerely,



Geoffrey J. Bidwell  
1600 109<sup>th</sup> Ave. S.E.  
Bellevue, WA 98004

Letter #33 – Audrey Kelley

33-1—See response to 8-1 above.

Letter 33



**Critical Areas Update**  
Draft Environmental Impact Statement  
Public Hearing



### COMMENT FORM

**CONTACT INFORMATION (OPTIONAL)**

NAME: <i>Audrey Kelley</i>			
ADDRESS: <i>416-156th Pl. NE</i>	CITY: <i>Bellevue WA</i>	STATE: <i>WA</i>	ZIP: <i>98008</i>
E-MAIL:			

Please add my name to your mailing list.  Yes  No

**COMMENTS**

1. Please provide comments on the Regulatory Alternative.

2. Please provide comments on the City Programs Alternative.

3. Other comments:

33-1 *There are apparently some local experts whom you could call on to get some balanced advice. Steve Johnson and Charles Kluge gave excellent advice—please get some more input from them!*

Submit comments at the meeting or mail comments to Carol Helland, Environmental Coordinator, City of Bellevue, Department of Planning & Community Development, P.O. Box 90012, Bellevue, WA 98009-9012

For further information, go to our website: [www.cityofbellevue.org/page.asp?view=7481](http://www.cityofbellevue.org/page.asp?view=7481)

Letter #34 – Helen Deer

34-1—No response.



Letter 34

HELEN DEER  
14712 SE 45th PL  
Bellevue, WA 98006

Ms. Helen Berens  
11511 Main St.  
Bellevue, WA 98004

Dear Ms. Berens,

34-1

As you can see by my return address above, I live in Somerset Woods. My back yard adjoins the creek vital in Bellevue's planning currently. I am the owner.

Since I do not drive in evening hours, I cannot attend the meeting planned for this matter on Wed, July 6, at 7:00pm. I am a senior and have had hospital stays and operations for the last few years. Currently, my health is good however and I do wish to cooperate in every way with this project.

Your assistant, Jeannie, has met to request to be placed on your mailing list for all procedures for this matter.

Thank you for your cooperation!  
Sincerely,  
Helen G. Deer

**Letter #35 – Victor M. Loehrer**

35-1—Letter describes wetland that impacts property as insignificant and degraded. In this case, the critical area report may be available to allow reduction in the otherwise applicable setback in such a circumstance, providing exactly the flexibility sought.

July 11, 2005

City of Bellevue  
Department of Planning & Community Development  
P.O. Box 90012  
Bellevue, WA 98009-9012

Letter 35  
Sato Corporation  
Overlake Management Co.  
John Y. Sato & Associates  
11225 S.E. 6<sup>th</sup> Street  
Suite 220  
Bellevue, Washington 98004  
425 / 454-4454

RECEIVED  
JUL 11 2005  
RE: 1614 – 118<sup>th</sup> Ave. S.E.  
Bellevue, WA  
Critical Area Ordinance

Gentlemen:  
Planning & Community  
Development

35-1 In September 2002 we were completing our building permit reviews for a 55,000 square foot office/warehouse building on the referenced property when the economy changed course and vacancy rates in Bellevue reached 35%. Even projects that were already started (i.e. Lincoln Plaza, Bellevue Technology Tower, etc.) were cancelled or stopped.

Our choice was to proceed with obtaining the building permit which included costs of over \$100,000.00 in fees, traffic mitigation, developers extension agreement, etc. Requirements of the developer's extension agreement were 18 months to complete – the building permit could be renewed again for a limited time if progress was made on the site construction.

However, with over \$350,000.00 already spent on Architectural Engineering, permit fees and consultants it would not have been prudent on our part to spend more knowing that the economy would not recover soon enough to provide economic feasibility to the project. Even today, with the area apparently recovering, the vacancy rate for office space is still 13% in the Bellevue-Central Business District and even more in the fringe areas. Therefore, at our request the City of Bellevue cancelled further review of our project on October 25, 2002. (Permit application numbers 01-106414GD/01-106412BB)

If the proposed setback requirements are now changed on this project, a project that was acceptable 2-½ years ago, to those proposed this project can no longer be built. We are affected by set backs in two instances:

1. Wetlands: A non-descript area initially created from water run off from the Interstate 405 freeway construction. We are already providing a 50-foot buffer. Arbitrarily setting a buffer of 110-feet from this insignificant wetland area is not correct. Some flexibility needs to be put into this ordinance that provides variations in setback requirements on a site specific basis or create another wetland category and buffer requirements for those areas created from drainage ditches which are substantially different than natural wetlands.

Architect / Developer / General Contractor / Property Management

35-2—Critical area report provides precisely the flexibility sought.

35-3—Landslide hazard definition is narrower than author believes. In addition to size and percent slope criteria stated, the area must also include some other indicator of landslide hazard to be regulated.

35-4—Critical area report allows modification and even elimination of setback for slopes with geotechnical report.

Slopes of less than 1,000 square feet and less than 10 feet of rise are exempt from regulation.

Slopes of any rise may be graded with geotechnical support and when no habitat structure is present.

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City of Bellevue  
Department of Planning & Community Development  
July 11, 2005

35-2 | 2. Steep Slopes: Our site provides for an undisturbed slope area of approximately 8000 square feet, part of which would be considered a steep slope as the grade is at least 40%. Our proposal had a driveway along the toe of this slope which already has a small retaining wall built from a previous project. Soils reports for this area shows the ground is sound and the approved construction plans required no setbacks from the toe of this slope whatsoever. The soils of this area have not changed but a setback of 75 feet from the toe of this area has now been proposed. Again we urge criteria that is based on site specific situations with geological support providing common sense solutions in determining a proper setback.

35-3 | The Critical Area Study Session of November 17, 2004 outlines three different slope types:

1. Gentle – less than 15%
2. Moderate – 15% to 40% (our project fits within this category) with no mention of setbacks
3. Steep

The new criteria now proposed is for two categories:

1. Landslide Hazard – 15% or more with more than a 10 foot of rise. (Our site now fits within this category even though the hillside is geologically sound and showed no disturbance at the time of the recent Nisqually earthquake.)
2. Steep Slopes.

35-4 | The proposed Critical Area Ordinance is in conflict with the Comprehensive Plan Update dated September 1, 2004 which states that in regards to slopes variable factors such as soils types, underlying geological materials, etc., should be considered. Consideration is given to creative solutions with the idea that the degree of development hazard depends on the type of soil and underlying geological conditions. The proposed critical area update ignores these ideas. Even a slope of 15% is automatically declared a critical area and required to have a setback of 75 feet from the toe. With no room for creative solutions such as a retaining wall, or the ability of city planners to use common sense criteria in determining a proper setback, a landowner can be unfairly paralyzed in creating a possible development. A balance in the relationship between the development and natural environment is not achieved by an inflexible standard which ignores criteria within the policy's own goal statement. Don't regulate steep slopes but geological hazards!

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City of Bellevue  
Department of Planning & Community Development  
July 11, 2005

35-4 | Furthermore, in regards to the impact on the private sector by these guidelines, there is a great deal of investment and planning currently in process which will be unfairly and adversely impacted by the imposition of this new arbitrary standard. The change in classification and setback requirements for the previously approved slope requirements without regard to the cost on the public sector is irresponsible, will cost citizens and landowners a substantial amount of money and discourage future development and infusion of support into our Bellevue economy. Under the proposed changes the expensive real estate communities of Somerset and Summit would never have been built. Even now it will be difficult to improve those properties with the proposed changes. Residential values will probably decrease as these areas become "non-conforming".

Bellevue is too diverse in its area to try and fit "Critical Areas" in just several categories without providing maps of all areas so site specific criteria can be provided. We urge you not to take a shot gun approach to this important piece of legislation but find a balance that will serve all members of the community. It is not sound judgment to provide unnecessary artificial setbacks in all instances that decrease development area, make existing projects non-conforming, which in turn also decreases the real estate tax base – and for no particular reason. There are now sensible restrictions in the present codes. Let's continue to work with those.

Please review this letter during the decision making in regards to the proposed Critical Area Ordinance. Such broad and sweeping changes will affect numerous City of Bellevue landowners and citizens, both residential and commercial, and result in essentially a condemnation of their land without any compensation. Responsible change must be implemented to balance all of the relevant interests. Thank you.

Sincerely,



Victor M. Lochrer  
John Y. Sato & Associates

**Letter #36 – Tony Schuler**

36-1—The city is committed to public education and outreach and training materials to prepare for changed regulations, if adopted by the council.

36-2—The ordinance allows for a “vegetation maintenance plan” that would allow the property owner to periodically do trimming and maintenance within critical areas in a way that ensures no damage to critical area, but can serve some benefits for property owner.

Ordinance would also establish clear allowance and procedures for removing hazard trees from critical areas.

Finally, ordinance codifies allowance for continued maintenance of formal landscaped areas and landscape features if established prior to the effective date.

36-3—See response to 36-1 above.

Letter 36    Page 1 of 1

From: tonyschuler@comcast.net  
Sent: Wednesday, July 13, 2005 11:02 AM  
To: Berens, Mary Kale  
Subject: Critical Areas Update

Kate,  
Thanks for talking with me today about the Critical Areas Update being proposed. I think it would be very helpful if the Update included:

36-1 1) More information about what property owners can do to manage their land in Critical Areas to serve both individual property owner & public interests.  
- For example, city regs & procedures are fairly clear about what constitutes "clearing", but there is not much clarity about acceptable or recommended "pruning" on steep slopes.  
- The city relies too much on its policy of urging neighbors to contact the city for answers to questions, because too often the city response is not satisfactory. I know too many neighbors who have learned the hard way that it's better to "don't ask, don't tell". More information up-front would solve some of this.

36-2 2) More latitude from the city toward allowing property owners to perform benign routine maintenance in critical areas w/o need for a permit or asking the city for permission. This would help convey a sense of partnership between the city & property owners toward overall better land maintenance.

36-3 3) Less attention on permitting requirements, more attention on publicizing what outcomes are unwanted or illegal & how they will be prosecuted:  
- While prevention is usually the best course of action, I don't think many property owners make the connection between city permitting requirements and the outcomes these requirements are trying to prevent. Several of my neighbors have low regard for the Land Use Dept, because of their negative experiences and their belief that the dept is on some bureaucratic power trip.  
- Most property owner actions on Critical Area land are beneficial or benign at worst. But the regs require permitting or oversight for even the smallest and most benign actions. I think people would get the idea better if they understood they can't create erosion, excessive run-off, or threaten neighbors with falling trees.

thx  
Tony Schuler  
4716 142nd Place SE

7/14/2005

**Letter #37 – Stacie LeBlanc Anderson**

**37-1—Standard of review for CAR must demonstrate at least as good protection.**

Letter 37

**From:** Christensen, Jeanie  
**Sent:** Thursday, July 07, 2005 9:13 AM  
**To:** Berens, Mary Kate; Paine, Michael; Bedwell, Heidi  
**Subject:** FW: Critical Areas Ordinance Update Involvement

I've added her to the electronic parties of record list.

Jeanie Christensen  
 Land Use - PCD  
 City of Bellevue  
 Phone 425-452-4392  
 Fax 425-452-5247

-----Original Message-----  
**From:** JChristensen@ci.bellevue.wa.us [mailto:JChristensen@ci.bellevue.wa.us]  
**Sent:** Wednesday, July 06, 2005 6:10 PM  
**To:** greyskydesign@mac.com  
**Subject:** Critical Areas Ordinance Update Involvement

Thank you for your comments regarding the Critical Areas Ordinance update process. Your comments will be forwarded to the Planning Commission. If you've requested additional information, staff will respond to you by the end of the next business day. If you'd like to speak directly with a staff person you may contact:

Kate Berens Legal Planner mkberens@ci.bellevue.wa.us 425-452-4616  
 Michael Paine Planning Manager mpaine@ci.bellevue.wa.us 425-452-2739  
 Heidi Bedwell Associate Planner hbedwell@ci.bellevue.wa.us 425-452-4862

Continue to check the City's website for additional information  
<http://www.cityofbellevue.org/page.asp?view=7481>

Comments from Stacie LeBlanc Anderson included:  
**Question:** What information would you like to receive from the City to help you make decisions about how to manage your property near critical areas in a way that is sensitive to fish & wildlife habitat needs?  
**Response:** Information on what to plant to clean water, air on our properties near Critical Areas; how to attract and feed birds/butterflies/frogs, etc.

**Question:** In your experience, what changes have you seen in the environment while enjoying the natural areas of Bellevue? How have those changes impacted your experience, and would you characterize them as positive or negative changes?  
**Response:** We no longer have crickets in Surrey Downs, as we did when I was a child.

**Question:** Provide suggestions for strategies/values/concerns that the City should consider as it drafts regulations implementing the critical areas policies.  
**Response:** We should be a leader in our treatment and consideration of noise pollution on endangered (and other species) living in our critical areas.

**37-1** **Question:** General Comments  
**Response:** My concern is that revising the Critical Areas Ordinance language from the existing code actually gives TOO MUCH "flexibility" to the City to make changes to and near wetlands that have sweeping impacts to the wetlands, shorelines, endangered species, and to the adjacent neighborhoods and

1

37-1 | their residents.

These wetlands belong to all citizens, and should not be impacted upon to provide transit options that SHOULD be brought into the Downtown by use of the recent Access Bellevue projects that cost taxpayers \$139 million! The bulk of the traffic should be brought in from NE 4th, NE6th, and NE8th, etc., and not through expanding lanes into the wetlands or using HCT on Bellevue Way and/or 112th Avenue SE near Mercer Slough, impacting quality of life for endangered species and endangered neighborhoods!

The City of Bellevue should be a leader in protecting and enhancing both the wetlands and the neighborhoods, and the Critical Areas Ordinance language should not be changed to create and facilitate an even more unbalanced field while weighing development, transit, commerce and existing neighborhood future interests.

Stacie LeBlanc Anderson has submitted a response.

SUBJECT:  
Critical Areas Ordinance Update Involvement

If the message from Stacie LeBlanc Anderson is not appropriate, please report it to [webmaster@ci.bellevue.wa.us](mailto:webmaster@ci.bellevue.wa.us)

Contact Information for Stacie LeBlanc Anderson if given is  
E-Mail: [greyskydesign@mac.com](mailto:greyskydesign@mac.com)  
Telephone: 425-462-8057

## Letter #38 – Scott &amp; Kathy Kaseburg

38-1—Addressed by commission's adoption of the staff approach for existing structures. This includes drawing the buffer around the building footprint.

38-2—The intent here is to address the dock; boatlifts and moorage piles are separately addressed. Concern about vagueness will be addressed through the addition of definitions and review of the ordinance for consistent use of terms.

38-3—Although no clear statement is made about this technique for increasing the stability of existing piles, it is a technique that may be allowed. Generally, repair and maintenance activities area allowed, with some proposals triggering compliance with standards. Specifically relating to piles, those triggers involve removal and replacement of existing piles. The technique described in the comment letter is not removal and replacement, and thus would not trigger compliance under city rules. Because the technique involves work in the water, the U.S. Army Corps of Engineers and Washington Department of Fish & Wildlife will also have permitting authority and may impose additional mitigation requirements.

38-4— The standard is taken from the requirements for the Corps of Engineers regional general permit. Staff does not find any justification for requiring the 12-foot dimension as it relates to best available science. Although this limit will continue to exist in the state and federal permitting requirements, it is appropriate to eliminate from the city code.

The regulatory alternative was modified to remove this requirement.

38-5—This provision is not a change from the existing regulations. The regulations require the recording of an agreement with adjoining property owners only if the structure will be closer than 12 feet to the property line.

Letter 38

From: Scott & Kathy Kaseburg [kaseburg@localnet.com]  
 Sent: Monday, July 18, 2005 11:01 PM  
 To: PlanningCommission  
 Cc: Bedwell, Heidi  
 Subject: Input on Draft Critical Areas Update

38-1 | 20.25E.055, C, 1, ii  
 The 100% replacement value restriction is overly burdensome. At least allow someone to double their structure. All of the setback and other restrictions will more than constrain development. If an owner was to tear down a single story structure and make a two story structure within the same footprint would require a 200% factor. Please consider raising this threshold.

38-2 | 20.25E.080, N, 1, a  
 "only one moorage facility is permitted . . ." is vague. Does that mean only one boat? I expect the intention is one dock. Is the intention here to prohibit someone from having both a dock and a buoy? I hope not, because the regulations would drive us towards longer docks.

38-3 | 20.25E.080, N, 1, b, v  
 No provision is made for using HDPE piping over existing pilings. Filing these with concrete provides a solution without disturbing the bottom by driving new piles. Is there an intention to eliminate repairs that utilize what has already been put into place?

38-4 | 20.25E.080, N, 1, b, vi (Moorage Pile Specifications)  
 I can see no reasonable basis to require moorage piling to be within 12 feet of a dock structure. What difference does it make to marine life if it is 12' or 16' away? Most boats of any size are wider than 12' and such a requirement as is drafted would drive designs that would have dock on both sides of the vessel, where two simple pilings would do fine. Furthermore, limiting a moorage to two is unnecessarily restrictive. A moorage pile is very unobtrusive to the environment; little more of an impact than a large rock. I'm aware that the Army Corps requirements have similar language; we need not repeat the requirement if it isn't justified. Consider eliminating this section.

38-5 | 20.25E.080, N, 1, b, viii  
 Setbacks 12' from any adjoining property owners is a reasonable limitation, but making it as a covenant that would need to be recorded on a deed is a bit over-the-top. Perhaps request letters of agreement be included in the building permit application process, just like most variances require.

thanks,  
 Scott Kaseburg  
 5443 Pleasure Point Lane SE  
 Bellevue, WA 98006

**Letter #39 – Thomas A. Kinsman**

39-1—Modification of ordinance to staff approach to nonconforming structures addresses concern about impact to existing structures in part; previous responses have detailed city efforts to notify citizens and property owners.

Letter 39

July 15, 2003

Planning Commission  
City of Bellevue  
Bellevue, Washington 98009-9012

Re: Proposed Critical Areas Ordinance

Dear Planning Commission Members:

39-1 | If you recall, I spoke at the public hearing you held on July 6, 2005. At the hearing, I submitted a letter to Director Carol Helland that reflected my comments. In my letter and my comments, I was not supportive of the proposed significant increases in regulations, and I write this letter to further clarify my concerns.

Based on input from City's Heidi Bedwell, I understand that City staff will provide a response to my comments which will be shared with the Commission as well as ultimately with me. I further understand that I have the opportunity to provide comments to you again after seeing how the City has addressed my concerns.

Unfortunately I will be out of town during the upcoming critical period of time at a family reunion, and so will not have the opportunity to see the City's response and provide timely comment. However, short of that, I will take this opportunity to better explain my position.

I write this letter to you as a long term Bellevue home owner. I have lived on 134<sup>th</sup> Avenue NE in Bellevue since 1969 – at my present address since 1980 and before that just north of the bridge on 134<sup>th</sup> Avenue NE that crosses Kelsey Creek. At my present address, Kelsey Creek crosses the western end on my property.

The effort put forth by the City on the proposed changes to the critical areas regulations is large and has been going on for a long time. If considered a huge rolling ball, it is very difficult for individual citizens to redirect such a ball, let alone stop it. However, the Commission plays a key roll and is in place to look at the big picture, not get mired down into the details, and make very important recommendations to the City Council.

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Thomas A. Kinsman  
829 134<sup>th</sup> Avenue NE, Bellevue, Washington 98005 \* 425-747-9312 \* takinsman@msn.com

39-2—With the addition of impervious surface standards, overall impervious surface will not increase as greatly as under the existing provisions.

39-1 I'd like to make two points: the first being about the amount of response you've received from the public about the proposed changes, and second about erosion created by the storm surges in Kelsey Creek.

The first point involves the relatively low number of public comments made during the current process. I understand from the City's Kate Berens that the advertising effort for the critical area changes and the July 6<sup>th</sup> public hearing totaled from 4000 – 4500 mailings. The low response could be interpreted as strong vote in favor of the proposed changes – after all a very small percentage of this number logged any complaints. However other reasons can cause the low response such as general apathy and lack of understanding of the impacts of the proposed changes. I would hope that the Commission will take a broad view and include these considerations, rather than take the position that the property owners had their chance, and didn't respond, so all must be OK.

The public statements made in the City staff's presentations are correct in that the proposed rules will not have any impact at all on existing development.....that is, there is nothing retroactive with the proposed rules. If this provides comfort to homeowners, however, my opinion is that it is only a short term comfort. In fact a much greater web of encumbrances will have been placed on properties adjacent to Kelsey Creek, and these will be strongly felt when alteration and/or redevelopment occurs in future years.

My 25 year regulatory experience working for the City of Seattle says there is nothing more frustrating for a citizen than dealing with a regulator who recognizes the validity of a citizen's individual circumstance, but is constrained by the words in the regulation such that he/she can not exercise good judgment. For this reason I applaud the City land use staff in its credible attempt to make the rules flexible. The existing rules should be amended to make them more flexible, even in the unlikely circumstance that the proposed rules are ultimately rejected by the Council.

39-2 The second point and the reason that moves me to make public comments is due to my own circumstance at 829 134<sup>th</sup> Avenue NE, and my very strong belief that the proposed rules are excessive and not particularly focused on one of the underlying problems – storm water drainage.

I am concerned about this issue because of a significant amount of erosion that has occurred on my property in recent years. My neighbors have similar experiences. I've lost several very large trees and have a vertically standing bank of approximately 12 feet high. When the trees fell over several years ago, I soon found out that emergency permits were out of the question, because it was only land that was at risk and not the household itself. In addition approaches such as rockeries (used in previous years) were no longer considered compatible with Kelsey Creek.

I hired a stream professional to give me an assessment of what it would take to restore the erosion damage to my property, and as indicated in my previous testimony, the repair is estimated to cost \$60,000. As you can imagine, this amount weighs very heavily in

2

Thomas A. Kuzman  
829 134<sup>th</sup> Avenue NE, Bellevue, Washington 98005 • 425-747-6312 • takuzman@msn.com

39-2

comparison to my yearly income. I've wondered if this cost relative to my budget would be similar to the cost of a piped storm sewer system relative to Bellevue's budget.

What I am concerned about is that the proposed rules appear to do nothing, at least nothing measurable, about the erosion problem on Kelsey Creek. While I would readily agree that there are numerous facets of maintaining a viable riparian corridor, minimizing storm surges is of the highest importance. My stream professional shared with me that city regulations have done a good job at taking the peak storm flow away from the Creek -- these have been in the form of publicly owned storm retention ponds in the drainage system as well as the requirement of city regulations that developers install storm retention tanks when developing property. These have gone a long way to solve the flooding problems experienced in the 1970s. These features collect the immediate water from a storm, but then meter it out into the Creek more slowly over a day or so after the storm.

What is important here is that apparently studies have shown that scouring energy impacts on the stream bed and banks during the high flow period after the storm are worse than that caused by peaks flows without retention systems. Although not as high as the un-retained peak flows, these high flow periods last a longer period of time and are causing more erosion as a result. Certainly as Bellevue continues with new development in the future, more storm drainage will be generated from impervious surfaces. I understand that many public rights-of-way as well as large commercial development drain directly into the Creek without any retention. These developments are "grandfathered" to regulations before current storm water retention was required. And as these already developed properties are redeveloped in the future, I assume these would be brought into compliance. This sounds good when considering peak flow and flooding issues, but the important point here is that the scouring energy by the Creek increases in time. Because of this, I see the erosion problem as not only getting worse in the future, but also being contrary to the environmental health of Creek.

So I am looking at the possibility of at least a \$60,000 bill to repair erosion on my property caused by Bellevue's use of Kelsey Creek as part of its storm drainage system. When I consider the fact that the City staff also wants to significantly increase the regulatory web that will further encumber my property, I come to the conclusion that this is not fair and causes me to be negatively inclined to support to new regulation.

Even though it is a critical area riparian corridor, there is no doubt that Kelsey Creek is also an integral part of the urban storm water drainage system. Of critical importance to any increase in land use or construction regulation is an initial determination that the result will be meaningful and measurable. All too often, regulations are proposed on the basis that "more is better", without any real knowledge of whether or not it will get better, or whether or not the results will be measurable. With this in mind, I hope you have, or can obtain, answers to the following questions and consider them in your important decision making.

3

Thomas A. Kinsman  
829 134<sup>th</sup> Avenue NE, Bellevue, Washington 98005 • 425-747-9312 • tkinsman@msa.com

39-3—Staff has visited Mr. Kinsman's property to assess the erosion. Kelsey Creek basin is known to have moderate to high levels of impervious surface area, which has an impact on stormwater runoff rates, which in turn affect the erosive conditions of the stream.

39-4—Land use regulations are only one method to address the protection of critical areas and their degradation. Although the erosive functions of the creek may be intensified or modified because of the impacts of development, that change in erosive functions does not negate the critical area values of the creek, which best available science indicates is not adequately protected by the city's existing regulations. The stream does contain several fish species who rely on a larger buffer to sustain habitat function.

The Utilities Department regulates the conveyance of stormwater. As part of the National Pollutant Discharge Elimination System (NPDES) permit, the city is reviewing whether or not to adopt the Department of Ecology stormwater manual requirements. These standards would only address new development, but may help ensure that the situation does not further degrade.

The changes recommended last week, although they do not eliminate the concern, do ensure that a property owner has a clear path for permitting projects designed to protect against erosion where it creates a problem for structures.

39-5—The draft EIS and risk analysis contain an extensive discussion of the existing regulations (the No-Action Alternative) that demonstrates that a variety of indicators relating to the health of the critical areas will continue to trend toward degradation under the existing ordinances. Those same analyses show that implementation of the recommended regulations would modify those trends, in some cases to a more neutral trend, and in others slowing the rate of degradation. It is rare to find an indication that the regulations would actually help improve degraded conditions on a basin-wide scale, although they certainly would on a site-specific scale.

39-6—The regulations are being amended to allow for streambank stabilization projects where necessary to protect existing structures, with a preference for use of natural materials for such stabilization. As described above, a major factor in erosion is the removal of vegetation and replacement with impervious surface, and the handling of stormwater. The regulations include impervious surface limits to begin controlling some of those impacts, although dramatic changes are not expected. The stormwater issue is regulated by other codes, currently under review through the NPDES process.

- 39-3 | • Does the City staff recognize that there is a growing erosion problem?
- 39-4 | • Does it make sense to ratchet up the regulations above the current high level of regulation for an urban creek that has regular unnatural storm surges due to its use as an integral part of Bellevue's storm drainage system?
- 39-5 | • Are the proposed changes going to provide measurable improvements over what the current regulations already provide?
- 39-6 | • Do the new regulations do anything measurable for the erosion problem?

I ask you to rely on your practical instincts and consider my concerns, and thank you very much for taking the time to read this letter.

Sincerely,



Tom Kinsman  
829 134<sup>th</sup> Avenue NE  
Bellevue, Washington 98005  
425-747-9312  
takinsman@msn.com

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Thomas A. Kinsman  
829 134<sup>th</sup> Avenue NE, Bellevue, Washington 98005 • 425-747-9312 • takinsman@msn.com

**Letter #40 – Deborah Lelinski**

40-1—The proposed regulations include adopting the state typing system and increasing required buffers. These measures are proposed to help protect existing wetland features and their functions and values, and represent an improvement in protection over existing code provisions.

Letter 40

From: Helland, Carol  
Sent: Tuesday, July 19, 2005 11:07 AM  
To: 'd.lelinski@comcast.net'  
Cc: Berens, Mary Kate; Paine, Michael  
Subject: RE: Citizen concern re: changes to guidelines for usage of critical areas

Deborah - I have received your e-mail comments and they will be added to the record. Thanks for taking the time to comment. Carol Helland

-----Original Message-----  
From: d.lelinski [mailto:d.lelinski@comcast.net]  
Sent: Monday, July 18, 2005 10:02 PM  
To: Helland, Carol  
Cc: Debi Lelinski (Home) (E-mail)  
Subject: Citizen concern re: changes to guidelines for usage of critical areas

40-1 | I am writing to express my concern regarding proposed changes to regulations/ guidelines impacting wetlands and our shorelines along 112th. These wetlands have been seriously impacted by development decisions in the past - the business complex in particular - and I believe strongly we need to prevent further encroachment into this sensitive wetland area.

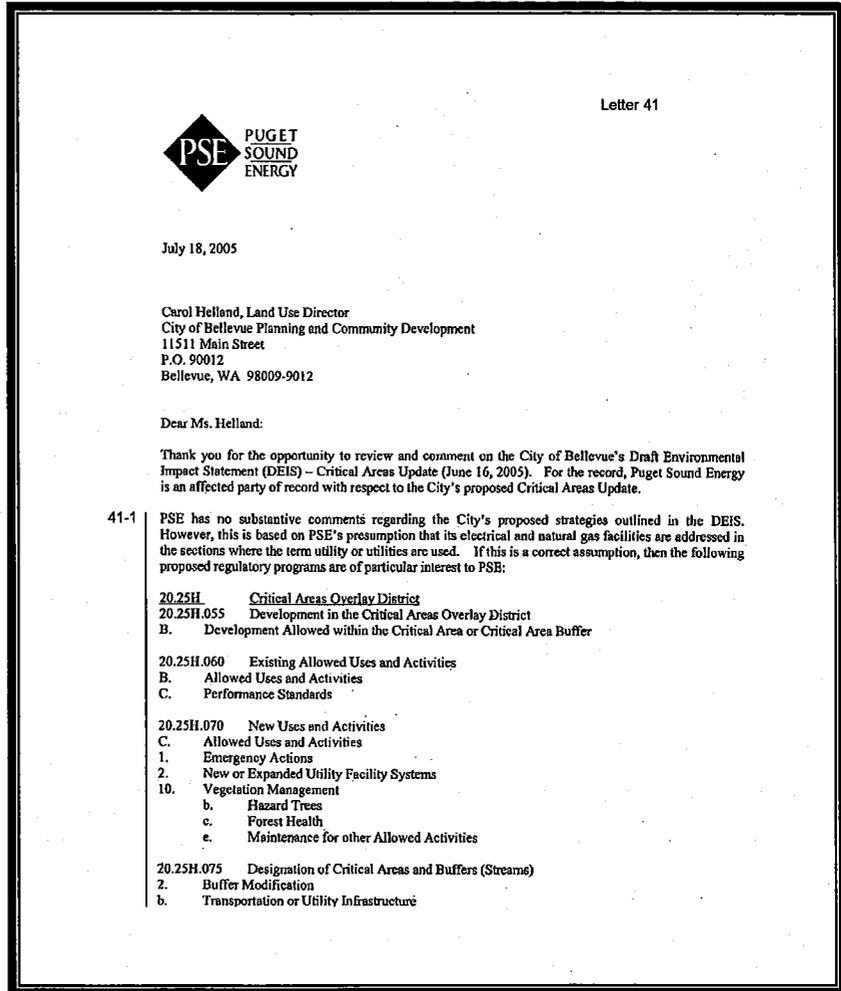
The slough is a real asset to us in Bellevue, and I am firmly in support of protecting it for the future.

Sincerely,

Deborah Lelinski  
915 - 109th Avenue SE  
Bellevue, WA 98004  
d.lelinski@comcast.net

**Letter #41 – Amy L. Tousley**

41-1—These uses do fall within the category of utility facility or systems as defined in the city’s land use code.



41-1—

Carol Helland  
July 18, 2005  
Page Two

- 41-1
- 20.25H.080 Performance Standards
    - B. Performance Standards – Reasonable Use Exception
  - 20.25H.095 Designation of Critical Areas and Buffers (Wetlands)
    - C. Designation of Wetland Critical Area Buffer
    - 2. Buffer Modification
      - b. Transportation or Utility Infrastructure
  - 20.25H.100 Performance Standards
    - B. Performance Standards – Reasonable Use Exception
  - 20.25H.115 Designation of Critical Area and Buffers (Shorelines)
    - B. Designation of Shoreline Critical Area Buffers
    - 2. Buffer Modification
      - b. Transportation or Utility Infrastructure
  - 20.25H.120 Designation of Critical Areas and Buffers (Geologic Hazard Areas)
    - B. Geologic Hazard Area buffers
    - 2. Buffer Modification
      - b. Transportation or Utility Infrastructure
  - 20.25H.125 Performance Standards – Landslide Hazards and Steep Slopes
    - B. Reasonable Use Exception
  - 20.25H.130 Performance Standards – Coal Mine Hazard Areas
    - A. Application of Regulation and Disclosure on Plats
  - 20.25H.175 Designation of Critical Area (Areas of Special Flood Hazard)
  - 20.25H.180 Development in the Area of Special Flood Hazard
    - F. Allowed Uses and Activities – Specific Performance Standards
      - 1. Allowed Uses and Activities
      - d. Repair and maintenance of existing utility facilities and systems
      - 3. New Uses and Activities
        - a. Emergency Actions
        - 4. Reasonable Use Exception
      - c. Nonresidential Construction
  - 20.25H.190 Reasonable Use Exception - Purpose
  - 20.25H.195 Reasonable Use Exception – Process
  - 20.25H.205 Reasonable Use Exception – Performance Standards
  - 20.25H.210 General Mitigation and Restoration Requirements
  - 20.25H.230 Critical Areas Report

41-2—The code adds as an allowed use or modification in a critical area or critical area buffer a vegetation management plan associated with upkeep or maintenance of another allowed use (i.e., right-of-way or utility lines and facilities). This represents additional clear ability for clearing that currently is a difficult permit hurdle.

Carol Helland  
July 18, 2005  
Page Three

41-1 | 20.25E | Shoreline Overlay District

20.25E.050 Exemptions from Substantial Development Permit

B. Normal Maintenance and Repair

D. Emergency Construction

20.25E.080 Shoreline Performance Standards

U. Utilities Regulations

V. Variances – Special Procedures

20.20 | Land Use Code

20.20.520.B

F. Site Landscaping

2. Planting Requirements

i. Utility Substation

20.30G.140 Decision Criteria

20.30P Critical Areas Land Use Permit

41-2 | It is important that the City allow PSE a reasonable approach to continuing it's ongoing operation and maintenance of the electrical and natural gas facilities. Examples include vegetation management practices to comply with the National Electric Safety Code, or construction of capital improvement projects with respect to franchise relocations. PSE looks forward to working with the City of Bellevue through the next phases of addressing potential amendments to the code. Should you have any questions, please don't hesitate to contact me at 425.462.3867. Thank you.

Cordially,

Amy L. Tousley  
Municipal Liaison Manager

Letter #42 – Tom Luthy

42-1—Buffers can provide many functions, not all of which depend on the existence of native or dense vegetation, including water quality functions; staff have found no evidence that property values will be negatively affected by the increased buffer widths. The modified approach to existing structures adopted by the Planning Commission on July 20 addresses in part concern about an expanded buffer making a structure “nonconforming” but modifying the buffer to follow the footprint of any existing structure

42-2—Existing docks are allowed to remain, and minor repairs may be undertaken. The recommended amendments establish a threshold at which point some level of compliance with the prescriptive standards should be met for more significant repairs. The applicant has the choice as to which option to choose to bring the dock into partial compliance, with choices designed to ensure that additional permitting requirements are not triggered.

42-3—The standards are consistent with the Army Corps of Engineers regional general permit guidance. For new docks, the city has not included additional requirements beyond those, other than certain property line setback requirements.

For repair of existing docks, there is no “regional general permit” to use as guidance. The Department of Fish and Wildlife does require structures being repaired to also bring the structure into partial compliance. For example, replacement of wood decking boards would be required to be of a grated material. Since all property owners proposing to repair, replace or construct a new dock have to receive permits from the state and federal agencies the regulations that all waterfront property owners must meet are the same. The proposed regulations attempt to limit the amount of conflict and confusion amongst all the requirements.

Letter 42

**Critical Areas Update Comments**  
July 13, 2005

To: Bellevue Planning Commission  
From: Tom Luthy  
8 Enatai Drive  
Bellevue, WA 98004  
Re: Proposed changes to shoreline ordinances

42-1 I am a residential homeowner who lives on Lake Washington. Obviously, I have a vested interest in the results of any changes to existing ordinances pertaining to shorelines. In the 30 years I have lived on my property, I believe I have been a responsible steward of the shoreline at my home. Frankly, I am chagrined about the proposed changes. The new ordinances provide no benefits to shoreline homeowners and potentially could result in increased costs and lowered property values. Specifically

1. Buffer area setback of 50 feet:  
What data do you have that indicates that an additional 25 feet of setback materially improves habitat? Moving the setback to 50 feet constitutes a possible “take” from homeowners by restricting future uses and accordingly could result in a lowered property value. Making minor landscaping changes within the buffer requires consultation with the City— a possible added expense to the homeowner.  
Leave the existing ordinance alone. It works.

42-2 2. Moorage repair:  
Usually moorage repair is undertaken for safety reasons. Outside the occasional replacement of deck boards, the economics of moorage repair usually call for a major rebuild. In many cases this will trigger a need for partial compliance which is more cost to the homeowner. Replacement of more than 50% of the structural piles puts the docks into the nightmare world of a new moorage facility.  
Grandfather existing docks

42-3 Given that shorelines are already regulated by both the State and the Army Corps of Engineers, why Bellevue desires to go well beyond these requirements is mystifying to say the least. Further, the other communities which abut Lake Washington and Lake Sammamish each have their own

42-3 regulations. Why not aim for a uniform set of regulations that is fair to all waterfront homeowners and attacks the habitat issue as a system solution? Are Bellevue's proposed regulations more restrictive than those of other communities? If so, how can you justify the regulations?

## **Part 6    References and Distribution List**

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## 17.0 Distribution List

Beaux Arts Village  
Attn: Clerk/Treasury  
10550 SE 27th Street  
Bellevue, WA 98004

Bellevue Chamber of Commerce  
10500 NE 8th Street, #750  
Bellevue, WA 98004-4332

Bellevue Downtown Association  
Attn: Leslie Lloyd  
500 108th Avenue NE, #210  
Bellevue, WA 98004

Bellevue Public Library  
Main Branch  
1111 110th Avenue NE  
Bellevue, WA 98004

Bellevue School District, #405  
Attn: Rubie Sanborn  
P.O. Box 90010  
Bellevue, WA 98009-9010

City of Issaquah  
Attn: Trish Heinonen, Planning Manager  
P.O. Box 1307  
Issaquah, WA 98027-1307

City of Kirkland  
Planning Department  
123 5th Avenue  
Kirkland, WA 98033

City of Medina  
Attn: Doug Schulze, City Manager  
P.O. Box 144  
Medina, WA 98039-0144

City of Mercer Island  
Development Services  
9611 SE 36th Street  
Mercer Island, WA 98040

City of Newcastle  
Attn: Planning Dept.  
13020 SE 72nd Place  
Newcastle, WA 98059-3002

City of Renton  
Environmental Review Committee  
Attn: Karen Codiga  
200 Mill Avenue South  
Renton, WA 98055

College of Architecture & Urban  
Planning Library  
University of Washington  
334 Gould Hall, J030  
Seattle, WA 98105

Daily Journal of Commerce  
Attn: Joe Nappafeld  
83 Columbia Street  
Seattle, WA 98104

Department of Community, Trade and  
Economic Development  
Attn: Doug Peters  
P.O. Box 42525  
Olympia, WA 98504-2525

Department of Ecology  
Attn: Donna Buntin, CAO Review  
Coordinator  
P.O. Box 47600  
Olympia, WA 98504

Department of Ecology  
Environmental Review Section  
P.O. Box 47703  
Olympia, WA 98504-7703

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Northwest Regional Office  
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3190 160th Avenue SE  
Bellevue, WA 98008-5452

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Attn: Laura Casey  
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East Bellevue Community Council  
Attn: Bill Halgren, Vice-Chair  
2230 151st Place SE  
Bellevue, WA 98007

East Bellevue Community Council  
Attn: Brigitte Wiechmann  
608 – 140th Avenue NE  
Bellevue, WA 98005-4708

East Bellevue Community Council  
Attn: James Bell, Chair  
405 140th Avenue NE  
Bellevue, WA 98005

East Bellevue Community Council  
Attn: James Keeffe, Alternate Vice Chair  
444 140th Avenue NE  
Bellevue, WA 98005

East Bellevue Community Council  
Attn: Jim Keefe, Vice Chair  
444 – 140th Avenue NE  
Bellevue, WA 98005

East Bellevue Community Council  
Attn: Ken Seal, Alternate Vice Chair  
15433 SE 8th Street  
Bellevue, WA 98007

Eastside Journal  
Attn: David Grant  
P.O. Box 90130  
Bellevue, WA 98009-9230

Eastside Journal  
P.O. Box 90310  
Bellevue, WA 98009

Federal Highway Administration  
Evergreen Plaza  
711 S. Capital Way, Suite 501  
Olympia, WA 98501-1284

Greater Seattle Chamber of Commerce  
1301 5th Avenue, Suite 2400  
Seattle, WA 98101

HUD  
Washington State Regional Office  
Attn: John W. Meyers  
Regional Director  
909 First Avenue, Suite 200  
Seattle, WA 98101

Issaquah School District  
Attn: Assistant Superintendent  
565 NW Holly Street  
Issaquah, WA 98027

KC Metro Transit Environmental Planning  
Attn: Gary Kriedt  
201 South Jackson Street, MS KSC-TR-0431  
Seattle, WA 98104-3856

King County DDES  
Attn: Joe Miles, Manager  
900 Oakesdale Avenue SW  
Renton, WA 98055-1219

Lake Hills Library  
15228 Lake Hills Boulevard  
Bellevue, WA 98007

Muckleshoot Indian Tribe/Fisheries Dept.  
Attn: Project Reviewer  
39015 172nd Avenue SE  
Auburn, WA 98002

Newport Way Library  
14250 SE Newport Way  
Bellevue, WA 98006

Office of the King County Executive  
400 King County Courthouse  
516 Third Avenue  
Seattle, WA 98104

Puget Sound Air Pollution Control  
Attn: Air Pollution Control Officer  
110 Union Street, #56  
Seattle, WA 98101-2038

Puget Sound Energy  
Municipal Land Planning  
Attn: Amy Tousley  
P.O. Box 90868, MER-04  
Bellevue, WA 98009-0868

Puget Sound Regional Council  
1011 Western Avenue, Suite 500  
Seattle, WA 98104-1035

Puget Sound Water Quality Action Team  
Office of the Governor  
P.O. Box 40900  
Olympia, WA 98504

Redmond Planning Department  
Attn: Judd Black  
15670 NE 85th Street  
Redmond, WA 98052

Seattle Post Intelligencer  
101 Elliott Avenue W.  
Seattle, WA 98119

Seattle Public Library  
Documents Unit  
1000 4th Avenue  
Seattle, WA 98104

Seattle Times  
Eastside Bureau  
10777 Main Street, Suite 100  
Bellevue, WA 98004

Sound Transit  
Union Station  
401 S Jackson Street  
Seattle WA 98104

Town of Clyde Hill  
Attn: Mitch Wasserman, Administrator  
9605 NE 24th  
Clyde Hill, WA 98004

Town of Hunts Point  
Attn: City Clerk, Lynne Perkins  
3000 Hunts Point Road  
Bellevue, WA 98004

U.S. Environmental Protection Agency,  
Region X  
1200 Sixth Avenue  
Seattle, WA 98101

Washington State Dept. of Fish and Wildlife  
600 Capital Way N  
Olympia WA 98501-1091

Washington State Dept. of Trade & Economic  
Development  
Ninth & Columbia Building  
C/O Growth Management  
P.O. Box 48300  
Olympia, WA 98504-4151

Washington State Dept. of Transportation  
15700 Dayton Avenue N.  
P.O. Box 330310  
Seattle, WA 98133-9710

Washington State Office of Archaeology and  
Historic Preservation  
1063 S. Capital Way, Suite 106  
Olympia, WA 98504

Washington State Office of Community  
Development  
906 Columbia Street SW  
Olympia, WA 98504-8300

Washington State Social and Health Services  
King County Eastside Service Office  
14360 Eastgate Way  
Bellevue, WA 98007

## **APPENDIX A**

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### **Alternative 3: Council-Modified Alternative**

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted  
General LUC Amendments**

**CITY OF BELLEVUE, WASHINGTON  
ORDINANCE NO. \_\_\_\_\_**

AN ORDINANCE amending the Bellevue Land Use Code to adopt city-wide impervious surface standards, and amend cross references, administrative provisions, and other sections for consistency with the Critical Areas Update; amending Sections 20.20.005, 20.20.010, 20.20.017, 20.20.018, 20.20.025, 20.20.030, 20.20.450, 20.20.520, 20.20.525, 20.20.540, 20.20.560, 20.20.590, 20.20.730, 20.25B.040, 20.25C.040, 20.25K.040, 20.25L.010, 20.25L.030, 20.30G.140, 20.35.015, 20.35.210, 20.40.490, 20.40.500, 20.50.020, 20.50.026, 20.50.040; repealing Section 20.20.023 and Part 20.30P; and creating new Sections 20.20.460, 20.50.042 and a new Part 20.30P of the Bellevue Land Use Code; and establishing an effective date.

WHEREAS, the City of Bellevue is a designated urban growth area under the state's Growth Management Act (GMA); and

WHEREAS, as an urban growth area, the City of Bellevue plans for and accepts its portion of the forecasted growth and development expected in King County; and

WHEREAS, the state Growth Management Act (GMA) requires local jurisdictions to designate and protect critical areas; and

WHEREAS, GMA requires local jurisdictions to include the best available science (BAS) in developing policies and regulations to protect critical area functions and values, and to give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries; and

WHEREAS, the City of Bellevue has a long history of protecting environmentally sensitive critical areas, with its first protective regulations adopted in 1987; and

WHEREAS, the City of Bellevue has a long history of developing and protecting exceptional neighborhoods and commercial areas, which contribute to economic development and the citizens' quality of life; and

WHEREAS, the City of Bellevue initiated its Critical Areas Update process in order to review existing regulations and policies protecting critical areas in 2001; and

WHEREAS, following substantial work by the Critical Areas Citizens Advisory Committee and the Planning Commission, the City Council adopted updated critical areas policies into the Environmental Element of the Comprehensive Plan, in November, 2004; and

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

WHEREAS, the Comprehensive Plan policies directs a regulatory and non-regulatory approach to protecting critical area functions and values; and

WHEREAS, the City of Bellevue protects critical areas with a variety of non-regulatory measures, including acquisition of critical areas, rehabilitation projects, education programs, and best management practices in city operations and management of city property and rights of way; and

WHEREAS, the proposed amendments to the Land Use Code updating the City's critical areas regulations, together with other regulations, including the City's clearing and grading regulations and stormwater regulations, and together with non-regulatory measures and incentives, provide protection of critical area functions and values; and

WHEREAS, the proposed amendments to the general provisions of the Land Use Code establish impervious surface limits for all land use districts outside the downtown, and modify landscaping standards for commercial and multi-family land use districts outside the downtown, recognizing the impact of all development on critical area functions and values; and

WHEREAS, the proposed amendments to the general provisions of the Land Use Code also update definitions and cross references for consistency with the changes to the city's specific critical areas regulations; and

WHEREAS, development of the proposed amendments included BAS, with BAS sources set forth completely in the Planning Commission Transmittal dated September 7, 2005; and

WHEREAS, the City prepared a risk analysis of the proposed amendments, entitled "City of Bellevue's Critical Areas Update – Risk Analysis of Regulatory, City Programs and Best Available Science Alternatives for Improving Critical Area Protection," dated June 16, 2005 and updated on \_\_\_\_\_, which discloses any departure from best available science and the risks associated with such departures; and

WHEREAS, the Council adopts the analysis and discussion of GMA and BAS obligations as set forth in the Planning Commission Transmittal dated September 7, 2005; and

WHEREAS, the Planning Commission held a public hearing on July 6, 2005 with regard to such proposed Land Use Code amendment; and

WHEREAS, the Planning Commission finds that the Land Use Code amendment satisfies the criteria of LUC 20.30J.135 and therefore recommends that the City Council approve such proposed amendment; and

WHEREAS, the City Council concurs in the analysis of the Land Use Code amendment criteria as set forth in the Planning Commission Transmittal dated

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted September 7, 2005 and finds that the Land Use Code amendment, as modified pursuant to Council direction, satisfies the criteria of LUC 20.30J.135; and**

WHEREAS, the City of Bellevue has complied with the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, and the City's Environmental Procedures Code, BCC 22.02, including preparation of a Draft Environmental Impact Statement dated \_\_\_\_\_ and the Final Environmental Impact Statement dated \_\_\_\_\_; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Section 20.20.005 of the Bellevue Land Use Code is hereby amended as follows:

**20.20.005 Chart of dimensional requirements described.**

Chart 20.20.010 sets forth the dimensional requirements for each land use district except: the Downtown Land Use Districts, the Evergreen Highlands Design District, the Evergreen Highlands Subarea Transportation Improvement Overlay District, Institutional District, and the OLB-OS Land Use District. All structures and activities in the City not located in the above districts shall conform to the dimensional requirements in Chart 20.20.010. Dimensional requirements for the Downtown Land Use Districts are found in LUC 20.25A.020. Dimensional requirements for the Evergreen Highlands Design District are found in Part 20.25F. Dimensional requirements for the Evergreen Highlands Subarea Transportation Improvement Overlay District are found in Part 20.25G. Dimensional requirements for the Medical Institutional District are found in Part 20.25J. Dimensional requirements for the OLB-OS Land Use District are found in LUC 20.25L.030. Additional special dimensional requirements for designated areas of the City are contained in other parts of the Code as follows:

- A. Part 20.25B LUC – Transition Areas;
- B. Part 20.25C LUC – OLB Districts;
- C. Part 20.25E LUC – Shoreline Overlay District;
- D. Part 20.25H LUC – ~~Sensitive Critical Areas~~ Overlay District; -
- E. Part 20.45A LUC – Platting and Subdivisions;
- F. Part 20.45B LUC – Short Plats and Short Subdivisions.

Section 2. Section 20.20.010 of the Bellevue Land Use Code is hereby amended as follows:

**20.20.010 Uses in land use districts dimensional requirements.**

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted  
 Chart 20.20.010**

**Uses in land use districts**

**Dimensional Requirements**

STD LAND USE CODE REF	LAND USE CLASSIFICATION	Residential										
		R-1	R-1.8	R-2.5	R-3.5	R-4	R-5	R-7.5*	R-10	R-15	R-20	R-30
	<b>DIMENSIONS</b>											
	Minimum Setbacks of Structures (feet) Front Yard (18) (20) <u>(38)</u> (39)	35	30	20	20	20	20	20	20	20	20	20
	Rear Yard (11) (17) (18) (20) <u>(38)</u> (39)	25	25	25	25	20	20	20	25	25	25	25
	Side Yard (11) (17) (18) (20) <u>(38)</u> (39)	5	5	5	5	5	5	5	5	5	5	5(1)
	2 Side Yards (17) (18) (20) <u>(38)</u> (39)	20	15	15	15	15	15	10	15	15	15	15
	Minimum Lot Area Acres (A) or Thousands of Sq. Ft. (3) <u>(39)</u>	35	20	13.5	10	8.5	7.2	4.7	8.5	8.5	8.5(12)	8.5(12)
	Dwelling Units per Acre (15) (21) (22)	1	1.8	2.5	3.5	4	5	7.5	10	15	20	30
	Minimum Dimensions (feet) Width of Street Frontage	30	30	30	30	30	30	30	30	30	30	30
	Width Required in Lot (4)	100	90	80	70	65	60	50	70	70	70	70
	Depth Required in Lot (4)	150	80	80	80	80	80	80	80	80	80	80
	Maximum in Building Height (feet) (10) (19) (26)	30	30	30	30	30	30	30	30	30	30 (5)	40
	Maximum Lot Coverage by Structures (percent) (13) (14) (16) (26) (27) <u>(37)</u> (39)	35	35	35	35	35	40	40	35	35	35	35
	Maximum Impervious Surface (percent) (35) (37) <u>(39)</u>	<u>50</u> (36)	<u>50</u> (36)	<u>50</u> (36)	<u>50</u> (36)	<u>50</u> (36)	<u>55</u> (36)	<u>55</u> (36)	<u>80</u>	<u>80</u>	<u>80</u>	<u>80</u>

\*Not effective within the jurisdiction of the East Bellevue Community Council.

NOTE: Dimensional Requirements for Downtown are found in Part 20.25A LUC.

Dimensional Requirements for Evergreen Highlands Design District (EH-A, EH-B, EH-C, EH-D) are found in Part 20.25F LUC.

Dimensional Requirements for Office and Limited Business – Open Space (OLB-OS) are found in Part 20.25L LUC.

Dimensional Requirements for Medical Institution District (MI) are found in Part 20.25J LUC.

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

**20.20.010**

**Chart 20.20.010 [Reader Note: the columns of this table for the Downtown land use districts have not been reprinted here for formatting reasons; they are not impacted by this ordinance]**

	Professional Office	Office	Office/Limited Business	Light Industry	General Commercial	Neighborhood Business	Community Business	Factoria Land Use District 1	Factoria Land Use District 2	Factoria Land Use District 3
LAND USE CLASSIFICATION	PO	O	OLB	LI	GC	NB	CB	F1	F2	F3
<b>DIMENSIONS</b>	(8, 21)	(8, 21)	(8, 21)	(8, 21)	(8, 21)	(8, 21)	(8, 21)	(8, 21)	(21, 31)	(21, 32)
Minimum Setbacks of Structures (feet) Front Yard (18) (20)	30	30	50	15	15			(28)	50	20
Rear Yard (17) (18) (20)	25	25	50	(2)	(2)	(2)	(2)	(2, 28)	30	5
Side Yard (17) (18) (20)	20	20	30	(2)	(2)	(2)	(2)	(2, 28)	30	5
2 Side Yards (17) (18) (20)	40	40	60	(2)	(2)	(2)	(2)	(2, 28)	60	10
Minimum Lot Area Acres (A) or Thousands of Sq. Ft. (3)			2A						2A	2A
Dwelling Units per Acre (15) (22)	10 (23)	20 (23)	30 (23)			15 (23)	30 (23)	30 (23)	30 (23)	30 (23)
Minimum Dimensions (feet) Width of Street Frontage			200						200	200
Width Required in Lot (4)			200						200	200
Depth Required in Lot (4)										
Maximum in Building Height (feet) (10) (19)	20	30	45 (6)	45 (9)	30	20 (25)	45	45/60 (29, 30)	75	75/135 (33, 34)
Maximum Lot Coverage by Structures (percent) (13) (14) (16) (37)	35 (24)	35 (24)	35 (24)	50		35 (24)			35 (24)	35 (24)
Maximum Impervious Surface (percent) (35) (37)	<u>80</u>	<u>80</u>	<u>80</u>	<u>85</u>	<u>85</u>	<u>80</u>	<u>85</u>	<u>85</u>	<u>80</u>	<u>80</u>

*\*Not effective within the jurisdiction of the East Bellevue Community Council.*

NOTE: Dimensional Requirements for Downtown are found in Part 20.25A LUC.  
 Dimensional Requirements for Evergreen Highlands Design District (EH-A, EH-B, EH-C, EH-D) are found in Part 20.25F LUC.

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

Dimensional Requirements for Office and Limited Business – Open Space (OLB-OS) are found in Part 20.25L LUC.

Dimensional Requirements for Institutional District (I) are found in Part 20.25J LUC.

**Notes: Uses in land use districts – Dimensional requirements**

- (1) Side yard setback in R-30 Districts increases to 20 feet on any side yard where structure exceeds 30 feet above finished grade.
- (2) All rear and side yards shall contain landscaping as required by LUC 20.20.520.
- (3) See LUC 20.20.012.
- (4) See LUC 20.20.015.
- (5) Except in Transition Areas, the maximum allowable building height in R-20 Districts may be increased to 40 feet if ground floor or underground parking for that building is provided and occupies a minimum of 75 percent of the building footprint.
- (6) The maximum allowable building height is 75 feet on any property designated OLB which lies within 475 feet of the right-of-way of I-405, between I-90 and SR-520.
- (7) Dimensional requirements for Downtown Land Use Districts are listed in LUC 20.25A.020.
- (8) Any office building or any office portion of a building in the PO, O, OLB, LI, GC, NB, CB or F1 Districts shall comply with the following limitations on Floor Area Ratio:
  - (a) At 0.5 FAR, no office building or office portion of a building may exceed 50,000 square feet of gross floor area; and
  - (b) For any office building or office portion of a building greater than 50,000 square feet in gross floor area the following sliding scale shall be observed as interpolated and extrapolated below:
    - (i) At 0.3 FAR, no office building or office portion of a building may exceed 100,000 square feet of gross floor area; and
    - (ii) At 0.1 FAR, no office building or office portion of a building may exceed 150,000 square feet of gross floor area.

This footnote 8 shall not apply to sites in the critical areas overlay district. Density/intensity on sites in the critical areas overlay district is calculated pursuant to LUC 20.25H.045.

- \* (9) The maximum building height may be exceeded upon approval of the Director of Planning and Community Development. Requests for such approval shall be processed in accordance with the administrative conditional use procedure of Part 20.30E LUC. Before granting any such approval, the Director of Planning and Community Development must find that:

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

- (a) The height increase is only to accommodate equipment, structures or buildings that contain special equipment primarily related to light manufacturing, wholesale, trade and distribution use, and is not for office or bulk retail use; and
- (b) There is functional need for a height increase; and
- (c) The overall site development will minimize adverse impacts caused by the height increase.

Notwithstanding the provisions of this note, no height increase is permitted within a Transition Area as defined in Part 20.25B LUC.

*\*Not effective within the jurisdiction of the East Bellevue Community Council. The maximum building height in LI Districts shall remain 30 feet.*

- \*(10) Except in Transition Areas, the allowable building height of any building located in PO, O, OLB, GC, NB, or CB Districts may be increased by one story, but not to exceed 15 feet, if basement parking for that building occupies a minimum of 75 percent of the building footprint.

*\* Not effective within the jurisdiction of the East Bellevue Community Council. The maximum building height in the LI Districts shall remain 30 feet.*

- (11) The LUC contains enhanced setback requirements for churches, clubs, and institutions (refer to LUC 20.20.190) and schools (refer to LUC 20.20.740) located in residential land use districts.
- (12) For each square foot of lot area devoted to open space in excess of 30 percent of the total lot area, one square foot is added to the lot area for the purpose of calculating density.
- (13) Lot coverage is calculated after subtracting all Protected Areas critical areas and stream critical area buffers, provided that coal mine hazards (20.25H.130) and habitat associated with species of local importance (20.25H.150) shall not be subtracted. ~~defined by LUC 20.25H.070.~~
- (14) Maximum lot coverage by structures is determined after public right-of-way and private roads are subtracted from the gross land area.
- (15) Except for sites in the critical areas overlay district, if there is a conflict between the minimum lot area and the permitted number of dwelling units per acre, the minimum lot area controls. Density/intensity on sites in the critical areas overlay district is calculated pursuant to LUC 20.25H.045
- (16) Exceptions to Lot Coverage. Although not considered structures for purposes of calculating lot coverage, the following may be considered impervious surfaces subject to the impervious surface limits. See LUC 20.20.460 and 20.50.026.
  - (a) Underground buildings as defined in LUC 20.50.050 are not structures for the purpose of calculating lot coverage.

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

- (b) Buildings constructed partially below grade and not higher than 30 inches above existing or finished grade, whichever is lower, are not structures for the purpose of calculating lot coverage subject to the following conditions:
- (i) The 30-inch height limit must be met at all points along the building excluding those areas necessary to provide reasonable ingress and egress to the underground portions of the building; and
  - (ii) The rooftop of the building shall be screened from abutting properties with 10 feet of Type II landscaping as described in LUC 20.20.520.G.2 except that the required trees shall be a minimum of 10 feet in height at planting; or, if a use is proposed for the rooftop, the rooftop may be landscaped consistent with the planting requirements for the specific use that is proposed and for the land use district in which the use is located. All landscaping shall comply with standards set forth in LUC 20.20.520. The provisions of LUC 20.20.520.J (Alternative Landscaping Option) are applicable.
- (17) If the setback abuts a street right-of-way, access easement or private road, the minimum dimension is 10 feet unless a greater dimension is specified.
- (18) See LUC 20.20.030 for designation and measurement of setbacks.
- \*(19) Notwithstanding any other provision of this Code, except Part 20.25B LUC or LUC 20.20.900 through 20.20.910, as applicable, the allowable building height of an office building may be increased by one story, not to exceed 15 feet, if a minimum of 75 percent of the ground floor of that building is devoted to parking for that building.
- \*Effective only within East Bellevue Community Council jurisdiction.*
- (20) See LUC 20.25H.090-035 for additional ~~sensitive-critical~~ area setbacks.
- (21) See LUC 20.25H.100-045 for additional ~~sensitive area density/intensity limitations~~ calculation of density/intensity on sites in the critical areas overlay district.
- (22) Density for senior citizen dwelling, congregate care senior housing, and assisted living is calculated as follows: units less than 600 square feet count as 0.5 unit and units 600 square feet or greater count as one unit.
- (23) This residential density may be in addition to FAR only for senior citizen dwellings, assisted living and congregate care senior housing.
- (24) Lot coverage may be increased to 50 percent if congregate care senior housing, senior citizen dwellings, assisted living or nursing homes are constructed on-site; provided, however, that coverage for the nonresidential portions of the development cannot exceed the maximum limits indicated. Lot coverage within NB Districts may be increased to 50 percent for mixed use development which includes residential uses comprising at least one-half the square footage of the

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**  
building footprint. Underground parking in excess of 50 percent of the site area shall not be included in lot coverage calculations.

- (25) The maximum building height for structures is increased to 30 feet only if residential uses or administrative office uses are provided on the second floor and provided the structure does not exceed two stories. For purposes of this note, a story is defined pursuant to the International Building Code, Section 202, as adopted and amended by the City of Bellevue.
- (26) See LUC 20.20.125 for specific requirements applicable to detached accessory structures.
- (27) Lot coverage for schools located in residential land use districts is limited to 35 percent of the site area (refer to LUC 20.20.740).
- (28) A 15-foot setback from the right-of-way line of Factoria Boulevard is required for development in the F1 Land Use District. A 15-foot setback from the right-of-way line of SE 38th Street between Factoria Boulevard and 126th Avenue SE is required for development in the F1 Land Use District.
- (29) Maximum building height in the F1 Land Use District shall be measured from average existing grade. Maximum building height in Area II and Area III of the F1 Land Use District is 60 feet, measured from average existing grade.
- (30) The allowable maximum building height of any building located in the F1 Land Use District may be increased by one story, not to exceed 15 feet, if a minimum of 75 percent of the ground floor of that building is devoted to parking. In no event shall a building in Area II or Area III of the F1 District exceed 75 feet, as measured to the highest point of the structure from average existing grade, including pitched roof areas and penthouse equipment screening.
- (31) Any office building or any office portion of a building in the F2 District may not exceed a Floor Area Ratio of 0.6 FAR.
- (32) The maximum FAR for the combined properties in the F3 Land Use District, regardless of use, shall be 1.26 FAR; provided, that individual parcels or portions of property lying within the F3 Land Use District may have FAR for those individual parcels or portions which exceed an FAR of 1.26 provided that the FAR calculated for the entire aggregated property within the F3 Land Use District shall not exceed 1.26. The maximum FAR permitted herein is based on a maximum total development, including existing and new development of 950,000 square feet, calculated in the same manner as provided for in the calculation of FAR. In the event of an inconsistency between the FAR maximum of 1.26 and the maximum total development amount of 950,000 square feet, the latter shall control.
- (33) In no event shall building height exceed 324 feet above sea level, based on North American Vertical Datum, 1988 (NAVD - 88).

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

- (34) Maximum building height south of the F3 Land Use District Separation Line shall be 135 feet, with structural elements not intended for habitation above 135 feet, so long as structural elements do not exceed 275 feet above sea level based on NAVD - 88.
- (35) See LUC 20.20.460 for exceptions and performance standards relating to impervious surface.
- (36) Impervious surface limits for legally-established nonconforming non-residential uses and for new allowed non-residential uses in these residential land use districts shall be 80 percent.
- (37) Maximum impervious surface and maximum lot coverage by structures are independent limitations on allowed development. All areas of lot coverage by structures are included in the calculation of total maximum impervious surface, unless such structures area excepted under LUC 20.20.460.
- (38) Certain non-critical area setbacks on sites in the critical areas overlay district may be modified pursuant to LUC 20.25H.040.
- (39) These dimensional standards may be modified through an approved conservation subdivision, LUC 20.45A.060 or conservation short subdivision, LUC 20.45B.055.

Section 3. Section 20.20.017 of the Bellevue Land Use Code is hereby amended as follows:

**20.20.017 Minimum lot size – Averaging in short plats and subdivisions.**

In approved short plats and subdivisions, the individual lots shall be considered in compliance with minimum area requirements if the average of the areas of all the lots in the short plat or plat meets the minimum requirement for the district in which the short plat or plat is located, provided: (1) that no individual lot therein shall be reduced more than 10 percent from the district minimum required area, except that lots in zones R-1, R-1.8, R-2.5, and R-3.5 may be reduced by up to 15 percent from the district minimum; (2) a reduction of five percent in the required lot width may be applied to 20 percent of the lots provided no reduction in the required area is applied to these lots. The lot averaging described in this section shall not be allowed for conservation subdivisions or conservation short subdivisions where the required minimum lot size for such subdivision is reduced as allowed under LUC 20.45A.060 or 20.45B.055, as applicable.

Section 4. Section 20.20.018 of the Bellevue Land Use Code is hereby amended as follows:

**20.20.018 Variation in minimum requirements – Area, width and depth.**

Except as set forth in LUC 20.20.017 above, in no case may the Director or any other hearing body vary the minimum requirements for minimum lot area, width of street frontage, width required in lot or depth required in lot, as stated in Chart 20.20.010, by more than 10 percent; except that this section shall not apply to planned unit

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted developments, Part 20.30D LUC, conservation subdivisions, LUC 20.45A.060, or conservation short subdivisions, LUC 20.45B.055. See Part 20.30G LUC relating to variances from the Land Use Code and Part 20.30H LUC relating to variances from the Shoreline Master Program.**

Section 5. Section 20.20.023 of the Bellevue Land Use Code is hereby deleted in its entirety as follows:

~~**20.20.023 Sensitive area setback modifications.**~~

~~Setbacks within the Sensitive Area Overlay District may be modified pursuant to LUC 20.25H.090.B.6.~~

Section 6. Section 20.20.025 of the Bellevue Land Use Code is hereby amended as follows:

**20.20.025 Intrusions into required setbacks.**

**A. Signs, Marquees and Awnings.**

See Sign Code, Chapter 22B.10 BCC.

**B. Garages/Carports on Slopes.**

1. ~~If the topography of a lot is such that the front building line is eight feet or more above the street grade, and there is no reasonable way to construct a driveway up to the dwelling level, a garage/carport may be built into the bank and set at least five feet back from the front property line, except as set forth in subsection 4 below.~~ **[Note: previously incorrectly marked as deleted text]**
2. ~~If the topography of a lot is such that the land drops down steeply from the street level and there is no reasonable way to construct a driveway with a slope less than 15 percent down to the dwelling level, a garage/carport may be built in the front yard setback, LUC 20.20.010, or in the slope setback, LUC 20.25H.090.B.4, subject to approval by the Director of Planning and Community Development. The garage/carport must be set at least five feet back from the front lot line, and may not exceed 15 feet above street level measured to the peak of a pitched roof or nine feet above street level measured to the top of a flat roof. The garage/carport and its vehicular access must be located and oriented to minimize disturbance of the slope.~~
3. A garage/carport must comply with the street intersection sight obstruction requirements of BCC 14.60.240.
4. ~~Notwithstanding any other provision of this section B to the contrary, Aa garage/carport on property subject to Part 20.25H LUC must comply with the disturbance limits, location, design and construction type requirements of LUC 20.25H.110.D may not be located within a critical area or critical area buffer unless allowed under Part 20.25H.~~

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**  
**C. Minor Building Elements.**

Subject to LUC 20.20.025.C.3, minor building elements including patios, platforms, eaves, trellises, open beams, fireplace chimneys, decks, porches, balconies, lanais, bay windows, greenhouse windows and similar elements of a minor character may intrude into a required setback as follows:

1. Any portion of a minor building element which equals or exceeds 30 inches above finished grade at its location may intrude into a required setback a distance no greater than 20 percent of the minimum dimension of that setback, or at least 18 inches, whichever is greater.
2. Any portion of a minor building element which is less than 30 inches above finished grade at its location may extend to any lot line.
3. Except for eaves, the combined length of all minor building elements which equal or exceed 30 inches above finished grade on any building facade shall not exceed 25 percent of the length of that facade.
4. Minor building elements may not be used to extend the enclosed building floor area into the required setback, except chimneys and bay windows protruding no more than 18 inches into the setback may extend to the finished grade at their location.
5. A minor building element may extend into a critical area structure setback required by LUC 20.25H.090-035 only if it is above the ground level and if vegetation will be maintained in a healthy condition. Solar access to vegetation must be maintained at least 50 percent of daylight hours during the normal growing season.

Note: Heat pumps are not minor building elements. Retaining walls and rockeries 30 inches or greater in height are not minor building elements.

**D. Rockeries and Retaining Walls.**

On a lot of less than 30,000 gross square feet or on any single-family lot, rockeries and retaining walls 30 inches or greater in height may extend into setbacks established by LUC 20.20.010; provided, that the existing grade change is such that no feasible alternative to location or height exists. In any event, the ~~Protected Area setback~~critical area buffer and structure setbacks requirements of LUC 20.25H.090-035 apply.

**E. Underground Buildings and Buildings Constructed Partially Below Grade.**

1. Limitations. This paragraph cannot be used to develop any building (including an underground building) which intrudes into ~~setbacks~~critical areas, critical area buffers, or critical area structure setbacks required by LUC Part 20.25H.090.
2. Subject to the limitations contained in this paragraph, underground buildings may intrude in the required setback.

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

3. Subject to the limitations contained in this paragraph, buildings constructed partially below grade and not higher than 30 inches above existing or finished grade, whichever is lower, may intrude into required setbacks subject to the following conditions:
  - a. The 30-inch height limit must be met at all points along the building except those areas necessary to provide reasonable ingress and egress to the underground portions of the building; and
  - b. The rooftop of the building shall be screened from abutting properties with 10 feet of Type II landscaping as described in LUC 20.20.520.G.2 except that the required trees shall be a minimum of 10 feet in height at planting or, if a use is proposed for the rooftop, the rooftop may be landscaped consistent with the planting requirements for the specific use that is proposed and for the land use district in which the use is located. All landscaping shall comply with standards set forth in LUC 20.20.520. The provisions of LUC 20.20.520.J (Alternative Landscaping Option) are applicable.

Section 7. Section 20.20.030.E of the Bellevue Land Use Code is hereby amended as follows:

- E. The critical area buffer and critical area structure setback requirements of LUC Part 20.25H.090 are in addition to the setback requirements of LUC 20.20.010 and 20.25A.020. The greater setback dimension is required.

Section 8. Section 20.20.450.A.1 of the Bellevue Land Use Code is hereby amended as follows:

**A. Heliports – General Requirements.**

1. In addition to the decision criteria in LUC 20.30B.140, the City shall consider, but not be limited to, the following criteria, in deciding whether to approve or approve with modifications an application for a heliport Conditional Use Permit:
  - a. In consideration of identified noise impacts, the City may impose conditions restricting the type of aircraft permitted to land at an approved heliport, and conditions which limit the number of daily takeoffs and landings and hours of operation.
  - b. The City may impose a periodic review requirement on heliport conditional use approvals in order to consider imposing additional conditions to mitigate adverse impacts from new aircraft technology.
  - c. The City may consider whether approach and departure paths are obstruction-free and whether residential or ~~environmentally sensitive~~critical areas would be adversely affected. The City may also consider whether approach and departure paths abut freeway corridors or waterways.

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

- d. The City may consider whether the proposed heliport facility will participate in a voluntary noise reduction program such as the "Fly Neighborly Program."

Section 9. A new Section 20.20.460 is hereby added to the Bellevue Land Use Code as follows:

**20.20.460 Impervious Surface**

**A. Purpose.** Limits on the total amount of impervious surfaces associated with site development are desirable to protect critical areas, which are impacted by the increased levels and rates of surface flow generated by impervious surfaces.

**B. Applicability.** The impervious surface limits contained in LUC 20.20.010, and the standards of this section shall be imposed any time a permit, approval, or review including land alteration or land development including subdivisions, short subdivisions or planned unit developments, a change in lot coverage, or a change in the area devoted to parking and circulation is required by this Code, or by the International Building Code.

**C. Modifications to Impervious Surface Limits.** The impervious surface limits contained in LUC 20.20.010 may be modified pursuant to a critical areas report, LUC 20.25H.230, so long as the critical areas report demonstrates that the effective impervious surface on the site does not exceed the limit established in 20.20.010.

**D. Exemptions.** The following are exempted from determining maximum impervious surface. These exemptions do not apply to any other Land Use Code requirement, including setbacks and limits on maximum lot coverage by structure; building code, utilities code or other applicable City of Bellevue codes or regulations.

1. Decks/platforms. Decks and platforms constructed with gaps measuring 1/8 inch or greater between boards, so long as the surface below the deck or platform is pervious;
2. Rockeries/retaining walls. Rockeries and retaining walls shall be exempt from the maximum impervious surface limits;
3. Stabilization measures. Shoreline stabilization measures shall be exempt from the maximum impervious surface limits; and
4. Landscape features. Fences, arbors with lattice or open roof materials and similar structures, individual stepping stones placed in the ground but not cemented or held together with an impervious material, and gravel mulch shall be exempt from the maximum impervious surface limits.

**E. Performance Standards.**

1. Design shall minimize topographic modification. Structures shall conform to the natural contour of the slope. The foundation shall be tiered to conform to the existing topography and step down the slope with earth retention incorporated

**Changes from September 7, 2005 Final Planning Comm'n Recommendation** highlighted  
into the structure where feasible. Standard prepared building pads, i.e., slab on grade, shall be avoided; and

2. Garages on sites sloping uphill should be placed below the main floor elevation where feasible to reduce grading and to fit structures into existing topography. Garages on sites sloping downhill from the street may be required to be placed as close to the right-of-way as feasible and at or near street grade. Intrusion into the front setback, as provided in LUC 20.20.025.B, may be required. On slopes in excess of 25 percent, driveways shall be designed to minimize disturbance and should provide the most direct connection between the building and the public or private street; and
3. Changes in existing grade outside the building footprint shall be minimized. Excavation shall not exceed 10 feet. Fill shall not exceed five feet subject to the following provisions: all fill in excess of four feet shall be engineered; and engineered fill may be approved in exceptional circumstances to exceed five feet to a maximum of eight feet. Exceptional circumstances are: 1) instances where driveway access would exceed 15 percent slope if additional fill retained by the building foundation is not permitted; or 2) where the five-foot fill maximum generally is observed but limited additional fill is necessary to accommodate localized variations in topography.

**F. Existing Impervious Surfaces.** Impervious surfaces legally established on a site prior to [insert effective date] and which exceed the limits set for thin LUC 20.20.020 shall not be considered non-conforming. Proposals to increase impervious surface on a site shall conform to the limits of LUC 20.20.020; where a site already exceeds the allowed amount of impervious surface, the additional impervious surface shall not be approved unless an equal amount of existing impervious surface is removed such that the net amount of impervious surface is unchanged.

**FG. Innovative Techniques.**

Surfaces paved with pervious pavement or other innovative techniques designed to mimic the function of a pervious surface shall not be included in the calculation of impervious surface areas, so long as the technique is designed by a professional engineer licensed by the State of Washington and the plans are approved by the Director. The Director may require a maintenance plan and long term performance assurance device to ensure the continued function of the pervious pavement or other technique.

Section 10. Section 20.20.520.B of the Bellevue Land Use Code is hereby amended as follows:

**B. Applicability.**

The requirements of this section shall be imposed any time a permit, approval, or review including land alteration or land development including subdivisions, short subdivisions

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Section 11. Section 20.20.520.F of the Bellevue Land Use Code is hereby amended as follows:

**F. Site Landscaping.**

1. Perimeter Landscaping Requirements for Use Districts. The applicant shall provide site perimeter landscaping either according to the following chart and subject to paragraphs F.2 and F.6 of this section; or in conformance with subsection J of this section.

**Perimeter Landscaping Requirements for Use Districts**

Land Use District in Which the Subject Property is Located <sup>3</sup>	Street Frontage (Type and Minimum Depth)	Interior Property Lines (Type and Minimum Depth) <sup>1</sup>
R-10, 15, 20, 30	Type III, 10' but if located in a Transition Area, and directly abutting S/F <sup>2</sup> , see Part 20.25B LUC for requirements.	Type III, 8' but if located in a Transition Area, and directly abutting S/F <sup>2</sup> , see Part 20.25B LUC for requirements.
NB, PO, O, OLB, OLB-OS	Type III, 10' but if located in a Transition Area, and directly abutting S/F <sup>2</sup> , R-10, 15, 20 or 30, see Part 20.25B LUC for requirements. <sup>4</sup>	Type III, 10' but if located in a Transition Area, and directly abutting S/F <sup>2</sup> , R-10, 15, 20 or 30, see Part 20.25B LUC for requirements. <sup>4</sup>
LI, GC, CB	Type III, 10' but if located in a Transition Area, and directly abutting S/F <sup>2</sup> , R-10, 15, 20 or 30, see Part 20.25B LUC for requirements.	Type III, 8' but if located in a Transition Area, and directly abutting S/F <sup>2</sup> , R-10, 15, 20 or 30, see Part 20.25B LUC for requirements.

(1) ~~If the property which abuts the subject property is in the same or a more intensive land use district than the subject property, the landscaping required along that common interior property line may be reduced by 25 percent in area. The remaining~~

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~~75 percent of the required landscaping may be relocated.~~ If approved by the Directors of the Planning and Community Development and Utilities Departments, such landscape area may be used for biofiltration swales. If used for biofiltration swales, this area shall be landscaped with quantities and species of plant materials that are compatible with the functional intent of the biofiltration swale. If the property which abuts the subject property is in the same or a more intensive land use district than the subject property, the landscaping required along that common interior property line may be relocated.

(2) S/F includes the R-1, R-1.8, R-2.5, R-3.5, R-4, R-5, and R-7.5 Land Use Districts.

(3) Notwithstanding the provisions of this paragraph, landscape development requirements for specific uses are listed in paragraph F.2 of this section.

(4) Landscape development requirements for the OLB-OS District may be modified pursuant to Part 20.25L LUC.

2. Planting Requirements for Specific Uses. Notwithstanding the provisions of paragraph F.1 of this section, the uses listed in this paragraph require specific landscaping as follows:

a. Subject to paragraph F.6 of this section, the following uses require 15 feet of Type I landscaping on all sides when located above ground and not housed within a building or accessory to another use; and if located outside of a public right-of-way:

- i. Utility sub-station;
- ii. Sewage pumping station;
- iii. Water distribution facility.

Alternative landscaping may be approved by the Director of Planning and Community Development if the requirements of subsection J of this section are met, and if visibility is essential to safety, security, or maintenance access.

b. Subject to paragraph F.6 of this section, the following uses require 10 feet of Type II landscaping along the street frontage, and 10 feet of Type III landscaping along interior property lines unless a more stringent requirement is specified in paragraph F.1 of this section:

- i. Church;
- ii. Commercial or public parking lot not serving a primary use;
- iii. Mobile home park;
- iv. Government service building;
- v. Community club;
- vi. Charitable or fraternal organization;
- vii. Hospital not located in the Medical Institution District;

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viii. Solid waste disposal facility.

Alternative landscaping may be approved by the Director of Planning and Community Development if the requirements of subsection J of this section are met.

- c. Subject to paragraph F.6 of this section, equipment and vehicle storage yards require 15 feet of Type I landscaping on all sides if in a Transition Area, or visible from a public right-of-way. Alternative landscaping may be approved by the Director of Planning and Community Development if the requirements of subsection J of this section are met.
  - d. Subject to paragraph F.6 of this section, the perimeter landscaping requirements for schools are set forth in LUC 20.20.740. Alternative landscaping may be approved by the Director of Planning and Community Development if the requirements of subsection J of this section are met.
3. **Parking Area Landscaping.** Parking areas require landscaping as follows in addition to any site perimeter landscaping required by paragraph F.1 or F.2 of this section:
    - a. Type V landscaping is required within a parking area.
    - b. A curb or other physical separation is required around each landscape area to separate that area from the parking and circulation area.
  4. Except for site perimeter landscaping areas required under paragraph F.6 of this section, landscape features such as decorative paving, sculptures, rock features or fountains are permitted in the required site perimeter landscaping area so long as such features are made of pervious materials, or are specifically exempt from impervious surface limits under LUC 20.20.460.D. unless such area is provided pursuant to paragraph F.6 of this section. The area devoted to such a feature may not exceed 50 percent of the required area. Rockeries over 30 inches in height are not rock features for the purpose of this section, and may not be counted toward the required area for landscaping.
  5. All plantings and fences required by this section are subject to the street intersection sight obstruction requirements, BCC 14.60.240. All plant materials must be pruned as necessary to comply with BCC 14.60.240.
  6. Existing Vegetation in Lieu of Landscape Development. If the proposal is located within the ~~Sensitive-Critical Areas~~ Overlay District, the Director shall waive the planting requirements of paragraphs F.1 and F.2 of this section and shall ~~permit~~ require the use of native vegetation that exists within a ~~sensitive-critical~~ area or within a ~~sensitive-critical~~ area ~~setback buffer~~ required by LUC 20.25H.090 in lieu of landscape development if the width of that existing vegetated area equals at least twice the dimension required by paragraph F.1 or F.2 of this section. Supplemental landscaping may be added adjacent to a setback to create the necessary width.

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7. The Director will allow the planting requirements of paragraphs F.1 and F.2 of this section to be satisfied within a sensitive critical area setback buffer where landscaping is added pursuant to a habitat improvement plan meeting the requirements of 20.25H.070 required by LUC 20.25H.090 if erosion control measures and water quality standards described in LUC 20.25H.110.A.9.a and b are met.
8. Site Landscaping Design Standards.
  - a. Landscaping plans shall show locations of retained trees, initial size, location and name of plant materials to be installed. For landscaping plans submitted with Building Permits or Clearing and Grading Permits, detailed irrigation plans are required.
  - b. Landscaping shall not include irrigated turf strips which are less than five feet in width. Soils within any irrigated turf strip used to satisfy the requirements of this Section 20.20.520 shall be amended as required by soil amendment standards established by the Director.
  - c. Irrigated turf shall not be included on slopes with finished grades in excess of 33 percent.
  - d. Landscaping areas which are irrigated shall be designed so that plants are grouped according to distinct hydrozones for irrigation of plants with similar water needs at a good efficiency.
  - e. In all newly landscaped areas, soils shall be amended with ~~either four inches of approved organic material, with the first two inch layer tilled into the existing soils, or as called for in a soil amendment plan for the landscaping prepared by a State Registered Landscape Architect, Washington Certified Nurseryman, Washington Certified Landscaper, or professional agronomist~~ required by soil amendment standards established by the Director.
  - f. Newly landscaped areas, except turf, shall be covered and maintained with at least two inches of organic mulch to minimize evaporation.

Section 12. Section 20.20.520.I of the Bellevue Land Use Code is hereby amended as follows:

**I. Species Choice.**

The applicant shall utilize plant materials which complement the natural character of the Pacific Northwest, and which are adaptable to the climatic, topographic, and hydrologic characteristics of the site, and shall include at least 50 percent native species in the required plantings. ~~I; provided, however, that if the subject property includes is within the critical areas overlay districta sensitive area subject to Part 20.25H LUC, the applicant shall utilize plant species as specified by the Director, which enhance that sensitive critical area and critical area buffer.~~ In selecting species, the applicant should utilize plant materials which reduce or eliminate the need for fertilizers, herbicides, or

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other chemical controls, especially for properties which include awithin the critical areas overlay district Riparian Corridor or wetland. Plant materials may not include noxious weeds or species, as designated by the Director.

Section 13. Section 20.20.520.J of the Bellevue Land Use Code is hereby amended as follows:

**J. Alternative Landscaping Option.**

1. The applicant may request a modification of the landscaping requirements set forth in subsections E through I of this section; provided, however, that modification of the provisions of paragraph F.6 of this section may not allow disturbance of a Protected Area critical area or critical area buffer.
2. The Director may administratively approve a modification of the landscaping requirements of this chapter if:
  - a. The proposed landscaping represents an equal or better result than that which could be achieved by strictly following the requirements of this section; and
  - b. The proposed landscaping complies with the stated purpose of this section (subsection A), and with the purpose and intent of paragraphs F.1 and G of this section; and
  - c. If a modification of any paragraph excluding subsection E of this section is requested, the proposed landscaping either:
    - i. Incorporates the increased retention of significant trees and naturally occurring undergrowth, or
    - ii. Better accommodates or improves the existing physical conditions of the subject property, or
    - iii. Incorporates elements to provide for wind protection or to maintain solar access, or
    - iv. Incorporates elements to protect or improve water quality; or
    - v. Incorporates native species in a design that better buffers a critical area and critical area buffer from uses on the site, including parking.
  - d. If a modification of subsection E of this section is requested, the proposal either:
    - i. Incorporates the retention of significant trees equal in number to what would otherwise be required, or
    - ii. Incorporates the retention of other natural vegetation in consolidated locations which promotes the natural vegetated character of the site.

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3. Effect of Approval. Following approval of alternative landscaping by the Director, the applicant may meet the landscaping requirements of this Code by complying with the approved landscape development proposal. A copy of the approved landscape development proposal will be placed in the official file.

Section 14. Section 20.20.525.C.1 of the Bellevue Land Use Code is hereby amended as follows:

**C. Implementation.**

1. Mechanical equipment located at or below grade may be placed within a required rear or side setback area unless that setback directly abuts a residential land use district or unless that setback is within a protected-critical area, critical area buffer, or critical area structure setback required by Part 20.25H, designated by LUC 20.25H.070 or is a protected area setback required by LUC 20.25H.090.

Section 15. Section 20.20.540.C of the Bellevue Land Use Code is hereby amended as follows:

- C. The children's play area shall not be located in areas sensitive to human disturbances such as wetlands, Riparian Corridors and slopes of 40 percent or more a critical area, critical area buffer, or critical area structure setback required by Part 20.25H, or in required street frontage landscaping.

Section 16. Section 20.20.560.A of the Bellevue Land Use Code is hereby amended as follows:

**A. Nonconforming Structures.**

1. Repair of an existing nonconforming structure is permitted.
2. Remodeling of a nonconforming structure is permitted provided the fair market value of the remodel does not exceed 100 percent of replacement value of the structure over any three-year period. If remodeling exceeds 100 percent of replacement value over any three-year period, the structure shall be brought into compliance with existing Land Use Code requirements.
3. A nonconforming structure may not be expanded unless the expansion conforms to the regulations of this Code. However, in single-family districts, an expansion may extend along existing building setbacks, provided the area affected by the expansion is not a Protected Area critical area or critical area buffer designated by LUC 20.25H.070 or within the Shoreline Overlay District Setback required by LUC 20.25E.080.
4. If a nonconforming structure is destroyed by fire, explosion, or other unforeseen circumstances to the extent of 75 percent or less of its replacement value as determined by the Director for the year of its destruction, it may be reconstructed consistent with its previous nonconformity. If such a structure is destroyed to the extent of greater than 75 percent of its replacement value, then any structure

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erected and any related site development shall conform to the regulations of this Code.

Section 17. Section 20.20.560.E of the Bellevue Land Use Code is hereby amended as follows:

E. Exceptions.

1. Downtown. The provisions of this section shall not apply in the Downtown Special Overlay District, Part 20.25A LUC. Refer to LUC 20.25A.025 for the requirements for nonconforming uses, structures, and sites located within the Downtown Special Overlay District.
2. Critical Areas Overlay District. The provisions of this section do not apply to structures or sites nonconforming to the requirements of Part 20.25H. Refer to LUC 20.25H.065 for the requirements for such nonconforming structures and sites.
3. Shoreline Overlay District. The provisions of this section do not apply to uses, structures or sites nonconforming to the requirements of Part 20.25E. Refer to LUC 20.25E.055 for the requirements for such nonconforming uses, structures and sites.

Section 18. Section 20.20.590.K.1 of the Bellevue Land Use Code is hereby amended as follows:

**K. Parking Area and Circulation Improvements and Design.**

Parking of vehicles for all uses is only permitted in parking areas that meet the requirements of this section; except that, vehicles on residential lots may also be parked in areas that meet the requirements of LUC 20.20.720 and 20.20.890 relating to the storage of recreational vehicles and trailers.

1. Materials. A parking and circulation area must be hard-surfaced and conform to any applicable City of Bellevue Development Standards as now or hereafter amended. For purposes of this section, the term hard-surfaced includes pavers, stones, bricks or other similar materials placed to support vehicle circulation, but also allow rain and other water to penetrate the surface (i.e. "grasscrete"). Hard surfaced also includes innovative pavement techniques approved pursuant to LUC 20.20.460.F. Existing legally established parking areas within critical areas and critical area buffers are exempt from the requirement to use hard surfaced materials. The Director of Planning and Community Development may approve a gravel surface for parking and circulation areas used on a temporary basis during construction pursuant to paragraph K.11 of this section.

Section 19. Section 20.20.730.C of the Bellevue Land Use Code is hereby amended as follows:

- C. Large satellite dish antennas in any residential development consisting of detached or single-family attached housing as specified in paragraph B.2 of this section are

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permitted subject to the following criteria, provided the Director of Planning and Community Development may modify setback and screening requirements upon proof that strict application of the requirements is infeasible or renders use of an antenna impossible:

1. The antenna shall meet front and side setback requirements for the main building and shall be a minimum of five feet from any rear property line;
2. The antenna shall be a minimum of 10 feet distant from any street right-of-way, vehicular access easement, or private road;
3. No antenna shall be located in a buffer or setback required by the City's sensitive critical areas regulations (see Chapter Part 20.25H LUC), unless affixed to a structure allowed pursuant to ~~except as otherwise provided by LUC 20.20.025-B Part 20.25H;~~ and
4. The antenna shall be substantially screened from view from adjacent property and the adjacent public rights-of-way by sight-obstructing landscaping, fencing, on-site structures, or natural topography.

Section 20. Section 20.25B.040.B of the Bellevue Land Use Code is hereby amended as follows:

**B. Setbacks.**

1. **Setback for Primary Structures.** Primary structures must be located a minimum of 30 feet from the property line of the district receiving transition.
2. **Distance Between Primary Structures.** Primary structures must be located a minimum of 20 feet from other primary structures, provided that this separation requirement may be modified pursuant to LUC 20.25H.040 on sites in the Critical Areas Overlay District.

Section 20. Section 20.25B.040.C of the Bellevue Land Use Code is hereby amended as follows:

**C. Landscaping, Open Space and Buffers.**

1. **Landscaping.** All landscaping shall comply with standards set forth in LUC 20.20.520. The provisions of LUC 20.20.520.J (Alternative Landscaping Option) are applicable and, in addition, may be used to modify up to 10 feet of required street frontage landscaping.
2. **Buffer.**
  - a. A landscaped buffer, at least 20 feet in width, shall be provided along the entire street frontage where any portion of the street frontage is abutting a district receiving transition and along the interior property line abutting the district receiving transition.

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- b. All significant trees within 15 feet of the property line shall be retained as required by LUC 20.20.520.E.
- c. The buffer shall be planted with the following, and shall include at least 50 percent native species in the required plantings:
  - i. Evergreen and deciduous trees, of which no more than 40 percent can be deciduous. There shall be a minimum of five trees per 1,000 square feet of buffer area, which shall be a minimum of 10 feet high at planting, along with the evergreen shrubs and living groundcover as described in paragraphs C.2.c(ii) and (iii) of this section to effectively buffer development from adjacent residential properties; and
  - ii. Evergreen shrubs, a minimum 42 inches in height at planting, at a spacing no greater than three feet on center; and
  - iii. Living groundcover planted to cover the ground within three years; and
  - iv. Alternatively, where the street frontage landscaping will be planted to buffer a building elevation and not a parking area, driveway or site development other than a building, lawn no less than five feet in width may be substituted for the shrubs and groundcover required in paragraphs C.2.c(ii) and (iii) of this section, provided that the soil in the entire area of lawn is amended in accordance with LUC 20.20.520.F.8. This paragraph does not apply in LI and GC Districts.
- d. Where an LI, GC or CB zoned property abuts a residential district on an interior property line, an evergreen hedge a minimum of four feet in height at planting and capable of achieving a continued visual screen with a height of five feet within a three-year period or a combination of shrubs and fence shall be added within the required planting area to achieve the effect of a hedge.
- e. Patios and other similar ground level features and trails may be incorporated into the buffer area, except that no more than 20 percent of the area may be used for such features. Patios shall not be located within 10 feet of the property line.

Section 21. Section 20.25C.040.B of the Bellevue Land Use Code is hereby amended as follows:

**B. Landscaping Design Standards.**

1. The provisions of LUC 20.20.520, Tree Preservation and Landscape Development, except as they conflict with this section shall apply to development in the OLB District.
2. Except for retail auto sales uses, a minimum of 15 percent of the property area of each site shall be in landscaped open space. For each percent that a structure's

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ground floor area exceeds 15 percent, the landscaping requirements for that site shall be increased by 0.5 percent to a maximum of 20 percent of the property area of the site.

3. Service yards and at-grade mechanical equipment shall be sight-screened from adjoining property or streets or highway by a solid planting of evergreen trees and shrubs at least as high as the equipment or use being screened within two years from the time of planting.
4. Except for retail auto sales uses, parking areas shall include plantings using trees of three inches caliper or 14 to 16 feet high and 42-inch high shrubs at approximately 35 feet on-center parallel to the aisle, or shall be screened as a service yard using similar materials. Other parking lot landscaping shall meet LUC 20.20.590 requirements for Type V landscaping. Plantings shall include a minimum of 50 percent native species. Noxious species, as designated by the Director in submittal requirements, are prohibited.
5. When property abuts the right-of-way for I-90, I-405, or SR 520 highways, or abuts parallel frontage roads of said highways, plant material shall be planted and spaced in a planting area a minimum of 10 feet wide. Deciduous trees shall have a minimum caliper of three inches, evergreen trees shall have a minimum height of 14 to 16 feet tall and shall be at intervals of no greater than 35 feet on center along the right-of-way. No more than 30 percent of the trees shall be deciduous. Trees shall have a minimum mature height of 45 feet. Shrubs shall be a minimum of 42 inches high.
6. Trees installed as part of general site landscaping shall be a minimum of one and one-half inches in caliper or eight to 12 feet high.
7. Accessible outdoor gathering areas should be provided for the employees, general public and visitors to the site.
8. Outdoor display of vehicles for retail auto sales uses shall meet the requirements of LUC 20.20.520 for Type V landscaping for auto display areas and LUC 20.20.520.F.2.c for vehicle storage yards.

Section 22. Section 20.25K.040.A of the Bellevue Land Use Code is hereby amended as follows:

#### **20.25K.050 F3 Land Use District.**

##### **A. Sensitive Critical Areas.**

~~Protected Slopes~~ Steep Slopes and Landslide Hazard Areas, as defined ~~designated in~~ LUC 20.25H.070(A)025, located within the F3 Land Use District shall not be considered a ~~Protected critical Area areas~~ for purposes of the Land Use Code.

##### **B. Application Review Criteria.**

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

The provisions of Chapter 20.25B LUC, Transition Area Design District; the provisions of Chapter 20.25C LUC, Office and Limited Business (OLB) District; and the provisions of this Part 20.25K LUC shall apply to applications for development in the F3 Land Use District.

Section 23. Section 20.25L.010.A.2 of the Bellevue Land Use Code is hereby amended as follows:

2. Forty percent of the gross land area, including any ~~protected~~ critical area, of the subject property must be retained or developed as open space as defined by LUC 20.50.038 for public use and public access. The area reserved as open space shall consist of contiguous acres.

Section 24. Section 20.25L.030 of the Bellevue Land Use Code is hereby amended as follows:

**20.25L.030 Dimensional requirements.**

Except for the dimensional requirements chart at LUC 20.20.010, the provisions of Chapter 20.20 LUC apply to development within the OLB-OS Land Use District. The following chart establishes the dimensional requirements for the OLB-OS Land Use District.

Dimensions (1)	OLB-OS Land Use District
Minimum Setbacks of Structures (feet) (2) (3) (13)	50
Rear Yard (2) (3) (4) (10) (13)	50
Side Yard (2) (3) (4) (10) (13)	30
2 Side Yards (2) (3) (4) (10) (13)	60
Minimum Lot Area (5) (12)	2 acres
Minimum Dimensions (feet) Width of Street Frontage	200
Width Required in Lot (6)	200
Maximum in Building Height (feet) (7)	70
Maximum Lot Coverage by Structures (8) (9) (10)	35
Floor Area Ratio (11)	0.5
<u>Impervious Surface (14) (15) (16)</u>	<u>80</u>

(1) See LUC 20.25H.100-045 for additional sensitive area density/intensity limitations in the critical areas overlay district.

(2) See LUC 20.20.030 for designation and measurement of setbacks.

(3) See LUC Part 20.25H.090 for additional sensitive critical area buffers and critical area structure setbacks.

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- (4) Except as provided in Note (13) of this section, if the setback abuts a street right-of-way, access easement or private road, the minimum dimension is 10 feet unless a greater dimension is specified.
- (5) See LUC 20.20.012.
- (6) See LUC 20.20.015.
- (7) Except where the provisions of Part 20.25B LUC apply, the allowable building height of any building located in OLB-OS may be increased by one story, but not to exceed 15 feet, if basement parking for that building occupies a minimum of 75 percent of the building footprint.
- (8) Maximum lot coverage by structures is calculated based on the total area of the entire parcel designated OLB-OS, including both the Development Area and the Reserved Area.
- (9) Lot coverage is calculated after subtracting all critical areas and stream critical area buffers, provided that coal mine hazards (20.25H.130) and habitat associated with species of local importance (20.25H.150) shall not be subtracted.
- ~~(9) Maximum lot coverage by structures is calculated after subtracting all Protected Areas defined by LUC 20.25H.070 and all public rights-of-way and private roads.~~
- (10) Any portion of a parking structure that is entirely below the average finished grade shall not be included in calculation of maximum lot coverage by structures, and such portion may intrude into required setbacks.
- (11) Any office building or any office portion of a building shall not exceed a floor area ratio of 0.5, calculated by dividing the total amount of gross square footage of buildings or structures to be constructed in the Development Area by the net on-site land area (as described in the definition of "Floor Area Ratio" in LUC 20.50.020) of the entire parcel designated OLB-OS, including both the Development Area and the Reserved Area. Refer to LUC 20.25H.100-045 for additional limitations on development intensity applicable to sites with protected areas in the critical areas overlay district.
- (12) Only one structure may occupy a site of not less than the minimum lot size (two acres). Two structures may occupy a site of four acres and for each increment of minimum lot size (two acres), an additional structure may be added. Structures on four acres or more may be clustered. All structures shall conform to these requirements.
- (13) The required setbacks on the interior of an OLB-OS parcel, or on the interior of a larger development of which the OLB-OS parcel is a part, may be reduced down to zero feet in order to increase required external setbacks or to preserve significant topographic or vegetative features of the Development Area. Modifications to required setbacks pursuant to this section may be included in the concomitant

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(14) See LUC 20.20.460 for exceptions and performance standards relating to impervious surface.

(15) Impervious surface limits for legally-established nonconforming non-residential uses and for new allowed non-residential uses in these residential land use districts shall be 80 percent.

(16) Maximum impervious surface and maximum lot coverage by structures are independent limitations on allowed development. All areas of lot coverage by structures are included in the calculation of total maximum impervious surface, unless such structures are excepted under LUC 20.20.460.

Section 25. Section 20.30G.140 of the Bellevue Land Use Code is hereby amended as follows:

#### **20.30G.140 Decision criteria.**

The Director may approve or approve with modifications an application for a variance from the provisions of the Land Use Code if:

##### **A. General.**

1. The variance will not constitute a grant of special privilege inconsistent with the limitation upon uses of other properties in the vicinity and land use district of the subject property; and
- B2. The variance is necessary because of special circumstances relating to the size, shape, topography, location or surroundings of the subject property to provide it with use rights and privileges permitted to other properties in the vicinity and in the land use district of the subject property; and
- €3. The granting of the variance will not be materially detrimental to property or improvements in the immediate vicinity of the subject property; and
- Đ4. The variance is not inconsistent with the Comprehensive Plan; and

##### **B. Additional Decision Criteria – Variances from Provisions of Part 20.25H.**

1. A variance to the requirements of Part 20.25H may be granted only if the applicant demonstrates that a variance from other provisions of the LUC, where allowed under Part 20.30G or 20.30H, are not feasible. For purposes of this section, variances from the other provisions of the LUC shall be considered not feasible only when, considering the function to be served by the proposal a variance to other provisions of the LUC, including non-critical area setbacks, will not realize the intended function of the proposal; and

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

2. Where the variance involves disturbance of a critical area or critical area buffer, the variance includes a mitigation plan meeting the requirements of LUC 20.25H.210.

C. Additional Decision Criteria -- Variances from Standards Applicable to Areas of Special Flood Hazard. In addition to the decision criteria in paragraphs A and B above, a proposal to vary the requirements for areas of special flood hazard shall meet the following criteria:

1. A variance shall only be issued upon a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nuisances, fraud on or victimization of the public, or conflict with existing laws or ordinances; and
2. Variances shall not be issued within a designated floodway, if any increase in flood levels during the base flood discharge would result.

Section 26. Part 20.30P of the Bellevue Land Use Code is hereby repealed in its entirety and replaced as follows:

**Part 20.30P Critical Areas Land Use Permit**

**20.30P.110 Scope.**

This Part 20.30P establishes the procedures and criteria that the City will use in making a decision upon an application to develop, disturb or otherwise modify a critical area or critical area buffer.

**20.30P.115 Applicability.**

This part applies to each application for a critical areas land use permit.

**20.30P.120 Purpose.**

A critical areas land use permit is the mechanism by which the City may approve limited use and disturbance of a critical area or critical area buffer. The provisions of Part 20.25H and Part 20.25E establish the uses and activities that may be allowed in a critical area or critical area buffer. The provisions of this part establish the requirements for a critical areas land use permit.

**20.30P.125 Who may apply.**

The property owner may apply for a critical area land use permit.

**20.30P.130 Applicable procedure.**

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**  
The City will process a critical area land use permit through Process II, LUC 20.35.200 et seq. The critical area land use permit may be merged with any other permit required for the proposal, pursuant to LUC 20.35.080.

**20.30P.140 Decision criteria.**

The Director may approve or approve with modifications an application for a critical area land use permit if:

- A. The proposal obtains all other permits required by the Land Use Code;
- B. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer; and
- C. The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable; and
- D. The proposal will be served by adequate public facilities including streets, fire protection, and utilities; and
- E. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan; and
- F. The proposal complies with other applicable requirements of this Code.

**20.30P.150 Time limitation.**

A Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a Building Permit or other necessary development permit within one year of the effective date of the Critical Areas Land Use Permit unless:

- A. The applicant has received an extension for the Critical Areas Land Use Permit pursuant to LUC 20.30P.155; or
- B. The Critical Areas Land Use Permit approval provides for a greater time period.

The time period established pursuant to this section shall not include the time during which an activity was not actively pursued due to the pendency of litigation which may

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**  
materially affect rights of the applicant for the permit or approval related to that permit or approval.

**20.30P.155 Extension.**

A. The Director may extend a Critical Areas Land Use Permit, not to exceed one year, if:

1. Unforeseen circumstances or conditions necessitate the extension of the permit; and
2. Termination of the permit would result in unreasonable hardship to the applicant; and the applicant is not responsible for the delay; and
3. The extension of the permit will not cause substantial detriment to existing uses, critical areas, or critical area buffers in the immediate vicinity of the subject property.

B. The Director may grant no more than one extension.

**20.30P.160 Assurance device.**

In appropriate circumstances, the City may require a reasonable performance or maintenance assurance device in conformance with LUC 20.40.490 to assure compliance with the provisions of the Land Use Code and the Critical Areas Land Use Permit as approved.

**20.30P.170 Hold Harmless**

Property owners who request approval of disturbance in a critical area or critical area buffer shall execute a hold harmless agreement in a form approved by the City Attorney which releases the City from liability for any damage arising from the location of improvements within the critical area or critical area buffer.

Section 27. Section 20.35.015 of the Bellevue Land Use Code is hereby amended as follows:

**20.35.015 Framework for decisions.**

- A. Land use decisions are classified into four processes based on who makes the decision, the amount of discretion exercised by the decisionmaker, the level of impact associated with the decision, the amount and type of public input sought, and the type of appeal opportunity.
- B. Process I decisions are quasi-judicial decisions made by the Hearing Examiner on project applications. The following types of applications require a Process I decision:
  1. Conditional Use Permits (CUPs) and Shoreline Conditional Use Permits;
  2. Preliminary Subdivision Approval (Plat); and

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

3. Planned Unit Development (PUD) Approval; and

4. ~~Protected Area Development Exception (PADE);~~

provided, that applications for CUPs, shoreline CUPs, preliminary plats, and PUDs, ~~and PADEs~~ within the jurisdiction of a Community Council pursuant to RCW 35.14.040 shall require a Process III decision.

C. Process II decisions are administrative land use decisions made by the Director. Threshold determinations under the State Environmental Policy Act (SEPA) made by the Environmental Coordinator and Sign Code variances are also Process II decisions. (See the Environmental Procedures Code, BCC 22.02.034 and Sign Code, BCC 22B.10.180.) The following types of applications require a Process II decision:

1. Administrative Amendments;
2. Administrative Conditional Use;
3. Design Review;
4. Home Occupation Permit;
5. Interpretation of the Land Use Code;
6. Preliminary Short Plat;
7. Shoreline Substantial Development Permit;
8. Variance and Shoreline Variance;
9. ~~Small Lot Protected Area Development Exception~~ Critical Area Land Use Permits; and
10. Review under State Environment Policy Act (SEPA) when not consolidated with another permit.

D. Process III decisions are quasi-judicial decisions made by the City Council. The following types of applications require a Process III decision:

1. Site-specific or project-specific rezone;
2. Conditional Use, Shoreline Conditional Use, Preliminary Plat, and Planned Unit Development, ~~and Protected Area Development Exception~~ projects subject to the jurisdiction of a Community Council pursuant to RCW 35.14.040; and
3. A rezone of any property to the OLB-OS Land Use District designation.

E. Process IV decisions are legislative nonproject decisions made by the City Council under its authority to establish policies and regulations regarding future private and

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**  
public development and management of public lands. The following are Process IV decisions:

1. Consideration of suggestions for amendments to the Comprehensive Plan (Annual Docket Adoption);
2. Amendments to the text of the Land Use Code or Comprehensive Plan;
3. Amendments to the Comprehensive Plan Map;
4. Amendments to the Zoning Map (rezones) on a citywide or areawide basis.

F. Process V decisions are administrative land use decisions made by the Director, for which no administrative appeal is available. The following are Process V decisions:

1. Temporary Encampment Permits.

G. Other types of land use applications and decisions made by the Director, including those set forth below, are minor or ministerial administrative decisions, exempt from the above land use processes. Notice and an administrative appeal opportunity are not provided. LUC 20.35.020 through 20.35.070, however, apply to all land use applications.

1. Boundary Line Adjustment;
2. Final Plat (also requires Hearing Examiner approval prior to recording);
3. Final Short Plat;
4. Land Use Exemption;
5. Temporary Use Permit;
6. Vendor Cart Permit;
7. Requests for Reasonable Accommodation as defined by Part 20.30T LUC.\*

*\*Not effective within the jurisdiction of the East Bellevue Community Council.*

Section 28. Section 20.35.210 of the Bellevue Land Use Code is hereby amended as follows:

**20.35.210 Notice of application.**

A. Notice of application for Process II land use decisions shall be provided within 14 days of issuance of a notice of completeness as follows:

**Table 20.35.210.A**

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

Application Type	Publish	Mail	Sign
Administrative Amendment	X	X	X
Administrative Conditional Use	X	X	X
Design Review	X	X	X
Home Occupation Permit	X	X	
Interpretation of Land Use Code	X		
Preliminary Short Plat	X	X	X
Shoreline Substantial Development Permit	X	X	
Variance, Shoreline Variance	X	X	
<del>Small Lot Protected Area Development Exception</del> <u>Critical Areas Land Use Permit</u>	X	X	
SEPA Review (when not consolidated with another permit)	X		

1. For Process II decisions not included in Table 20.35.210.A, notice of application shall be provided by publication and mailing.
2. When required by Table 20.35.210.A, publishing shall include publication of the project description, location, types of City permits or approvals applied for, date of application and location where the complete application file may be reviewed, in a newspaper of general circulation in the City.
3. Mailing shall include mailed notice to owners of real property within 500 feet of the project site including the following information:
  - a. The date of application;
  - b. The project description and location;
  - c. The types of City permit(s) or approval(s) applied for;
  - d. The Director may, but need not, include other information to the extent known at the time of notice of application, such as: the identification of other City permits required, related permits from other agencies or jurisdictions not included in the City permit process, the dates for any public meetings or public hearings, identification of any studies requested for application review, any existing environmental documents that apply to the project, and a statement of the preliminary determination, if one has been made, of those development regulations that will be used for project mitigation.
4. If signs are required, two signs or placards shall be posted by the applicant on the site or in a location immediately adjacent to the site that provides visibility to motorists using adjacent streets. The Director shall establish standards for size, color, layout, design, wording, placement, and timing of installation and removal of the signs or placards.
5. Mailings shall also include mailing notice of the application including at least the information required in paragraph A.1 of this section to each person who has requested such notice for the calendar year and paid any fee as established by

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

the Director. This mailing shall also include all members of a Community Council and a representative from each of the neighborhood groups, community clubs, or other citizens' groups who have requested notice of land use activity. As an alternative to mailing notice to each such person, notice may be provided by electronic mail only, when requested by the recipient.

Section 29. Section 20.40.490.D of the Bellevue Land Use Code is hereby amended as follows:

**D. Amount of Assurance Device.**

1. General. The applicable Department Director shall determine the amount of the assurance device as follows:
  - a. For a performance device the amount will be 150 percent of the cost of the work or improvements covered by the assurance device based on estimated costs immediately following the expiration of the device.
  - b. For a maintenance device the amount will not be less than 20 percent of the cost of replacing the materials covered by the assurance device based on estimated costs on the last day covered by the device. The Director may require an amount more than 20 percent where the Director determines such increased amount is necessary to assure that adequate funds will be available to protect health, safety and welfare, or to protect critical area functions and values in the event of total or partial failure or underperformance of the work requiring the maintenance device..
2. Assistance in Determining Estimated Costs. The applicable Department Director may consult with one or more persons with applicable special knowledge or expertise in determining the cost of work or improvements covered by an assurance device under paragraph D.1 of this section. The applicant shall pay the actual costs of this consultation prior to the Director accepting the device.

Section 30. Section 20.40.490.I of the Bellevue Land Use Code is hereby amended as follows:

**I. Use of Proceeds – Emergency Work by City.**

If at any time the ~~City Manager~~Director or Director's designee determines that actions or inaction associated with any assurance device have created an emergency situation endangering the public health, safety, or welfare, creating a potential liability for the City, or endangering City streets, utilities, or property, or endangering critical area functions and values; and if the nature or timing of such an emergency precludes the notification of applicants as provided in subsection G of this section while still minimizing or avoiding the effects of the emergency, the City may use the assurance device to correct the emergency situation. The City may either have employees of the City do the work or make the improvements, or may have a contractor do the work or make the improvements. If the City uses the assurance device as provided by this section, the applicant shall be notified in writing within four days of the commencement of emergency

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted** work. The notice must state the work that was completed and the nature or timing of the emergency that necessitated the use of the assurance device without prior notification.

Section 31. Section 20.40.500 of the Bellevue Land Use Code is hereby amended as follows:

**B. Expiration of Vested Status of Land Use Permit or Approval.**

1. The vested status of a land use permit or approval shall expire as provided in paragraph B.2 of this section; provided, that:
  - a. Variances shall run with the land in perpetuity if recorded with King County Department of Records and Elections within 60 days following the City's final action; and
  - b. Critical Areas Land Use Permits shall expire as set forth in LUC 20.30P.150; and
  - c. Lots in a subdivision or short subdivision shall be vested against changes in the Land Use Code, except for changes that address a serious threat to the public health or safety as found by the City Council when such change is adopted, for a period of five years following the date of recording of the final plat or final short plat; and
  - ~~b~~d. The time period established pursuant to paragraph B.2 of this section shall not include the time during which an activity was not actively pursued due to the pendency of litigation which may materially affect rights of the applicant for the permit or approval related to that permit or approval.
2. The vested status of a land use permit or approval shall expire two years from the date of the City's final decision, unless:
  - a. A complete Building Permit application is filed before the end of the two-year term. In such cases, the vested status of the land use permit or approval shall be automatically extended for the time period during which the Building Permit application is pending prior to issuance; provided, that if the Building Permit application expires or is canceled pursuant to BCC 23.05.160, the vested status of a land use permit or approval shall also expire or be canceled. If a Building Permit is issued and subsequently renewed, the vested status of the land use permit or approval shall be automatically extended for the period of the renewal;
  - b. For projects which do not require a Building Permit, the use allowed by the permit or approval has been established prior to the expiration of the vested status of the land use permit or approval and is not terminated by abandonment or otherwise; or
  - c. The vested status of a land use permit or approval is extended pursuant to paragraph B.3 of this section.

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

3. When a Building Permit is issued, the vested status of a land use permit or approval shall be automatically extended for the life of the Building Permit. If the Building Permit expires, or is revoked or canceled pursuant to BCC 23.05.160 or otherwise, then the vested status of a land use permit or approval shall also expire, or be revoked or canceled.

Section 32. Section 20.50.012 of the Bellevue Land Use Code is hereby amended by the addition of the following new definitions.

**Best Available Science (BAS).** 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, now or as hereafter amended.

**Bridge.** A structure spanning and providing passage over a gap or barrier, such as a stream, river, floodplain, ravine or roadway. There are six basic modern bridge forms: the beam, the truss, the arch, the cantilever, the cable-stay, and the suspension.

Section 33. Section 20.50.012 of the Bellevue Land Use Code is hereby amended as follows:

**Buildable Area.** That area of a property remaining after area defined as a Protected critical Area area and critical area buffer pursuant to LUC Part 20.25H-070 has been subtracted from the gross land area.

Section 34. Section 20.50.014 of the Bellevue Land Use Code is hereby amended by the addition of the following new definitions.

**Closed Stream Corridor Segment.** Those stream segments, regardless of their type, that are fully enclosed in an underground pipe or similar conveyance.

**Critical Areas.** Areas required to be protected under the Growth Management Act, RCW 36.70A. The city's critical areas are designated in Part 20.25H.

**Culvert.** Transverse pipes or conveyance used to convey streams or drainage under driveway, roads, rail lines or other similar transportation corridors.

Section 35. Section 20.50.014 of the Bellevue Land Use Code is hereby amended by the deletion of the following definition.

~~**Colluvium.** A soil deposit derived from downslope movement of material from other soil formations as the result of one or more small earth slides. These deposits are typically found on steep hillsides or at the base of slopes.~~

Section 36. Section 20.50.020 of the Bellevue Land Use Code is hereby amended by the addition of the following new definitions.

**Fish habitat.** Any habitat which is used by any fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management. Fish habitat includes off-channel habitat.

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**  
**Functions and Values.** Functions are the ecological things that critical areas do and can include biochemical, hydrological and food web and habitat processes at a variety of temporal and spatial scales. The economic or social roles provided by critical areas are also functions. Values are societal perceptions regarding the goods and services provided by critical areas.

Section 37. Section 20.50.020 of the Bellevue Land Use Code is hereby amended as follows:

**Floor Area Ratio (FAR).** A measure of development intensity equal to the gross floor area, excluding parking and mechanical floors or areas, divided by net on-site land area (square feet). Net on-site land area includes the area of an easement but does not include public right-of-way except in the Downtown as provided for in LUC 20.25A.020.D. Refer to LUC ~~20.25H.100~~20.25H.045-G for additional limitations on development intensity applicable to sites with protected critical areas or critical area buffers.

Section 38. Section 20.50.024 of the Bellevue Land Use Code is hereby amended by the addition of the following new definitions:

**Habitat.** Refers to an individual, species-specific use of a wildlife-habitat type. Habitat is the place, including physical and biotic conditions, where a plant or animal usually occurs and is fundamentally linked to the distribution and abundance of species. Species may depend on a habitat or structural characteristics for part or all of its life history or may exhibit a high degree of adaptability using more than one habitat. The relationship of species to habitat is scale dependent and varies from geographic range, home range, to local or site specific habitat components. Habitat includes areas of high relative density or species richness, breeding habitat, winter range, and movement corridors. These areas may also include habitats that are of limited availability or high vulnerability to alteration. Other examples include: remnant patches of mature mixed Puget Sound lowland forest, caves and cliffs, snag-rich areas and downed logs, riparian areas, lakes and ponds, wetlands and their buffers, and heron rookeries.

**Habitat Type.** Place where an animal or plant normally lives and which is characterized by a dominant plant form or physical characteristic. A habitat type is based on actual conditions and consequently can be mapped, and is assumed to contain all the essential needs for a species' maintenance and viability. Habitat types are not species specific because they are based on the similarity of many wildlife species using a suite of vegetation types.

**Hydrology.** Scientific study of the properties, distribution and effects of water on the Earth's surface, in the soil and underlying rocks, and in the atmosphere.

**Hyporheic zone.** The saturated zone located beneath and adjacent to streams that contains some portion of surface waters, serves as a filter for nutrients and maintains water quality.

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**  
Section 39. Section 20.50.026 of the Bellevue Land Use Code is hereby amended by the addition of the following new definition.

**Impervious surface.** Any structure or other hard surface affixed to the ground that prevents or retards the entry of water into the soil layer, or that causes water to run off the surface in greater quantities or at an increased rate of flow from the flow rate prior to addition of such surface. Impervious surfaces include, without limitation: structures, including eaves; vehicular, bicycle, pedestrian or other circulation facilities constructed of solid surfaces, including pavement, concrete, brick or stone; decks, patios, sport courts, swimming pools, hot tubs and similar recreation facilities; and landscape features, including sheds, arbors, and play structures.

Section 40. Section 20.50.032 of the Bellevue Land Use Code is hereby amended by the addition of the following new definition:

**Low Impact Development.** An approach to land development and stormwater management that reduces adverse impacts while accommodating growth. Key principles include protecting native soils and vegetation and minimizing and managing stormwater at the source.

Section 40. Section 20.50.034 of the Bellevue Land Use Code is hereby amended by the addition of the following new definition:

**Mitigation.** Methods used to compensate for adverse impacts to critical areas.

Section 41. Section 20.50.036 of the Bellevue Land Use Code is hereby amended by the deletion of the following definition:

~~**Natural Conditions, Natural Determinants, Natural Environment.** Existing topography, geology, soils, hydrology, water quality, climate, air quality, noise, vegetation, wildlife, marine life, and natural resources in the City, as recognized in the Comprehensive Plan Element 21D and Bellevue Environmental Procedures Code Chapter 22.02 BCC as important in determining the types and forms of development permissible.~~

Section 42. Section 20.50.040 of the Bellevue Land Use Code is hereby amended by the addition of the following new definitions.

**Primary structure.** The structure on a site that houses the principal use. For residential uses, the primary structure houses the dwelling unit(s). For non-residential uses, the primary structure houses the use undertaken on the site, as classified by LUC 20.10.440. Primary structures do not include structures that contain only certain functions or equipment that support the principal use, such as sheds, garages, or mechanical equipment structures.

Section 43. A new section 20.50.042 of the Bellevue Land Use Code is hereby created and the following new definition of "qualified professional" included:

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**  
**Qualified professional.** A qualified professional is one who, by meeting certain defined educational, licensing or other qualifications established by the director, has the knowledge to provide expert design, engineering, habitat, or other evaluations necessary to allow the city to make a decision on a specific proposal. Where the applicant for a proposal is a city, county, state or federal agency, a qualified professional may include trained staff whose job functions include providing the expertise required by this code.

Section 44. Section 20.50.044 of the Bellevue Land Use Code is hereby amended by the addition of the following new definitions.

**Restore.** To reestablish ecological processes, structures, functions and biotic and abiotic linkages that lead to the recovery of an ecosystem that has been degraded, damaged or destroyed. Restoration does not mandate a return to pre-development conditions.

Section 45. Section 20.50.044 of the Bellevue Land Use Code is hereby amended by the deletion of the following definition.

~~**Riparian Corridor.** The area mapped or defined as a Riparian Corridor in the City of Bellevue Sensitive Area Notebook. Riparian Corridors are classified as one of four types as follows:~~

~~A. **Type A Riparian Corridors:** Are stable and established corridors which have an established floodplain as mapped by FEMA National Flood Insurance Program, or generally satisfy the following conditions:~~

~~1. Include Riparian habitat, as distinguished from other terrestrial habitats, which includes a vegetation community that is integrated with the stream ecosystem and provides food, shelter, breeding and rearing areas for aquatic and terrestrial animals. Type A Riparian Corridors are measured from the top of each stream bank and include a primary setback which extends away from the stream on each side a distance of 50 feet;~~

~~2. May contribute to or establish a natural open space character; and~~

~~3. Scored 40 or less on the City of Bellevue Storm and Surface Water Utility Department Comprehensive Watercourse Inventory, or are bounded upstream and downstream by corridor reaches with scores of 40 or less (unless the subject reach is longer than the sum of the lengths of the adjacent upstream and downstream reaches).~~

~~B. **Type B Riparian Corridors:** Are Riparian Corridors with perennial watercourses which are not rated as Type A Riparian Corridors and that scored between 41 and 60 on the City of Bellevue Storm and Surface Water Utility Department Comprehensive Watercourse Inventory, or are bounded upstream and downstream by corridor~~

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

~~reaches with scores between 41 and 60 (unless the subject reach is longer than the sum of the lengths of the adjacent upstream and downstream reaches). Type B Riparian Corridors are measured from the top of each stream bank and include a primary setback which extends away from the stream on each side a distance of 25 feet.~~

~~C. Type C Riparian Corridors: Are Riparian Corridors not rated as Types A and B, including all seasonal or intermittent flows or ponding, that are not mapped as wetlands by the City of Bellevue, which are fed by groundwater seepage or stormwater runoff, or corridors which scored 61 or greater on the City of Bellevue Storm and Surface Water Utility Department Comprehensive Watercourse Inventory, or are bounded upstream and downstream by corridor reaches with scores greater than 60 (unless the subject reach is longer than the sum of the lengths of the adjacent upstream and downstream reaches). Type C Riparian Corridors consist of an open conveyance channel, which is physically and hydrologically connected to a downstream Type A or B Riparian Corridor and continues the vegetation and wildlife corridor. Type C Riparian Corridors are measured from the top of each stream bank and includes a primary setback which extends away from the stream on each side a distance of 10 feet.~~

~~D. Type D Riparian Corridors: Are Riparian Corridors not rated as Types A, B, or C including all seasonal or intermittent flows or ponding, that are not mapped as wetlands by the City of Bellevue, which are fed by groundwater seepage or stormwater runoff, or corridors which scored 61 or greater on the City of Bellevue Storm and Surface Water Utility Department Comprehensive Watercourse Inventory, or are bounded upstream and downstream by corridor reaches with scores greater than 60 (unless the subject reach is longer than the sum of the lengths of the adjacent upstream and downstream reaches). Type D Riparian Corridors consist of a conveyance channel, open or closed, and extends to the top of the bank of the open channel or swale or the sides of a pipe or culvert.~~

Section 46. Section 20.50.046 of the Bellevue Land Use Code is hereby amended by the addition of the following new definitions.

Salmonid. A member of the fish family *salmonidae*, which includes salmon, trout, dolly varden, char and white fish

Stormwater. Precipitation that does not infiltrate into the soil, or evaporate, but flows over the surface into a pipe or directly to surface water.

Section 47. Section 20.50.046 of the Bellevue Land Use Code is hereby amended by the deletion of the following definitions.

~~Sensitive Area. An area mapped or defined in the City of Bellevue Sensitive Area Notebook as a Sensitive Area including Areas of Special Flood Hazard, Wetlands, Riparian Corridors and Slopes equal to or exceeding 15 percent. (Ord. 4654, 6-6-94, § 82; Ord. 3775, 5-26-87, § 31)~~

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**  
Surface, Impervious. Ground or covered ground, through which water cannot percolate. (Ord. 4654, 6-6-94, § 82)

Section 48. Section 20.50.048 of the Bellevue Land Use Code is hereby amended by the addition of the following new definitions:

**Top-of-bank**

1) The point closest to the boundary of the active floodplain of a stream where a break in the slope of the land occurs such that the grade beyond the break is flatter than 3:1 at any point for minimum distance of 50 feet measured perpendicularly from the break; and

2) for a floodplain area not contained within a ravine, the edge of the active floodplain of a stream where the slope of the land beyond the edge is flatter than 3:1 at any point for a minimum distance of 50 feet measured perpendicularly from the edge.

Section 49. Section 20.50.048 of the Bellevue Land Use Code is hereby amended as follows:

**Toe of Slope.** The lower boundary of the 40 percent protected slope as delineated on the slope category analysis; or in the case of slopes with colluvium or landslide hazards deposits, as delineated by the geotechnical report.

**Top of Slope.** The upper boundary of the 40 percent protected slope as delineated on the slope category analysis; or in the case of slopes with colluvium or landslide hazards deposits, as delineated by the geotechnical report.

Section 50. Section 20.50.054 of the Bellevue Land Use Code is hereby amended by the addition of the following new definitions.

**Watershed.** A drainage basin defined by topographic divides from which precipitation and irrigation water flows to a stream or river.

**Wetland Mitigation.** The following mitigation techniques comprise wetland mitigation:

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. Restoration is divided into:

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

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

- **Rehabilitation.** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions 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.

Creation (Establishment): The manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland where a wetland did not previously exist. Establishment results in a gain in wetland acres. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species.

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

Section 51. Section 20.50.054 of the Bellevue Land Use Code is hereby amended by deletion of the following definition:

~~Wetlands. An area meeting the definition of a wetland as defined by the State of Washington, Department of Ecology pursuant to Chapter 382, Laws of 1995. For the purpose of these regulations, a wetland is classified as one of three types as follows:~~

~~A. Type A:~~

~~Those wetlands which include, are adjacent to, or are hydrologically related with a Type A or B Riparian Corridor.~~

~~B. Type B:~~

~~Those wetlands with an area exceeding 7,200 square feet which do not include, are not adjacent to, or are not otherwise hydrologically interdependent with a Type A or B Riparian Corridor.~~

~~C. Type C:~~

April 3, 2006

**Changes from September 7, 2005 Final Planning Comm'n Recommendation highlighted**

~~Those wetlands with an area of less than 7,200 square feet which do not include, are not adjacent to, or are not otherwise hydrologically related with a Type A or B Riparian Corridor.~~

Section 52. This ordinance shall take effect on ~~December 1, 2005~~**[insert effective date]**.

PASSED by the City Council this \_\_\_\_\_ day of \_\_\_\_\_, 2006,  
and signed in authentication of its passage this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

(SEAL)

\_\_\_\_\_  
Grant Degginger, Mayor

Approved as to form:

Lori M. Riordan, City Attorney

\_\_\_\_\_  
Mary Kate Berens, Deputy City Attorney

Attest:

\_\_\_\_\_  
Myrna L. Basich, City Clerk

Published \_\_\_\_\_

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

CITY OF BELLEVUE, WASHINGTON  
ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE amending the Bellevue Land Use Code to amend the Shoreline Overlay District to recognize shorelines and critical areas and amend certain provisions to protect those critical areas; amending Sections 20.25E.010, 20.25E.017, 20.25E.020, 20.25E.030, 20.25E.040, 20.25E.050, 20.25E.055, 20.25E.060, 20.25E.070, 20.25E.080 of the Bellevue Land Use Code; and establishing an effective date.

WHEREAS, the City of Bellevue is a designated urban growth area under the state's Growth Management Act (GMA); and

WHEREAS, as an urban growth area, the City of Bellevue plans for and accepts its portion of the forecasted growth and development expected in King County; and

WHEREAS, the state Growth Management Act (GMA) requires local jurisdictions to designate and protect critical areas; and

WHEREAS, GMA requires local jurisdictions to include the best available science (BAS) in developing policies and regulations to protect critical area functions and values, and to give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries; and

WHEREAS, the City of Bellevue has a long history of protecting environmentally sensitive critical areas, with its first protective regulations adopted in 1987; and

WHEREAS, the City of Bellevue has a long history of developing and protecting exceptional neighborhoods and commercial areas, which contribute to economic development and the citizens' quality of life; and

WHEREAS, the City of Bellevue initiated its Critical Areas Update process in order to review existing regulations and policies protecting critical areas in 2001; and

WHEREAS, following substantial work by the Critical Areas Citizens Advisory Committee and the Planning Commission, the City Council adopted updated critical areas policies into the Environmental Element of the Comprehensive Plan, in November, 2004; and

WHEREAS, the Comprehensive Plan policies directs a regulatory and non-regulatory approach to protecting critical area functions and values; and

WHEREAS, the City of Bellevue protects critical areas with a variety of non-regulatory measures, including acquisition of critical areas, rehabilitation projects, education programs, and best management practices in city operations and management of city property and rights of way; and

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

WHEREAS, the proposed amendments to the Land Use Code updating the City's critical areas regulations, together with other regulations, including the City's clearing and grading regulations and stormwater regulations, and together with non-regulatory measures and incentives, provide protection of critical area functions and values; and

WHEREAS, the amendments to Part 20.25E of the Land Use Code recognize that the City's shorelines provide fish and wildlife habitat, and protect the functions and values of such habitat through techniques for avoiding impacts, minimizing impacts and mitigation impacts to such functions and values; and

WHEREAS, the amendments to Part 20.25E of the Land Use Code also significantly increase flexibility and incentives for property owners; and

WHEREAS, the amendments to Part 20.25E recognize the importance of continued recreational use of and public access to the City's shorelines, consistent with the state Shoreline Management Act and the City's Comprehensive Plan and Shoreline Master Program; and

WHEREAS, development of the proposed amendments included BAS, with BAS sources set forth completely in the Planning Commission Transmittal dated September 7, 2005; and

WHEREAS, the City prepared a risk analysis of the proposed amendments, entitled "City of Bellevue's Critical Areas Update – Risk Analysis of Regulatory, City Programs, and Best Available Science Alternatives for Improving Critical Area Protection," dated June 16, 2005 and updated on \_\_\_\_\_, which discloses any departure from best available science and the risks associated with such departures; and

WHEREAS, the Council adopts the analysis and discussion of GMA and BAS obligations as set forth in the Planning Commission Transmittal dated September 7, 2005; and

WHEREAS, the Planning Commission held a public hearing on July 6, 2005 with regard to such proposed Land Use Code amendment; and

WHEREAS, the Planning Commission finds that the Land Use Code amendment satisfies the criteria of LUC 20.30J.135 and therefore recommends that the City Council approve such proposed amendment; and

WHEREAS, the City Council concurs in the analysis of the Land Use Code amendment criteria as set forth in the Planning Commission Transmittal dated September 7, 2005 and finds that the Land Use Code amendment, as modified pursuant to Council direction, satisfies the criteria of LUC 20.30J.135; and

WHEREAS, the City of Bellevue has complied with the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, and the City's Environmental Procedures

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

Code, BCC 22.02, including preparation of the Draft Environmental Impact Statement dated \_\_\_\_\_ and the Final Environmental Impact Statement dated \_\_\_\_\_; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Section 20.25E.010 of the Bellevue Land Use Code is hereby amended as follows:

**20.25E.010 Definition of district.**

The Shoreline Overlay District encompasses those lake waters 20 acres in size or greater and those stream waters with a mean annual water flow exceeding 20 cubic feet per second; the lands underlying them; the lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways associated with such streams and lakes; and marshes, bogs, swamps and river deltas associated with such streams and lakes. Specifically included within the district are the following:

- A. Lake Washington, including Mercer Slough upstream to Interstate 405 – The lake waters, underlying lands and the area 200 feet landward of the ordinary high water mark, plus associated floodways, floodplains, marshes, bogs, swamps, and river deltas;
- B. Lake Sammamish – The lake waters, underlying lands and the area 200 feet landward of the ordinary high water mark, plus associated floodways, floodplains, marshes, bogs, swamps and river deltas;
- C. Lower Kelsey Creek – The creek waters, underlying lands, and territory between 200 feet on either side of the top of the banks, plus associated floodways, floodplains, marshes, bogs, swamps and river deltas; and
- D. Phantom Lake – The lake waters, underlying lands and the area 200 feet landward of the ordinary high water mark, plus associated floodways, floodplains, marshes, bogs, swamps and river deltas.

Development within the Shoreline Overlay District may also be subject to the requirements of LUC Part 20.25H. In the event of a conflict between the provisions of this Part 20.25E and LUC Part 20.25H, the provisions providing the most protection to critical area functions and values shall prevail.

Section 2. Section 20.25E.017 of the Bellevue Land Use Code is hereby amended as follows:

**20.25E.017 Definitions specific to the Shoreline Overlay District.**

As used in this chapter, the following definitions apply:

Changes since September 7, 2005 Planning Comm'n Recommendation **highlighted**

**A. Development.**

A use consisting of the construction or exterior alteration of structures, dredging, drilling, dumping, filling, removal of any sand, gravel or minerals, bulkheading, driving of piling, placing of obstructions, or any other project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this Master Program at any state of water level.

**B. Height.**

Measured from average grade level (the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under the proposed building or structure) to the highest point of a structure; provided, that television antennas, chimneys, and similar appurtenances shall not be used in calculating height, except where they obstruct the view of a substantial number of residences; provided further, that temporary construction equipment is excluded in this calculation.

**C. Structure.**

A permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels.

**D. Shoreline Critical Area.**

The following water bodies are hereby designated as shoreline critical areas:

1. Lake Washington, including Mercer Slough upstream to Interstate 405 – The lake waters underlying lands plus associated floodways, floodplains, marshes, bogs, swamps and river deltas;
2. Lake Sammamish – The lake waters and underlying lands, plus associated floodways, floodplains, marshes, bogs, swamps and river deltas;
3. Lower Kelsey Creek – The creek waters, underlying lands, plus associated floodways, floodplains, marshes, bogs, swamps and river deltas; and
4. Phantom Lake – The lake waters, underlying lands, plus associated floodways, floodplains, marshes, bogs, swamps and river deltas.

**E. Shoreline Critical Area Buffer.**

That area designated as the shoreline critical area buffer under LUC 20.25H.035. The shoreline critical area buffer may be modified pursuant to the provisions of Part 20.25H.

**F. Shoreline Critical Area Structure Setback.**

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

That area designated as the shoreline critical area structure setback under LUC 20.25H.035. The shoreline critical area structure setback may be modified pursuant to the provisions of Part 20.25H.

**FG Critical Areas Report.**

The process described in LUC 20.25H.230 that allows for modification of regulations applicable to the shoreline critical area and shoreline critical area buffer. Provisions of this 20.25E may also be modified using a critical areas report where specifically allowed.

Section 4. Section 20.25E.030 of the Bellevue Land Use Code is hereby amended as follows:

**20.25E.030 Interpretation – Administration by City.**

The Bellevue Shoreline Overlay District is supplementary to the underlying land use districts. When conflict arises between regulations of the Shoreline Overlay District and underlying land use districts, regulations of the Shoreline Overlay District shall prevail. When conflict arises between regulations of the Shoreline Overlay District and other special districts, such as the ~~Sensitive~~ Critical Area Overlay District, the ~~most restrictive~~ regulations providing the most protection to critical area functions and values shall prevail.

Section 5. Section 20.25E.040 of the Bellevue Land Use Code is hereby amended as follows:

**20.25E.040 Substantial Development Permit required.**

A Substantial Development Permit is required for all development within the Shoreline Overlay District, with the exceptions noted in LUC 20.25E.050. Procedures for securing a Substantial Development Permit shall be as set forth in Chapter 173-14 WAC and Part 20.30R LUC. All information reasonably required to enable the City to make a full evaluation of proposed development in shoreline areas shall be provided by applicants for a Substantial Development Permit.

Section 6. Section 20.25E.050 of the Bellevue Land Use Code is hereby amended as follows:

**20.25E.050 Exemptions from Substantial Development Permit system – Letter of exemption required.**

The following developments shall not require Substantial Development Permits so long as they are consistent with the policy of the State Shoreline Management Act, Chapter 173-14 WAC, and the City's Shoreline Master Program, and the applicable requirements of this Part 20.25E. However, a letter of exemption from the City shall be required for any such development, to be forwarded to the Department of Ecology and the Attorney

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

General's Office when required by WAC 173-14-115. Exemptions from the Substantial Development Permit system are as follows:

- A. Any development of which the total cost or fair market value, whichever is higher, does not exceed \$2,500, if such development does not materially interfere with the normal public use of the water or Shoreline Overlay District;
- B. Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition; "Normal repair" means to restore a development to a state comparable to its original condition within a reasonable period after decay or partial destruction except where repair involves total replacement which is not common practice or causes substantial adverse effects to the Shoreline Overlay District resource or environment. Replacement of existing pilings in the same location shall constitute "normal repair" under this section. Although such normal repair or replacement is exempt from the Substantial Development Permit system, certain limitations may apply to the repair or replacement of nonconforming structures, shoreline stabilization measures and moorage. See LUC 20.25E.055 (nonconforming structures), LUC 20.25E.080.E (shoreline stabilization), and LUC 20.25E.080.N (moorage);
- C. Construction of the normal protective bulkhead common to single-family residences. A "normal protective" bulkhead is constructed at or near the ordinary high water mark to protect a single-family residence and is for protecting land from erosion, not for the purpose of creating land. Where an existing bulkhead is being replaced, it shall be constructed no further waterward of the existing bulkhead than is necessary for construction of new footings. See LUC 20.25E.080.E for additional provisions regarding shoreline stabilization measures;
- D. Emergency construction necessary to protect property from damage by the elements. An "emergency" is an unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with this chapter. The director, or the designee thereof, shall designate when such an action constitutes an emergency action. Where the emergency action involves development or disturbance in the shoreline critical area or shoreline critical area buffer, the person or agency undertaking the emergency action shall also comply with LUC 20.25H.070;
- E. Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities construction of a barn or similar agricultural structure, and the construction and maintenance of irrigation structures including but not limited to head gates, pumping facilities, and irrigation channels; provided, that a feedlot of any size, all processing plants, other activities of a commercial nature, alteration of the contour of the property by leveling or filling other than that which results from normal cultivation, shall not be considered normal or necessary farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being used for feeding livestock hay, grain, silage, or other

Changes since September 7, 2005 Planning Comm'n Recommendation **highlighted**

livestock feed, but shall not include land for growing crops or vegetation for livestock feeding and/or grazing, nor shall it include normal livestock wintering operations;

- F. Construction or modification of navigational aids, such as channel markers or anchor buoys;
- G. Construction by an owner, lessee, or contract purchaser of a single-family residence, and/or accessory structure thereto, for his own or his family use which does not exceed a height of 35 feet above average grade level.

“Single-family residence” means a detached dwelling designed for and occupied by one family including those structures and developments within a continuous ownership which are a normal appurtenance.

An “appurtenance” is necessarily connected to the use and enjoyment of a single-family residence and is located landward of the perimeter of a marsh, bog, or swamp. Normal appurtenances include a garage; deck; driveway; utilities; fences; and grading which does not exceed 250 cubic yards (except to construct a conventional drainfield). Construction authorized under this exemption shall be located landward of the line of ordinary high water mark;

- H. Construction of a dock, including a community dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee, or contract purchaser of single-family and multiple residence(s), for which the cost or fair market value, whichever is higher, does not exceed \$2,500;
- I. Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored ground water for the irrigation of lands;
- J. The marking of property lines or corners on state-owned lands, when such marking does not significantly interfere with normal public use of the surface of the water;
- K. Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on September 8, 1975, which were created, developed or utilized primarily as a part of an agricultural drainage or diking system;
- L. Any project with certification from the governor pursuant to Chapter 80.50 RCW; and

The above exemptions shall be construed narrowly and shall not exempt a project from other City of Bellevue ordinance or permit regulations; further, exempted development shall be consistent with the policies and provisions of the Shoreline Management Act, the Shoreline Management Program Element of the Bellevue Comprehensive Plan and this Part 20.25E.

Section 7. Section 20.25E.055 of the Bellevue Land Use Code is hereby amended as follows:

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

**20.25E.055 Nonconforming development.** See performance standards at 20.25H.180 for provisions relating to the repair, remodeling, expansion or reconstruction of structures located in the Area of Special Flood Hazard. Any alterations to existing structures allowed under this Section 20.25E.055 shall also comply with those provisions. In the event of conflict, the provisions for the Area of Special Flood Hazard shall govern.

A. Definitions. Nonconforming development means a Shoreline Overlay District use or structure which was lawfully constructed or established prior to the effective date of the Shoreline Management Act or the Bellevue Shoreline Master Program, whichever is applicable, or amendments thereto, but which does not conform to present regulations or standards of the Master Program or policies of the Shoreline Management Act.

B. Non-conforming Development outside the shoreline critical area and shoreline critical area buffer.

1. Nonconforming development may be continued; provided, that it is not enlarged, intensified, increased, or altered in any way which increases its nonconformity;

~~2.~~ A nonconforming development which is moved any distance must be brought into conformance with this part and the Shoreline Management Act;

~~3.~~ If a nonconforming development is damaged to an extent not exceeding 75 percent replacement cost of the original structure, it may be reconstructed to those configurations existing immediately prior to the time the structure was damaged, so long as restoration is completed within one year of the date of damage.;

C. Nonconforming Development within the shoreline critical area or shoreline critical area buffer. The requirements of this subsection C may be modified through a critical areas report, LUC 20.25H.230.

1. Existing primary structures. See 20.25H.035.B.

~~2.~~ Existing non-primary structures – Nonconforming structures, including appurtenances (other than docks and bulkheads). A structure (other than a primary structure, a dock or a bulkhead) legally established within a shoreline critical area or critical area structure setback prior to [insert effective date] shall be considered a nonconforming structure. If no modifications to a nonconforming n-existing structure are proposed, then the structure may continue without coming into compliance with the regulations of this Part 20.25E and Part 20.25H. Compliance may in whole or in part be required when changes to a structure are proposed, as follows:

a. Repair and remodeling of an existing a nonconforming structure is limited to minor, non-structural repairs, and repairs of mechanical systems within or supporting the structure. If repair or remodeling exceeds these limits, the

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structure shall be brought into compliance with existing Land Use Code requirements, including requirements of this Part and Part 20.25H.

- b. Expansion of existing nonconforming structures, other than as allowed under LUC 20.25H.055, into the shoreline critical area and critical area buffer is prohibited.
- c. If an y-portion of an existing nonconforming structure is damaged or destroyed by fire, explosion or other unforeseen circumstance requiring repairs consistent with those allowed under subsection (ia) above, it may be repaired within the footprint existing at the time of destruction; provided that such repair is commenced within one year of the date of destruction and diligently pursued. Areas of temporary disturbance resulting from the reconstruction shall be restored pursuant to a mitigation plan approved by the Director under LUC 20.25H.210. If such a structure is destroyed and requires structural or other repairs more extensive than those allowed under subsection (ia) above, then any reconstruction of such structure shall be in compliance with existing Land Use Code requirements, including requirements of this Part and Part 20.25H.

## 2. Docks and Bulkheads.

- a. Bulkheads. Legally established bulkheads may be repaired and replaced in accordance with LUC 20.25E.080.E.
- b. Moorage. Legally established covered and uncovered moorage may be repaired and replaced in accordance with LUC 20.25E.080.N

## D. Nonconforming Uses.

- ~~E~~1. If a nonconforming use is discontinued for 12 consecutive months or for 12 months during any two-year period, any subsequent use shall be conforming. It shall not be necessary to show that the owner of the property intends to abandon such nonconforming use in order for the nonconforming rights to expire; and
- F2. A nonconforming use shall not be changed to another nonconforming use, regardless of the conforming or nonconforming status of the building or structure in which it is housed.

Section 8. Section 20.25E.060 of the Bellevue Land Use Code is hereby amended as follows:

### **20.25E.060 Use regulations and policies governing permits.**

The uses established by LUC 20.10.440 for the applicable land use district may be undertaken in the Shoreline Overlay District as allowed for the underlying land use district. In addition, uses and activities established by LUC 20.25H.055 may be undertaken in the shoreline critical area and shoreline critical area buffer. All

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

development associated with the use shall comply with the provisions of this Part 20.25E. General use regulations performance standards applying to all permits and specific regulations for certain types of uses are found in LUC 20.25E.080, "Shoreline Use Regulation Performance Standards". In addition, all uses and permits must be in conformance with the Shoreline Master Program Policy Element of the Bellevue Comprehensive Plan. Uses and permits within the shoreline critical area and shoreline critical area buffer must also be in conformance with the applicable performance standards of LUC 20.25H.055.

Section 9. Section 20.25E.070 of the Bellevue Land Use Code is hereby amended as follows:

**20.25E.070 Permits.**

Land use approvals in a Shoreline Overlay District shall follow the procedures established for the proposal in the underlying land use district, except as follows: as set forth in LUC 20.25E.080.W procedures found in Parts 20.30C LUC ((Shoreline Conditional Uses); as set forth in LUC 20.25E.080.V, 20.30H LUC (Variances to the Shoreline Master Program);, and as set forth in LUC 20.25E.040 and 20.30R LUC (Shoreline Substantial Development); and as set forth in Part 20.25H for uses and development in the shoreline critical area and shoreline critical area buffer (critical areas land use permit, Part 20.30P).

Section 10. Section 20.25E.080 of the Bellevue Land Use Code is hereby amended as follows:

**20.25E.080 Shoreline use regulation Performance Standards.**

**A. Policy and Administration.**

1. The Shoreline Master Program Use Regulations Performance Standards, as adopted by the City of Bellevue by Resolution 2441, as amended by this Code, and as required by Chapter 98.58 RCW, regulate development in the Shoreline Overlay District.
2. The use regulations performance standards developed for the Lake Washington, Lake Sammamish, lower Kelsey Creek and Phantom Lake shorelines are derived directly from state policies pertaining to applicable activity. Some of the conditions are designated as mandatory requirements for the various use activities, while others are regarded as factors to guide discretionary decisions.
3. The City through the administration of this Code must advise affected parties, upon application for permits, of the need for compliance with federal and state law when their existence is known and further must advise the applicants when there is a probability of the existence of regulations administered by other agencies with suspected jurisdiction.

**B. General Regulations Applicable to all Land Use Districts and Activities.**

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

1. Where applicable, all federal and state water quality and effluent standards shall be met.
2. If a property extends into the Shoreline Overlay District, the Shoreline Master Program Policies and these use regulations shall apply only to that portion of the property lying within the Shoreline Overlay District.
3. All development within the Shoreline Overlay District shall be accompanied by a plan indicating methods of preserving shoreline vegetation and for control of erosion during and following construction in accordance with Part 20.25H, City of Bellevue Excavation, Clearing and Grading regulations, BCC Ch. 23.40.14076, and the Comprehensive Plan.
4. Special care shall be exercised to preserve vegetation in wetland, shoreline and ~~water courses~~stream corridor bank areas in order to prevent soil erosion. Removal of vegetation from or disturbance of shoreline critical areas and shoreline critical area buffers, and from other critical area and critical area buffers shall be prohibited, except in conformance with Part 20.25H and the specific performance standards of this section.
5. Maximum height limitation for any proposed structure within the Shoreline Overlay District shall be 35 feet, except in land use districts with more restrictive height limitations. The method of measuring the maximum height is described in WAC 173-14-030(6). Variances to this height limitation may be granted pursuant to Part 20.30H LUC.
6. The Bellevue Shoreline Master Program, in conjunction with existing Bellevue land use ordinances and Comprehensive Plan policies, shall guide all land use decisions in the Shoreline Overlay District.
7. Any development within the Shoreline Overlay District shall comply with all applicable Bellevue ordinances, including but not limited to the Bellevue Land Use Code, Sign Code, and clearing and grading regulations.
8. The dead storage of watercraft seaward of the ordinary high water mark of the shoreline is prohibited.
9. Where applicable, state and federal standards for the use of herbicides, pesticides and/or fertilizers shall be met, unless superseded by City of Bellevue ordinances. Use of such substances in the shoreline critical area and shoreline critical area buffer shall comply with the City's "Environmental Best Management Practices."
10. Adequate storm drainage and sewer facilities must be operational prior to construction of new development within the Shoreline Overlay District. Storm drainage facilities shall be separated from sewage disposal systems.

**C. Agricultural Use Regulations.**

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

1. Minimum lot dimensions for a single-family dwelling within those areas of the Shoreline Overlay District designated Agriculture shall be 200 feet, length and width. Minimum setback requirements: front yard, 50 feet minimum; side and rear yards, 25 feet minimum. All structures, accessory buildings and ancillary facilities (e.g., manure stockpiles, retention ponds and storage ponds) shall be located outside of the shoreline critical area buffer. ~~set back a minimum of 25 feet from the ordinary high water mark.~~
2. In those areas of the Shoreline Overlay District in which agricultural uses are permitted, habitable structures and accessory buildings may not exceed 35 percent of the lot area, and may not exceed a height maximum of 35 feet.
3. All structures, accessory buildings and ancillary facilities shall be built and located in such a manner so as to prevent agricultural wastes from entering ground and surface water.
4. Unless superseded by stricter City of Bellevue ordinances, erosion control measures shall be applied in accordance with the applicable guidelines and standards established by the Soil Conservation Service, U.S. Department of Agriculture.
5. New agricultural uses in the shoreline critical area and shoreline critical area buffer are prohibited. In addition to the standards of this section, legally established agricultural uses shall also meet the requirements of LUC 20.25H.055.

**D. Aquaculture Regulations.**

1. When construction of aquaculture structures is permitted, it shall be done with minimum disturbance to the existing shorelines.
2. The quality of water discharged into ~~water courses~~ critical areas from rearing ponds shall not adversely affect the quality of the recipient waters or associated wetlands.
3. No structure which might reasonably hinder the passage of anadromous fish shall be permitted within the Shoreline Overlay District.
4. In addition to the standards of this section, aquaculture uses shall also meet the requirements of LUC 20.25H.055.

**E. ~~Bulkhead Regulations.~~ Shoreline Stabilization, including existing Bulkheads**  
Shoreline stabilization is allowed in the shoreline critical area and shoreline critical area buffer in compliance with this subsection E. The requirements of this subsection E may be modified through a critical areas report, LUC 20.25H.230.

**1. Definitions.**

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

- a. Hard Shoreline Stabilization Measures.** As used in this Part, hard shoreline stabilization measures include: rock revetments, gabions, concrete groins, retaining walls, bulkheads and similar measures which present a vertical or nearly vertical interface with the water.
- b. Soft Shoreline Stabilization Measures.** As used in this Part, soft shoreline stabilization measures include: biotechnical measures, beach enhancement, anchor trees, gravel placement, stepped back rockeries, shoreline plantings and similar measures that use natural materials engineered to provide shoreline stabilization while mimicking or preserving the functions and values of the shoreline critical area.
- c. Shoreline Stabilization Measures.** As used in this Part, shoreline stabilization measures refers collectively to both hard and soft shoreline stabilization measures.
- d. Avoidance Measures.** As used in this Part, avoidance measures refer to techniques used to minimize or prevent shoreline erosion that do not involve modification of the shoreline at the interface of land and water. Avoidance measures include vegetation enhancement, upland drainage control, and protective walls or embankments placed outside of the shoreline critical area and critical area buffer.
- e. Technically feasible.** The determination of whether a technique or stabilization measure is technically feasible shall be made by the Director as part of the decision on the underlying permit after consideration of a report prepared by a qualified professional addressing the following factors:

  - i. site conditions, including topography and the location of the primary structure in relation to the Ordinary High Water Mark;
  - ii. the location of existing infrastructure necessary to support the proposed measure or technique;
  - iii. the level of risk to the primary structure, public facility or public use structure or land area presented by shoreline erosion and ability of the proposed measure to mitigate that risk;
  - iv. whether the cost of avoiding disturbance of the shoreline critical area or shoreline critical area buffer is disproportionate as compared to the environmental impact of proposed disturbance, including any continued impacts on functions and values over time; and
  - v. the ability of both permanent and temporary disturbance to be mitigated.
- f. Allowed land area.** As used in this Part, allowed land area is the land area located within 25 feet of the existing primary structure landward of the ordinary high water mark, or for public and city parks, that land area used for an active recreational use or developed with recreation facilities, including trails, picnic areas, and playfields.

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

**g. Minor Repair.** As used in this Part, minor repair refers to modifications or improvements to an existing shoreline stabilization measure that are designed to ensure the continued function of the stabilization measure by preventing failure of any part of the stabilization measure. A repair that is proposed after a significant portion of the stabilization measure has collapsed, eroded away or otherwise demonstrated a loss of structural integrity is not a minor repair.

**2. New or enlarged shoreline stabilization measures.**

**a. When Allowed.** New or enlarged shoreline stabilization measures shall be allowed only to protect existing primary structures, public facility or public use structures, and allowed land area. Shoreline stabilization measures shall be allowed only where avoidance measures are not technically feasible.

**b. Type of Shoreline Stabilization Measure Used.** Where a new or enlarged shoreline stabilization measure is allowed, soft shoreline stabilization measures shall be used, unless the applicant demonstrates that soft shoreline stabilization measures are not technically feasible. An applicant asserting that soft stabilization measures are not technically feasible shall provide the information relating to each of the factors set forth in subsection 1.e. for a determination of technical feasibility by the director. Only after a determination that soft shoreline stabilization measures are not technically feasible shall hard shoreline stabilization measures be permitted.

**c. Location.** Shoreline stabilization measures shall be located at or behind the ordinary high water mark. Soft shoreline stabilization measures may also be located waterward of the ordinary high water mark.

**d. Height limit.** The height of any new or expanded hard shoreline stabilization measure shall not exceed 30 inches from average grade of actual or existing topography or, if at the ordinary high water mark, the ordinary high water mark; except that bulkhead heights may be increased if approved by the Director if the following criteria are satisfied:

**i.** Increased height does not negatively impact abutting properties; and

**ii.** Increased height is necessary to protect the existing primary structure or allowed land area because of:

**(1)** Slopes of 40% or greater at and immediately landward of the ordinary high water mark. In such instances, increased height shall be limited to the minimum height necessary to protect the existing primary structure and allowed land area, or

**(2)** Extraordinary wave action as demonstrated in a report prepared by a qualified professional. In such instances, increased height shall be limited to the minimum height necessary to protect the existing

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primary structure and allowed land area or 45 inches, whichever is less.

e. Mitigation and Restoration. Areas of new permanent disturbance and all areas of temporary disturbance within the shoreline critical area and shoreline critical area buffer shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.

**3. Repair and Replacement of Existing Shoreline Stabilization.** This section allows repair and replacement of existing legally established shoreline stabilization measures.

a. Minor Repair. Minor repair is permitted. Areas of temporary disturbance within the shoreline critical area or shoreline critical area buffer are restored pursuant to a restoration plan meeting the requirements of LUC 20.25H.210.

b. Major Repair or Replacement. Major repair or replacement shall be treated as a new shoreline stabilization measure, subject to the provisions of subsection 2 above.

4. Bulkheads shall be designed to minimize the transmission of wave energy to other properties.

**5. Critical Area Buffer Modification.** Where an applicant replaces a legally established existing hard shoreline stabilization measure with a soft shoreline stabilization measure or an avoidance measure, the critical area buffer and any applicable structure setback shall continue to be measured from the ordinary high water mark that existed with the hard shoreline stabilization measure. Such ordinary high water mark shall be located by a survey prior to removal of the hard shoreline stabilization measure.

~~1. The use of bulkheads shall be limited to protection of existing areas or facilities landward of the ordinary high water mark, and not for the purpose of creating land by filling behind such bulkheads.~~

~~2. Construction of or improvements to bulkheads shall not extend into the lakes or Riparian Corridors beyond the ordinary high water mark, except in case of an approved landfill in compliance with LUC 20.25E.080.K.5, and shall be completed within a timely manner.~~

~~3. Bulkheads shall be limited in height to 30 inches from average grade of actual or existing topography or, if at the ordinary high water mark, the ordinary high water mark; except that bulkhead heights may be increased if approved by the Director of Planning and Community Development and~~

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~~Director of Storm and Surface Water Utility if they determine the following criteria are satisfied:~~

- ~~a. Increased height does not negatively impact abutting properties; and~~
- ~~b. Increased height is necessary to protect the existing upland property because of:
  - ~~i. The extraordinary height and/or slope of the natural or existing topography at and immediately landward of the ordinary high water mark. In such instances, increased bulkhead height shall be limited to the minimum height necessary to protect the existing property landward of the ordinary high water mark, or~~
  - ~~ii. Extraordinary wave action. In such instances, increased bulkhead height shall be limited to the minimum height necessary to protect the existing property landward of the ordinary high water mark or 45 inches, whichever is less.~~~~
- ~~4. Bulkheads shall be designed to minimize the transmission of wave energy to other properties.~~

**F. Breakwaters, Jetties and Groins Regulations.** Breakwaters, jetties and groins may be located in the shoreline critical area and shoreline critical area buffers in compliance with this subsection F.

1. Solid landfill breakwaters shall be prohibited within the Shoreline Overlay District.
2. ~~The builder of a jetty or groin structure shall be responsible for determining in advance any possible adverse effects to the property of others caused by his construction. Alternative means for protecting the shoreline shall be outlined by the builder prior to issuance of a Substantial Development Permit.~~
2. Breakwaters, jetties, groins, and weirs located waterward of the ordinary high-water mark shall be allowed only where necessary to support water-dependent uses, public access, shoreline stabilization, or other specific public purpose. Breakwaters, jetties, groins, weirs, and similar structures in the shoreline critical area or shoreline critical area buffer require a shoreline conditional use permit.
3. Breakwaters, jetties, groins, and weirs shall be designed by a qualified professional to protect the functions and values of the shoreline critical areas.
4. Areas of new permanent disturbance and all areas of temporary disturbance within the shoreline critical area and shoreline critical area buffer shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.

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### **G. Clearing and Grading Regulations.**

1. All clearing, grading, excavating, and fill in the Shoreline Overlay District shall comply with the provisions of BCC Ch. 23.10.14076, now or as hereafter amended.
2. No clearing, grading, excavating, or fill shall be allowed within ~~25 feet of the ordinary high water mark~~the shoreline critical area or shoreline critical area buffer except as permitted by this Part 20.25E, or in association with activities allowed under Part 20.25H.
3. Wherever the City determines that the act or intended act of clearing, grading, excavation or fill has become or will constitute a hazard in life or limb, or endangers property, or adversely affects the safety, use of, or stability of a public way, drainage channel or natural ~~watercourse~~stream corridor, including siltation and sedimentation therein, the owner of the property upon which the clearing, excavation or fill is located or other person or agent in the City shall, within the period specified therein terminate such clearing, grading, excavation, embankment or fill, or eliminate the same from the development plan, or modify the plans, as may be required so as to eliminate the hazard and be in conformance with the requirements of this Code.

### **H. Commercial Development Regulations.**

1. Regardless of the provisions of LUC 20.10.440 and the underlying land use district, Commercial development is not permitted on the City's Lake Sammamish shoreline.
2. The maximum building height in areas of the Shoreline Overlay District which are zoned for commercial uses shall be 35 feet, except in those zoning districts with more restrictive height limitations.
3. Tanks for the distribution and sale of petroleum products are not permitted in the Shoreline Overlay District except for marinas. When permitted, such tanks shall be located on dry land, and designed to preclude and contain spills. Such tanks shall not be permitted in corrosive soil areas.
4. Any commercial development located within the Shoreline Overlay District shall be equipped to contain and clean up pollutant spills, as required by state and federal regulations.
5. Commercial parking facilities shall not be permitted over water or within ~~25 feet of the ordinary high water mark~~the shoreline critical area or shoreline critical area buffer and structured parking shall not be permitted within the shoreline critical area structure setback. Parking areas shall be permitted only when accessory to commercial uses. Provisions must be made to control and cleanse surface water runoff from the parking areas in order to comply with state water quality standards.

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6. Commercial development along shorelines shall provide for erosion control.
7. Commercial development permitted within the Shoreline Overlay District, other than that related to water use, shall be ~~set back a minimum of 25 feet from the ordinary high water mark located landward of the shoreline critical area buffer and landward of any applicable shoreline critical area structure setback.~~
8. Commercial development in the Shoreline Overlay District oriented to the use of watercraft shall provide restrooms and hookups for toilet facilities. No watercraft shall flush toilet refuse into the lake at such locations. For the purposes of this section, commercial development shall include yacht clubs, commercial and private marinas, boat repair shops, fueling facilities and other similar uses. Unless allowed under a critical areas report, LUC 20.25H.230, any structure associated with such commercial development shall be located landward of the shoreline critical area buffer, except moorage facilities allowed under subsection N.

**I. Dredging Regulations.** Dredging in the shoreline critical area or shoreline critical area buffer is allowed in compliance with this subsection I.

1. Dredging for the sole purpose of obtaining fill or construction material is prohibited.
2. Dredging shall be permitted only in the following cases:
  - a. To maintain navigability to the extent of previously dredged and/or existing authorized location, depth, and width; or
  - b. To improve water flow or water quality; or
  - c. To mitigate conditions which could endanger public health or safety; or
  - d. ~~To create or improve recreational opportunities; or To carry out a habitat improvement project approved pursuant to LUC 20.25H.070; or~~
  - e. To provide for the drainage of surface waters for approved development purposes, including existing legally established agricultural activities.

Dredging shall be limited to the minimum extent necessary to accomplish its permitted purpose.

3. The lateral spread of resuspended sediment created by a dredging operation shall be contained within previously approved limits.
4. Dredging spoils shall be deposited at dumping sites which are set back an adequate distance to prevent impairment of water quality. Dumping sites shall not be allowed except in areas designated by the City of Bellevue.

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5. Dredging spoils stored at the dredging site shall be adequately contained to prevent leakage. Any drainage of the spoils shall be filtered sufficiently to prevent reentrance of sediments into the water.
6. Areas of new permanent disturbance and all areas of temporary disturbance within the shoreline critical area and shoreline critical area buffer shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210. ~~Shoreline vegetation disturbed by dredging projects shall be restored to its original or an improved condition through use of indigenous vegetation.~~

**J. Ecological and Historical Sites.**

1. The designation of historical sites and related preservation activities is permitted in the Shoreline Overlay District.
2. Water fowl and wildlife preserves are a permitted use within the Shoreline Overlay District.

**K. Landfill Regulations.** Landfill within the shoreline critical area and shoreline critical area buffer is allowed in compliance with this subsection K.

(Note: Prohibited landfill materials are defined by the Bellevue Uniform Building Code/International Building Code, as adopted and subsequently amended by the City of Bellevue.)

1. Landfills within the Shoreline Overlay District shall be controlled to prevent significant adverse alteration in the storage and flow characteristics of the affected area.
2. Landfills which do not meet the requirements of this Code and the Bellevue Building Code as amended are prohibited (Uniform Building Code 7010)International Building Code, as adopted and subsequently amended by the City of Bellevue, are prohibited.
3. Landfill is prohibited except where necessary for:
  - a. ~~Maintenance of shoreline property above the ordinary high water mark;~~
  - ba. Improvement of water quality in the event no other possible alternatives are available;
  - c. ~~Enhancement or restoration of habitat in conformance with City of Bellevue standards adopted by the Director of Planning and Community Development and the Director of Storm and Surface Water Utility if permitted under Part 20.25H LUC;~~
  - db. Replenishment of sand on public and private beaches;

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- ~~ec.~~ Establishment of an interpretive center when undertaken by, or in cooperation with, the City of Bellevue, if permitted under Part 20.25H LUC;
- ~~fd.~~ Ensuring or preserving the structural integrity of~~In connection with an approved bulkheads shoreline stabilization or avoidance measure, where permitted under subsection LUC 20.25E.080 paragraph E of this section;~~
- ~~e.~~ Where necessary to support a legally established water-dependent use;
- ~~f.~~ In connection with the water dependent use, public access, cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan,
- ~~g.~~ Disposal of dredged material considered suitable under, and conducted in accordance with, the Dredged Material Management Program of the Department of Natural Resources;
- ~~h.~~ Expansion or alteration of transportation facilities of statewide significance currently located on the shoreline and then only upon a demonstration that alternatives to fill are not feasible; and
- ~~i.~~ Required mitigation, mitigation actions, environmental restoration, beach nourishment or enhancement project.

In such cases, landfill may be permitted provided there is no significant adverse impact upon fish, wildlife and adjacent property and shall be limited to the minimum extent necessary to accomplish its permitted purpose.

- 4. Landfill behind ~~bulkheads shoreline stabilization measures~~ shall be limited to the height of bulkheads and shall be in compliance with paragraph E.3 of this section.
- 5. No landfill shall be permitted ~~below or within~~ waterward of the ordinary high water mark, ~~except to restore lands lost to unusual erosion within the 12 months prior to the date of permit or exemption application~~ in connection with a habitat enhancement project approved pursuant to LUC 20.25H.055, or in connection with an approved shoreline stabilization measure in compliance with paragraph E of this section. ~~In no event, however, shall landfill be permitted below the ordinary high water mark established 12 months prior to permit or exemption application. The property owner bears the burden of demonstrating the unusual nature of the precipitating erosion and establishing the location of the earlier ordinary high water mark.~~
- 6. Landfill is prohibited within marshes, bogs and swamps and within wetlands ~~described in the Sensitive Areas Notebook~~ except as provided for in Chapter 20.25H LUC.

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7. In those limited instances where landfill is permitted, the waterside perimeter of the fill shall be stabilized with vegetation.
8. Applicants for landfills within the Shoreline Overlay District must also secure and perform in accordance with fill permits under the City's clearing and grading regulations, Chapter 23.76 BCC.
9. Landfills shall be permitted only when they are in complete conformance with all conditions of site development approval.

**L. Mining Regulations.**

Mining is not a permitted activity within the Bellevue Shoreline Overlay District.

**M. Outdoor Advertising, Sign and Billboard Regulations.** Signs may not be located within the shoreline critical area or shoreline critical area buffer.

1. Signs in residential areas of the Shoreline Overlay District shall be for identification only, noncommercial, unobtrusive in character and nonilluminated. Lighting from an external source shall be shielded from view.
2. Signs in the Shoreline Overlay District shall not obstruct the shoreline views of upland properties.
3. Signs in that portion of the Shoreline Overlay District which permits commercial activities shall be permitted provided such signs are physically oriented internally to the district and meet the requirements of the Bellevue Sign Code. No water-oriented advertising is permitted.
4. Any permitted use within that portion of the Shoreline Overlay District which permits commercial activities and which actually fronts on Lake Washington, will be permitted one identification sign oriented to the lake. Such sign may identify the business complex itself or gasoline service associated with the complex.
  - a. If located on dry land, the signs shall comply with the size and placement requirements of the Bellevue Sign Code and illumination of the sign may be low-level internal illumination.
  - b. If such sign is located on a pier, maximum size shall be 25 square feet and maximum height 10 feet above pier deck, and such sign may not be illuminated.
- ~~5. In those portions of the wetland environment of the Shoreline Overlay District where commercial development is permitted, signs shall be for identification only.~~
- ~~6. In wetland environment commercial development areas, internally illuminated signs shall be low-level, and external lighting sources shall be shielded from view.~~

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75. Off-premises signs, nonappurtenant, illuminated and freestanding signs extending above the roof line are not permitted in the Shoreline Overlay District.

86. Sign structures must meet all other conditions of the Bellevue Sign Code.

**N. Moorage Regulations.** Moorage facilities are allowed in the shoreline critical area and shoreline critical area buffer in compliance with this subsection N. The requirements of this subsection N may be modified through a critical areas report, LUC 20.25H.230, except where otherwise noted.

**1. New or Expanded Residential Moorage Facilities.**

**a. When Allowed.** Construction of one noncommercial, residential moorage facility per upland residential waterfront lot or one joint-use moorage facility for two or more adjacent waterfront lots is allowed in accordance with this subsection N. Expansion of any legally established existing moorage facility is permitted only to the extent the expansion complies with the development standards of subsection b below, and does not cause the moorage facility to exceed, or further exceed, any of the limitations in subsection b.

Moorage shall only be permitted within:

- i. Lots created on or after the effective date of this ordinance having water frontage meeting or exceeding the minimum lot width required in the applicable land use district;
- ii. Lots created prior to the effective date of this ordinance; or
- iii. Nonbuilding tracts platted for the purpose of providing common moorage for a group of contiguous properties.

For the purposes of meeting the requirements of subsection 1(a)(i) above, adjoining property owners may combine their water frontage by mutual agreement recorded with the King County Records and Elections Division and the Bellevue City Clerk. Only one moorage facility is permitted pursuant to such a combined frontage agreement, which may connect with the property landward of the ordinary high water mark at only one location.

**b. Development Standards.**

- i. The only structures permitted in the first 30 feet waterward of the ordinary high water mark are piers and ramps. All floats and ells must be at least 30 feet waterward of the OHWM.
- ii. No skirting is allowed on any structure.
- iii. Surface Coverage (includes all overwater portions of the moorage structure):

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- (1) Moorage facilities serving only one residential waterfront lot shall not exceed 480 square feet.
- (2) Moorage facilities serving two residential waterfront lots shall not exceed 700 square feet
- (3) Moorage facilities serving three or more residential waterfront lots shall not exceed 1000 square feet.

iv. Location, width and length regulations. Docks with configurations that do not include any or all of the elements below shall be subject to the overall length and square footage limitations of this section. No portion of a dock shall exceed four feet in width, unless allowed in this subsection iv.

- (1) Piers shall not exceed four feet wide and shall be fully grated.
- (2) Ramps shall not exceed three feet wide and shall be fully grated.
- (3) Ells.
  - (a) Ells are allowed only over water with depths of 9 feet or greater at the landward end of the ell.
  - (b) Ells may be up to six feet wide by 20 feet long with a two-foot wide strip of grating down the center; or
  - (c) Ells may be up to six feet wide by 26 feet long with grating over the entire ell.

(4) Floats.

- (a) Floats are allowed only over water with depths of 10 feet or greater at the landward end of the float.
  - (b) Floats may be up to six feet wide by 20 feet long, with a two-foot wide strip of grating down the center.
- (5) Total facility length. In no case may any moorage facility extend more than 150 feet waterward of the ordinary high water mark.

v. Structural Piling Specifications. The first (nearest shore) piling shall be steel, four inch piling and at least 18 feet waterward of the ordinary high water mark. Piling sets beyond the first are not required to be steel, shall be spaced at least 18 feet apart and shall not be greater than 12 inches in diameter. Piles shall not be treated with pentachlorophenol, creosote, CCA or comparably toxic compounds. If ACZA piling are proposed, the applicant will meet all of the Best Management Practices, including a post-treatment procedure, as outlined in the amended Best Management

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Practices of the Western Wood Preservers. Steel piles will be installed using approved sound attenuation measures.

**vii. Shoreline Critical Area and Critical Area Buffer Functions.**

- (1) Existing habitat features. Existing habitat features (e.g., large and small woody debris, substrate material, etc.) shall be retained and new or expanded moorage facilities placed to avoid disturbance of such features.
- (2) Invasive weeds (e.g., milfoil) may be removed with non-chemical means only.
- (3) Shoreline Planting. In order to mitigate the impacts of new or expanded moorage facilities, the applicant shall plant emergent vegetation (if site appropriate) and a buffer of vegetation a minimum of 10 feet wide along the entire length of the lot immediately landward of ordinary high water mark. Planting shall consist of native shrubs and trees and, when possible, emergent vegetation. At least five native trees will be included in a planting plan containing one or more evergreen trees and two or more trees that like wet roots (e.g., willow species). Such planting shall be monitored for a period of five years consistent with a monitoring plan approved pursuant to LUC 20.25H.210. This subsection is not intended to prevent reasonable access through the shoreline critical area buffer to the shoreline, or to prevent beach use of the shoreline critical area.

**vii. Setback.** No private moorage or other structure waterward of the ordinary high water mark, including structures attached thereto, shall be closer than 12 feet to any adjacent property line except when a mutual agreement of adjoining property owners is recorded with the King County Records and Elections Division and the Bellevue City Clerk. Excepted from the requirements of this section are boat lifts or portions of boat lifts which do not exceed 30 inches in height measured from ordinary high water mark.

**2. Repair and Replacement of Existing Residential Moorage Facilities.**

- a. Certain repairs requiring partial compliance with development standards. Proposals described in this subsection to repair legally established moorage facilities that do not meet the requirements of subsection 1 above require partial compliance with such requirements, as follows. A proposal includes any and all actions proposed within a twelve month period.
  - i. Proposals requiring partial compliance. The following proposals shall require the need for partial compliance with subsection 1. If a proposal requires partial compliance, the applicant shall perform one of the improvements listed in subsection ii below.

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- (A) Proposals to replace more than 50% of the decking and the above-water decking substructure (e.g. stringers) within the first 30 feet waterward of the ordinary high water mark, or of the existing access ramp, whichever is less; or
- (B) Proposals to replace more than 50% of the decking and decking substructure of the entire moorage; or
- (C) Proposals involving the combination of either subsection (A) or (B) with a proposal to replace more than two but less than 50 percent of the existing piles.

ii. Improvements required. If the proposal requires the need for partial compliance, the applicant may choose one of the following improvements. The improvement shall be completed with the original proposal:

- (A) Reduce of the width of that portion of the facility within the first 30 feet waterward of the ordinary high water mark, or of any access ramp to no more than 4 feet wide; or
- (B) Fully grate the affected portion of the facility; or
- (C) Remove skirting from the entire facility; or
- (D) Remove existing piles from the first 18 feet of the facility; or
- (E) Enhance the shoreline critical area buffer to meet the shoreline plantings requirements of (1)(b)(vii)(3) above.

iii. Proposals involving replacement of moorage piles shall require full compliance of replacement moorage piles with the development standards of subsection 1(b)(vii) above.

iv. Proposals involving replacement of more than 50% of the structural piles of the moorage facility shall be considered a new moorage facility and shall comply with the provisions of subsection 1 above.

b. Other repairs. Proposals to repair existing legally established moorage facilities where the nature of the repair is not described in subsection 2.a shall be considered minor repairs and are permitted, consistent with any applicable standards of the Land Use Code, International Building Code, as adopted and subsequently amended by the City of Bellevue, and any other applicable codes or regulations.

**3. New and Expanded Commercial, Public Access, Marina and Yacht Club Moorage.**

a. When Allowed. New commercial moorage facilities for a water-dependent use, and new moorage for marinas and yacht clubs are allowed as a shoreline conditional use in accordance with this Paragraph N where the use has been legally established. Expansion of any legally established existing moorage facilities is permitted only to the extent the expansion complies with the development standards of subsection b below or as approved through a critical areas report, LUC 20.25H.230.

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**b. Development Standards.**

- i. The only structures permitted in the first 30 feet waterward of the ordinary high water mark are piers and ramps. All floats and ells must be at least 30 feet waterward of the OHWM.
- ii. No skirting is allowed on any structure.
- iii. Location, width and length regulations.
  - (1) Piers shall incorporate grating to the maximum extent feasible considering accessibility requirements.
  - (2) Ramps shall incorporate grating to the maximum extent feasible considering accessibility requirements.
  - (3) Ells.
    - (a) Ells are allowed only over water with depths of 9 feet or greater at the landward end of the ell.
    - (b) Ells shall be the minimum size necessary to allow for the use and access of marina facilities.
    - (c) Ells shall incorporate grating to the maximum extent feasible considering accessibility requirements.
  - (4) Floats.
    - (a) Floats are allowed only over water with depths of 10 feet or greater at the landward end of the float.
    - (b) Floats shall be the minimum size necessary to allow for use and access of marina facilities.
    - (c) Floats shall incorporate grating to the maximum extent feasible considering accessibility requirements.
  - (5) Total facility length. In no case may any moorage facility extend more than 150 feet waterward of the ordinary high water mark.
- iv. **Structural Piling Specifications.** The first (nearest shore) piling shall be steel, four inch piling and at least 18 feet waterward of the ordinary high water mark. Piling sets beyond the first shall be spaced at least 18 feet apart and shall not be greater than 12 inches in diameter. Piles shall not be treated with pentachlorophenol, creosote, CCA or comparably toxic compounds. If ACZA piling are proposed, the applicant will meet all of the Best Management Practices, including a post-treatment procedure, as

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outlined in the amended Best Management Practices of the Western Wood Preservers. Steel piles will be installed using approved sound attenuation measures.

**vi. Setback.** No private moorage or other structure waterward of the ordinary high water mark, including structures attached thereto, shall be closer than 12 feet to any adjacent property line except when a mutual agreement of adjoining property owners is recorded with the King County Records and Elections Division and the Bellevue City Clerk. Excepted from the requirements of this section are boat lifts or portions of boat lifts which do not exceed 30 inches in height measured from ordinary high water mark.

**vi. Shoreline Critical Area and Critical Area Buffer Functions.**

- (1) Existing habitat features. Existing habitat features (e.g., large and small woody debris, substrate material, etc.) shall be preserved and new or expanded moorage facilities placed to avoid disturbance of such features.
- (2) Invasive weeds (e.g., milfoil) may be removed with non-chemical means only.
- (3) Shoreline Planting. In order to mitigate the impacts of new or expanded moorage facilities, the applicant shall plant emergent vegetation (if site appropriate) and a buffer of vegetation a minimum of 10 feet wide along the entire length of the lot immediately landward of ordinary high water mark. Planting shall consist of native shrubs and trees and, when possible, emergent vegetation. At least five native trees will be included in a planting plan containing one or more evergreen trees and two or more trees that like wet roots (e.g., willow species). Such planting shall be monitored for a period of five years consistent with a monitoring plan approved pursuant to LUC 20.25H.210. This subsection is not intended to prevent reasonable access through the shoreline critical are buffer to the shoreline, or to prevent beach use of the shoreline critical area

**vii. Uncovered Commercial, Public Access, Marina or Yacht Club Moorage in Meydenbauer Bay.** Commercial, public access, marina or yacht club moorage in Meydenbauer Bay shall not extend beyond the following boundary line: All Azimuths being South; commencing at the E 1/4 Sec. corner of Sec. 31 T 25N, R 5E, W.M., whose "X" coordinate is 1,661,520.58 and whose "Y" coordinate is 225,661.29 of the Washington Coordinate System, North Zone, and running thence on an Az of 78°51' 17" a distance of 963.76 feet to a point whose coordinate is "X" 1,660,575.00, "Y" 225,475.00 of said coordinate system; thence on an Az of 37°26' 00" for a distance of 60 feet to a point being the true beginning of this description; thence on an Az of 316°19' 15" a distance of 495.14 feet; thence on an Az of 2°21' 10" a distance of 42.52 feet; thence on an Az of 312°06' 17" a distance of 415.00 feet; thence on an Az of 37°24' 19" a distance of 118.06 feet to an intersection with the

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northwesterly extension of the northwesterly line of Reserve "A" at the N. end of Ronda Street between Blocks 29 and 38, Plat of Moorlands, as recorded in Vol. 4 of Plats, Page 103, records of King County, Washington, said point of intersection being the terminus of this line description. (See Figure C.)

**4. Repair and Replacement of Existing Commercial, Public Access, Marina and Yacht Club Moorage.**

Any proposed repair or replacement of existing legally established moorage facilities shall comply to the maximum extent technically feasible with the standards for new facilities set forth in subsection 3 above. A determination of technical feasibility shall consider:

- a. the location of existing infrastructure;
- b. the scope, function or objective of the proposed repair or replacement;
- c. whether the cost of complying with the standards set forth in subsection 3 above is disproportionate as compared to the environmental benefit associated with such compliance; and
- d. the ability of any impacts on the critical area functions and values of the shoreline arising from a repair or replacement that does not comply with the standards of subsection 3 above to be mitigated.

~~1. The height of any moorage structure shall not exceed a maximum of 16 feet above the ordinary high water mark.~~

**5. Boatlift.** Installation, repair, maintenance, replacement or retention of one ground-based or floating watercraft lift without a canopy, per adjacent upland property and the placement of no more than 2 cubic yards of fill to anchor the lift is permitted.

- a. The fill must be clean.
- b. The fill must consist of rock or pre-cast concrete blocks.
- c. The fill must only be used to anchor the watercraft lift.
- d. The minimum amount of fill must be utilized to anchor the watercraft lift.

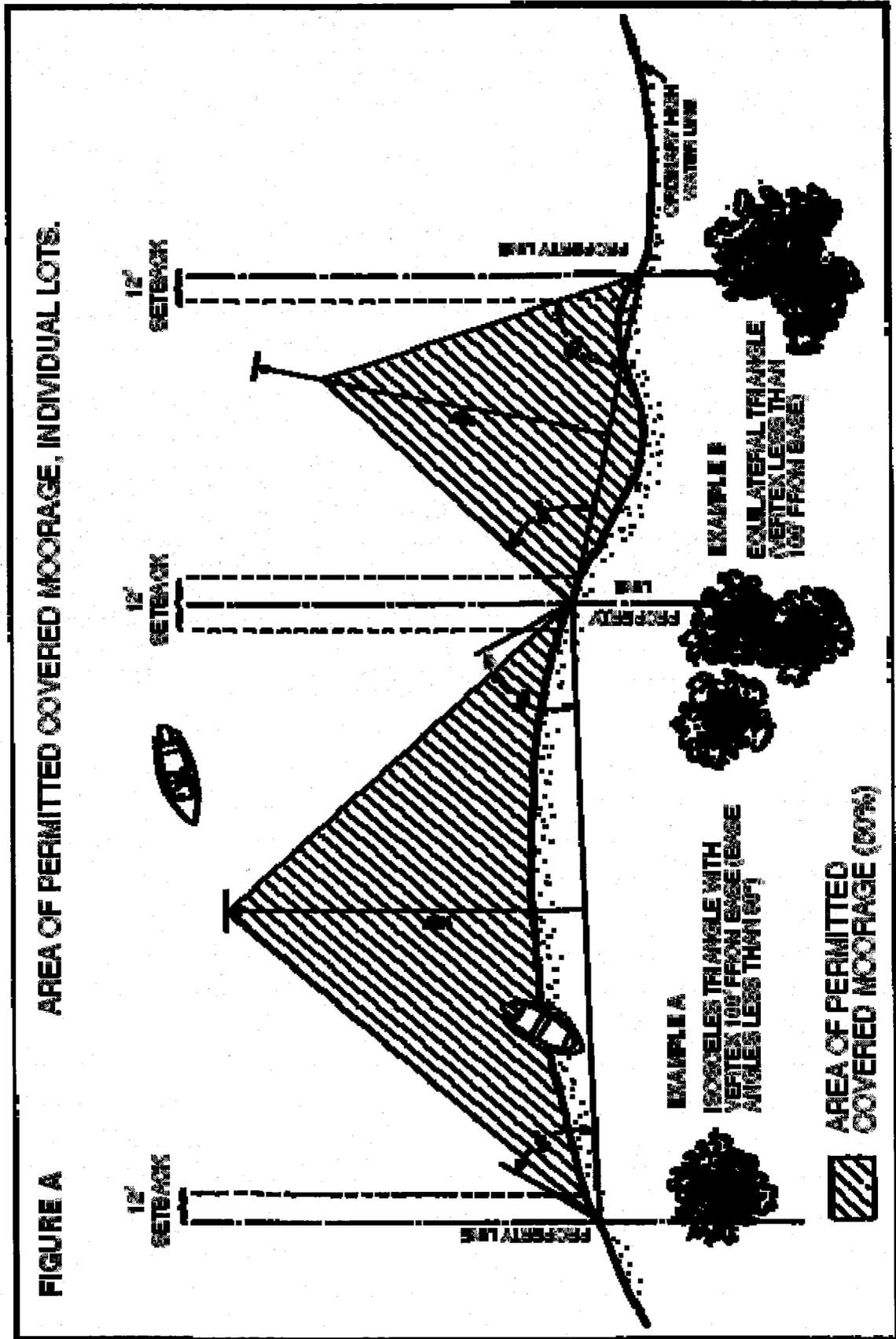
**6. Covered Moorage.** Installation of a translucent canopy on a new or existing watercraft lift is allowed in accordance with this subsection.

- a. Number and Location -- Residential.

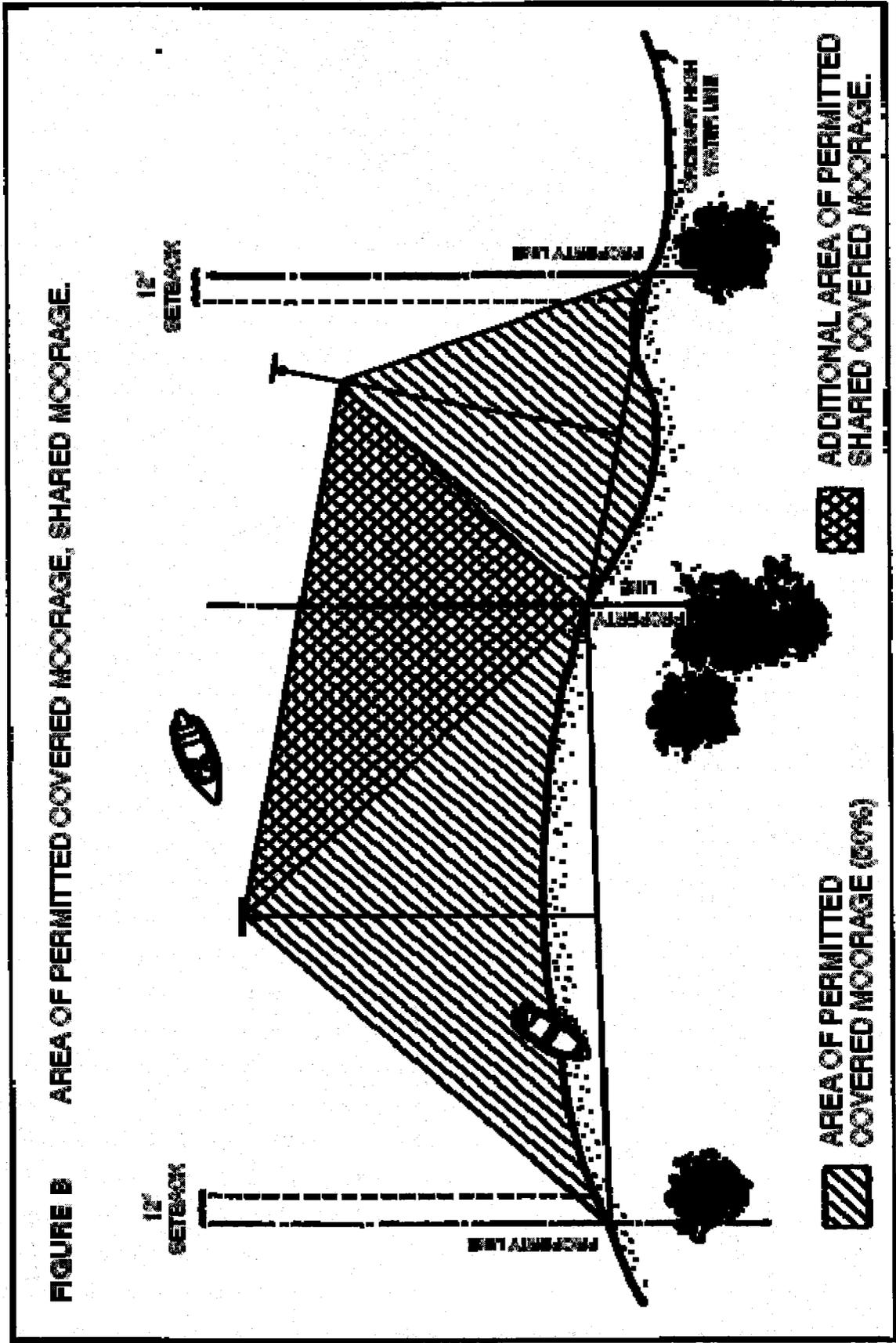
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- (1) In fresh waters, the canopy and structure should be located waterward of the 9' depth elevation as established by the OHWM.
  - (2) The lowest edge of the canopy must be at least 8 feet above the plane of OHW.
  - (3) Only one canopy can be installed per single or joint use residential overwater structure.
  - (4) The watercraft lift with the canopy must be oriented with the length in the north-south direction to the maximum extent practicable.
- 2b. Area Requirements, Covered Moorage -- Residential. The covered portion of a moorage shall be restricted to the area lying within an equilateral triangle, the base of which shall be a line drawn between the points of intersection of the property sidelines with the line of normal high water, except that covered moorage shall not extend beyond 100 feet from the center of the base of such triangle; the covered portion of such moorage shall be restricted to the area lying within an isosceles triangle of which the base is the line drawn between the points of intersection with the respective sidelines of such property and the line of normal high water with the vertex thereof 100 feet from the center of said base. The required 12-foot setback from the property sidelines shall be deducted from the triangle area. (See Figure A.)

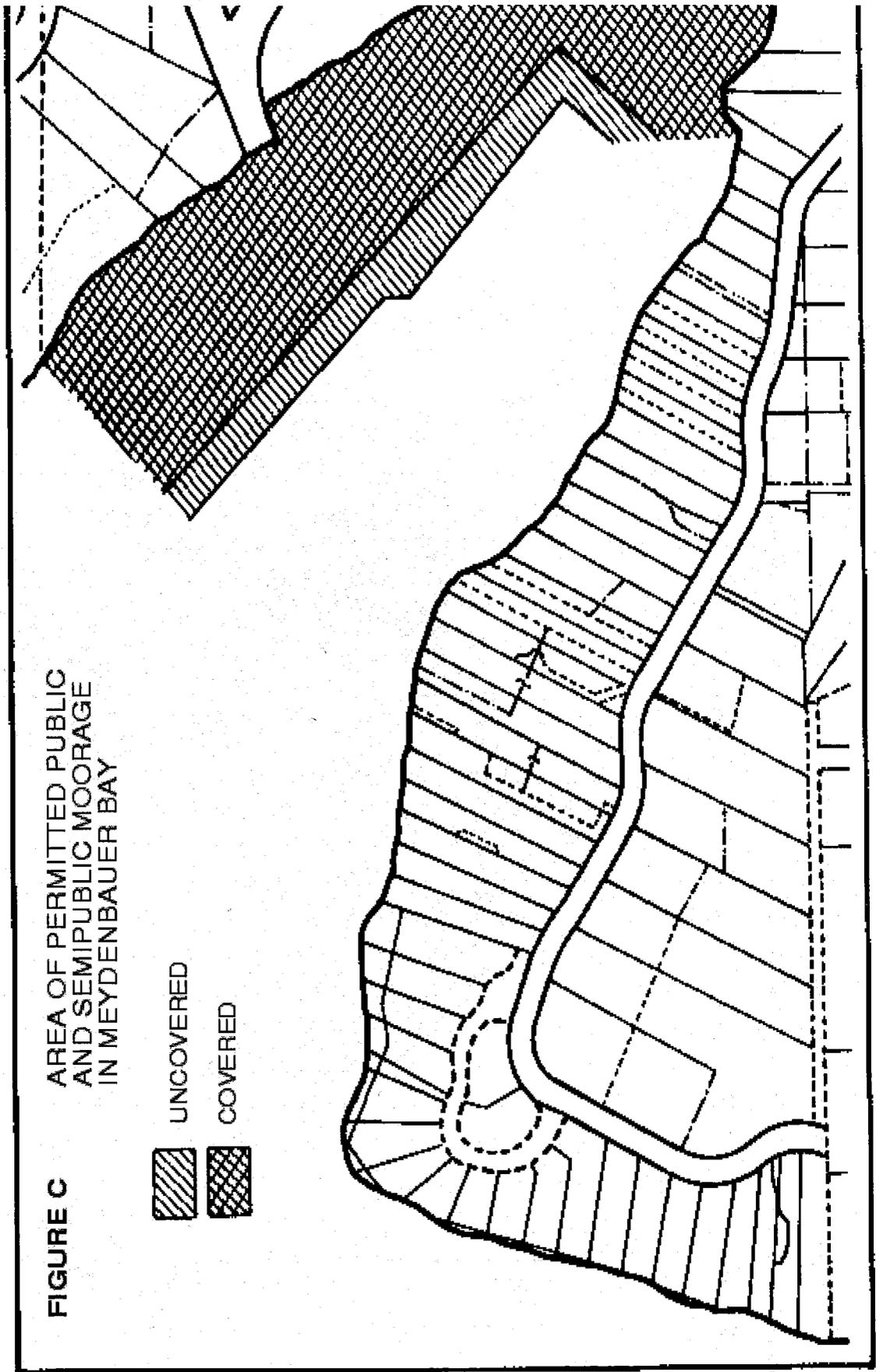
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Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

Covered moorage in no event shall cover more than 50 percent of the permitted covered moorage area.

- 3c. Area Requirements, Shared Covered Moorage -- Residential. Where a shared covered moorage is built pursuant to the agreement of adjoining owners, the covered moorage area shall be deemed to include, subject to the limitations of such joint agreement, all of the combined building areas included within the triangles extended upon said adjoining properties as augmented by the inverted triangle situated between the aforesaid triangles having as its base a line drawn between the vertices of the respective triangles. (See Figure B.)

Covered moorage in no event shall cover more than 50 percent of the permitted covered moorage area.

- ~~4. Uncovered Public and Semipublic Moorage in Meydenbauer Bay. Public or semipublic moorage in Meydenbauer Bay shall not extend beyond the following boundary line: All Azimuths being South; commencing at the E 1/4 Sec. corner of Sec. 31 T 25N, R 5E, W.M., whose "X" coordinate is 1,661,520.58 and whose "Y" coordinate is 225,661.29 of the Washington Coordinate System, North Zone, and running thence on an Az of 78°51' 17" a distance of 963.76 feet to a point whose coordinate is "X" 1,660,575.00, "Y" 225,475.00 of said coordinate system; thence on an Az of 37°26' 00" for a distance of 60 feet to a point being the true beginning of this description; thence on an Az of 316°19' 15" a distance of 495.14 feet; thence on an Az of 2°21' 10" a distance of 42.52 feet; thence on an Az of 312°06' 17" a distance of 415.00 feet; thence on an Az of 37°24' 19" a distance of 118.06 feet to an intersection with the northwesterly extension of the northwesterly line of Reserve "A" at the N. end of Ronda Street between Blocks 29 and 38, Plat of Moorlands, as recorded in Vol. 4 of Plats, Page 103, records of King County, Washington, said point of intersection being the terminus of this line description. (See Figure C.)~~

- 5d. Covered Public and Semipublic Commercial, Public Access, Marina or Yacht Club Moorage in Meydenbauer Bay. The extent of covered public or semipublic commercial, public access, marina or yacht club moorage in Meydenbauer Bay shall comply with the following limitations: On the common line of adjoining private properties, covered moorage shall observe a two-foot-six-inch setback; on public street lines, in the water, no setback shall be required; no covered moorage shall extend out in the bay farther than the limits of the following boundary line: All Azimuths being South; commencing at the E 1/4 Sec. corner of Sec. 31, T 25N, R 5E, W.M., whose "X" coordinate

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

is 1,661,520.58 and whose "Y" coordinate is 225,661.29 of the Washington Coordinate System, North Zone, and running thence on an Az of 78°51' 17" a distance of 963.76 feet to a point being the true beginning whose coordinate is "X" 1,660,575.00, "Y" 225,475.00 referred to said coordinate system; thence on an Az of 316°19' 15" a distance of 999.87 feet; thence on an Az of 37°24' 19" a distance of 217.23 feet to an intersection with the northwesterly extension of the northwesterly line of Reserve "A" at the N. end of Ronda Street between Blocks 29 and 38, Plats of Moorlands as recorded in Vol. 4 of Plats, page 103, records of King County, Washington, said point of intersection being the terminus of this line description. (See Figure C.)

- 67. Boathouses.** New boathouses are prohibited. Existing boathouses are subject to the rules for nonconforming structures set forth in LUC 20.25E.050.C., as applicable. A critical areas report may not be used to modify this subsection 7. must be approved by the Director of Planning and Community Development. The Director may approve a boathouse only if the structure does not constitute a substantial obstruction of the range of view for neighboring properties, and the structure complies with the covered moorage restrictions in paragraph N.2 of this section.

~~7. Moorage shall only be permitted within:~~

- ~~a. Lots created on or after the effective date of this ordinance having water frontage meeting or exceeding the minimum lot width required in the applicable land use district;~~
- ~~b. Lots created prior to the effective date of this ordinance; or~~
- ~~c. Nonbuilding tracts platted for the purpose of providing common moorage for a group of contiguous properties.~~

~~For the purposes of meeting the requirements of paragraph N.7.a of this section, adjoining property owners may combine their water frontage by mutual agreement recorded with the King County Records and Elections Division and the Bellevue City Clerk. Only one moorage facility is permitted pursuant to such a combined frontage agreement, which may connect with the property landward of the ordinary high water mark at only one location.~~

- ~~8. No private moorage or other structure waterward of the ordinary high water mark, including structures attached thereto, shall be closer than 12 feet to any adjacent property line except when a mutual agreement of~~

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

~~adjoining property owners is recorded with the King County Records and Elections Division and the Bellevue City Clerk. Excepted from the requirements of this section are boat lifts or portions of boat lifts which do not exceed 30 inches in height measured from ordinary high water mark.~~

~~9. Private Residential Moorage Extension.~~

~~a. Except as provided in paragraph 9.b of this section, private moorage may not extend more than 80 feet beyond the ordinary high water mark.~~

~~b. Private moorage may extend more than 80 feet beyond the ordinary high water mark to the point at which 10 feet of water depth exists at ordinary high water, if approved by the Director of Planning and Community Development. In making his determination the Director shall approve the proposal only if the following criteria are satisfied:~~

~~i. The moorage will not extend beyond the point necessary to obtain a reasonable and safe moorage; and~~

~~ii. The increased length will not interfere with the public use and enjoyment of the water, or create a hazard to navigation; and~~

~~iii. The increased length will not unreasonably interfere with the use of adjacent piers.~~

~~c. In no case may private moorage extend more than 150 feet beyond the ordinary high water mark.~~

~~10. Boat moorage for semipublic and public use shall be permitted as a shoreline conditional use only.~~

**O. Ports and water-related industries are not a permitted use within the Shoreline Overlay District.**

**P. Recreation Activities Regulations.**

1. Swimming shall be separated from public or semipublic boat launching area.
2. Public street ends in the Shoreline Overlay District may be developed for public recreational activities.
3. Recreational activities within the Shoreline Overlay District shall be permitted when designed subject to the provisions of the Bellevue Shoreline Master Program and its use regulations.

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

4. Public and private recreation activities whether public or private, proposed or located in the shoreline critical area and shoreline critical area buffer shall comply with the requirements of LUC 20.25H.055.

**Q. Residential Development Regulations.**

1. For purposes of this section, accessory structures shall include swimming pools, tennis courts, spas, greenhouses and similar facilities.
2. No boat, houseboat or watercraft moored seaward of the ordinary high water mark shall be used as a permanent residence.
3. All structures, accessory buildings and ancillary facilities, other than those related to water use (such as moorage) shall be set back a minimum of 25 feet from the ordinary high water mark, except minor structural elements as defined and regulated under LUC 20.20.025.C, and except stairs, handrails, and fences essentially perpendicular to the shoreline located outside of the shoreline critical area and shoreline critical area buffer, except stairs, handrails, and a trail or path providing access to the shoreline. The setback is measured from the ordinary high water mark of any shoreline regardless of property lines. The requirements of this subsection may be modified through a critical areas report, LUC 20.25H.230, or through participation in the stewardship program described in LUC 20.25H.055.
4. Fences essentially parallel with the shoreline are not permitted within 25-foot setback critical area buffer or critical area structure setback. [Note: language was inadvertently deleted in previous draft]
54. Maximum building height in those areas of the Shoreline Overlay District which are zoned for residential uses shall be 35 feet, except in land use districts where more restrictive height limitations exist.
6. All residential development shall be accompanied by a plan indicating methods for preserving shoreline vegetation and control of erosion during and following construction as required by City of Bellevue clearing and grading regulations, Chapter 23.76 BCC, and the Comprehensive Plan.

**R. Road and Railroad Designs and Construction Regulations.**

1. Construction of new railroad corridors in the Shoreline Overlay District is prohibited. Repair and reconstruction of existing facilities is permitted.
2. ~~Motorized vehicles including off-trail vehicles, are prohibited within publicly-owned portions of the Shoreline Overlay District except for authorized public service vehicles.~~
32. Development of pedestrian and bicycle pathways within the Shoreline Overlay District shall avoid those areas which are too fragile for normal trail construction.

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

When development design is shown to mitigate adverse impact, it may be permitted.

- ~~4. Runoff from City streets and roads within the Shoreline Overlay District should be cleansed of sediment and toxic materials before entering watercourses of the Shoreline Overlay District.~~
53. New parking facilities within the Shoreline Overlay District shall not be permitted over water or within 25 feet of the ordinary high water mark the shoreline critical area buffer. Provisions must be made to control and cleanse surface water runoff from parking areas in order to comply with state water quality standards.
- ~~64. Parking facilities shall be set back a sufficient distance from the ordinary high water mark so as not to require the creation or protection of such parking facilities by shoreline protective measures.~~
5. Roads, railroads and trails proposed or located in the shoreline critical area and shoreline critical area buffer shall comply with the requirements of LUC 20.25H.055.

**S. Shoreline Protection Regulations Critical Area and Critical Area Buffer regulations. Additional uses and activities are allowed in the shoreline critical area and shoreline critical area buffer, as set forth in LUC 20.25H.055.**

- ~~1. New development in the Shoreline Overlay District shall utilize design and construction methods and practices which will protect such development from damage resulting from a 100-year flood.~~
- ~~2. New development within the Shoreline Overlay District shall provide for the routing of flood waters and shall avoid reducing the flood water storage capacity of the wetlands and marshes, bogs and swamps.~~
- ~~3. Riprapping and bank stabilization measures should be of a sloping design, meeting the criteria set forth in City of Bellevue clearing and grading regulations, Chapter 23.76 BCC, and should be left ungrouted.~~
- ~~4. Development within the Shoreline Overlay District shall exclude those uses which reduce the floodway area to the extent that they either cause a backwater on upstream property or increase the velocity on downstream property.~~

**T. Solid Waste Regulations.**

1. The disposal of nuisance materials, as defined by the City of Bellevue Nuisance Ordinance, Chapter 9.10 BCC, within the Shoreline Overlay District is prohibited.

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

2. The dumping of toxic materials within the Shoreline Overlay District is prohibited.

#### **U. Utilities Regulations.**

- ~~1. When utilities are located within the wetlands environment of the Shoreline Overlay District, sufficient measures must be taken to adequately mitigate all related substantial adverse impacts.~~
21. Compatible utilities shall be consolidated within a single right-of-way. After construction, all areas shall be restored to their pre-project configuration, replanted with suitable vegetation, and provided maintenance until newly planted vegetation is established.
2. Utilities proposed or located in the shoreline critical area and shoreline critical area buffer shall comply with the requirements of LUC 20.25H.055.

~~EPF/existing landscape maintenance/vegetation management/~~

#### **V. Variances – Special Procedures.**

Where there is a Shoreline Overlay District, variances from the requirements of the underlying use district regulations will follow the requirements and procedures specified in Part 20.30G LUC. A variance from the Shoreline Master Program will not be required in addition to the variance from the requirements of the underlying use district unless the proposal would constitute a variance from the Shoreline Master Program. Where the variance sought is from the requirements of the Shoreline Master Program, the procedures and requirements specified in Part 20.30H LUC will be followed.

#### **W. Conditional Uses – Special Procedures.**

Uses which are shown as Conditional Uses on Chart 20.10.440 for the underlying use district shall, where there is also a Shoreline Overlay classification on the property, follow the requirements and procedures of Part 20.30C LUC.

#### **X. Administration and Enforcement.**

The administration and enforcement of this section shall be in conformance with the rules and procedures set forth in Chapter 20.40 LUC and with those found in WAC 173-14-180 or its successor. When conflict arises between regulations of the Shoreline District and underlying land use districts, regulations of the Shoreline Overlay District shall prevail.

Section 11. This ordinance shall take effect on December 1, 2005~~insert effective date~~.

PASSED by the City Council this \_\_\_\_\_ day of \_\_\_\_\_, 2006,  
and signed in authentication of its passage this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

(SEAL)

\_\_\_\_\_  
Grant Degginger, Mayor

Approved as to form:

Lori M. Riordan, City Attorney

\_\_\_\_\_  
Mary Kate Berens, Deputy City Attorney

Attest:

\_\_\_\_\_  
Myrna L. Basich, City Clerk

Published \_\_\_\_\_

**Changes from September 7, 2005 Final Planning Comm'n Recommendation shown in strike-draft  
(~~deleted text~~ and new text)**

CITY OF BELLEVUE, WASHINGTON  
ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE amending the Bellevue Land Use Code to update critical areas regulations considering best available science, local policies and Growth Management Act requirements; repealing Part 20.25H of the Bellevue Land Use Code and Resolution 5712; and creating a new Part 20.25H of the Bellevue Land Use Code; and establishing an effective date.

WHEREAS, the City of Bellevue is a designated urban growth area under the state's Growth Management Act (GMA); and

WHEREAS, as an urban growth area, the City of Bellevue plans for and accepts its portion of the forecasted growth and development expected in King County; and

WHEREAS, the state Growth Management Act (GMA) requires local jurisdictions to designate and protect critical areas; and

WHEREAS, GMA requires local jurisdictions to include the best available science (BAS) in developing policies and regulations to protect critical area functions and values, and to give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries; and

WHEREAS, the City of Bellevue has a long history of protecting environmentally sensitive critical areas, with its first protective regulations adopted in 1987; and

WHEREAS, the City of Bellevue has a long history of developing and protecting exceptional neighborhoods and commercial areas, which contribute to economic development and ~~the~~ to citizens' quality of life; and

WHEREAS, the City of Bellevue initiated its Critical Areas Update process in order to review existing regulations and policies protecting critical areas in 2001; and

WHEREAS, following substantial work by the Critical Areas Citizens Advisory Committee and the Planning Commission, the City Council adopted updated critical areas policies into the Environmental Element of the Comprehensive Plan, in November, 2004; and

WHEREAS, the Comprehensive Plan policies directs a regulatory and non-regulatory approach to protecting critical area functions and values; and

WHEREAS, the City of Bellevue protects critical areas with a variety of non-regulatory measures, including acquisition of critical areas, rehabilitation projects, education programs, and best management practices in city operations and management of city property and rights of way; and

**Changes from September 7, 2005 Final Planning Comm'n Recommendation shown in strike-draft  
(deleted-text and new text)**

WHEREAS, the proposed amendments to the Land Use Code updating the City's critical areas regulations, together with other regulations, including the City's clearing and grading regulations and stormwater regulations, and together with non-regulatory measures and incentives, provide protection of critical area functions and values; and

WHEREAS, the amendments to Part 20.25H of the Land Use Code include regulations requiring development to avoid impacts to critical areas through the use of buffers, require development in compliance with performance standards that minimize impacts to critical areas where development is required, and require mitigation of impacts that cannot be avoided; and

WHEREAS, the amendments to Part 20.25H of the Land Use Code also significantly increase flexibility and incentives for property owners; and

WHEREAS, the amendments to Part 20.25H of the Land Use Code recognize and accommodate existing legally-established development in and near critical areas; and

WHEREAS, the Coal Mine Hazard regulations adopted in 1993 by Resolution 5712 represent the best available information and techniques for development within identified coal mine hazards areas, and should be included in the Land Use Code; and

WHEREAS, development of the proposed amendments included BAS, with BAS sources set forth completely in the Planning Commission Transmittal dated September 7, 2005; and

WHEREAS, the City prepared a risk analysis of the proposed amendments, entitled "City of Bellevue's Critical Areas Update – Risk Analysis of Regulatory, City Programs, and Best Available Science Alternatives for Improving Critical Area Protection," dated June 16, 2005 and updated on \_\_\_\_\_ which discloses any departure from best available science and the risks associated with such departures; and

WHEREAS, the Planning Commission held a public hearing on July 6, 2005 with regard to such proposed Land Use Code amendment; and

WHEREAS, the Planning Commission finds that the Land Use Code amendment satisfies the criteria of LUC 20.30J.135 and therefore recommends that the City Council approve such proposed amendment; and

WHEREAS, the Council adopts the analysis and discussion of GMA and BAS obligations as set forth in the Planning Commission Transmittal dated September 7, 2005; and

WHEREAS, the City Council concurs in the analysis of the Land Use Code amendment criteria as set forth in the Planning Commission Transmittal dated September 7, 2005 and finds that the Land Use Code amendment, as modified pursuant to Council direction, satisfies the criteria of LUC 20.30J.135; and

WHEREAS, the City of Bellevue has complied with the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, and the City's Environmental Procedures Code, BCC 22.02,

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(deleted text and new text)**

including preparation of the Draft Environmental Impact Statement dated \_\_\_\_\_ and the Final  
Environmental Impact Statement dated \_\_\_\_\_ ; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS  
FOLLOWS:

Section 1. Resolution 5712 is hereby repealed.

Section 2. Part 20.25H of the Bellevue Land Use Code is hereby repealed.

Section 3. A new Part 20.25H of the Bellevue Land Use Code is hereby adopted as  
follows:

**Critical Areas Overlay District**

**Part 20.25H**

**I. SCOPE AND PURPOSE**

**20.25H.005 Scope.**

This Part 20.25H establishes standards and procedures that apply to development within the "Critical Areas Overlay District," which includes any site that is in whole or in part designated as a critical area or critical area buffer. All development within the Critical Areas Overlay District must be reviewed and approved pursuant to this Part in addition to being subject to all other relevant standards of the Bellevue City Code. The Critical Areas Overlay District does not apply to the Downtown.

**20.25H.010 Purpose.**

The Critical Areas Overlay District is a mechanism by which the City recognizes the existence of natural conditions which affect the use and development of property. Through this part, the City designates and classifies ecologically sensitive and hazard areas and imposes regulations on the use and development of affected property in order to protect the functions and values of these areas and the public health, safety and welfare, and to allow the reasonable use of private property.

**20.25H.015 Applicable procedure.**

The Critical Areas Overlay District consists of two parts:~~(A)~~ that part of a site that is not contained within a critical area, ~~or~~ critical area buffer, or critical area structure setback, and ~~(B)~~ that part of a site that is within a critical area, ~~or~~ critical area buffer, or critical area structure setback.

A. If a proposal avoids all disturbance or modification of the critical area, ~~and~~ critical area buffer, and critical area structure setback, the proposal is subject to the provisions of this Part 20.25H through the review process for the underlying permit or approval required for

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(deleted text and new text)**

the development, and a decision on such application may be appealed according to the appeal process applicable ~~to~~for the underlying permit or approval.

- B. If a proposal involves disturbance to or modification of the critical area, ~~or critical area buffer,~~  
or critical area structure setback, then in addition to the review process for the underlying permit or approval required for the development, the proposal shall require a critical areas land use permit, LUC Part 20.30P, except where otherwise indicated in this Part.

**20.25H.020 Submittal Requirements.**

- A. The Director shall specify the submittal requirements, including type, detail and number of copies, for a use or development application to be deemed complete and accepted for filing.
- B. The Director may waive specific submittal requirements determined to be unnecessary for review of an application.

**II. DESIGNATION OF CRITICAL AREAS AND DIMENSIONAL STANDARDS**

**20.25H.025. Designation of Critical Areas.**

The following areas are hereby designated as critical areas. For additional information about identifying each critical area, see the specific sections noted.

**Changes from September 7, 2005 Final Planning Comm'n Recommendation shown in strike-draft (deleted-text and new text)**

Critical Area Category or Type	Additional Information Identifying Critical Area
<b>Streams-Corridors</b>	
Type S Water	LUC 20.25H.075
Type F Water	LUC 20.25H.075
Type N Water	LUC 20.25H.075
Type O Water	LUC 20.25H.075
Closed <del>corridor</del> segment, regardless of type; Kelsey Creek drainage basin	LUC 20.25H.075
Closed <del>corridor</del> segment, regardless of type; all other drainage basins	LUC 20.25H.075
<b>Wetlands</b>	
Category I	LUC 20.25H.095
Category II	LUC 20.25H.095
Category III	LUC 20.25H.095
Category IV over 2500 square feet	LUC 20.25H.095
<b>Shorelines</b>	
Shorelines	LUC 20.25E.017.D
<b>Geologic Hazard Areas</b>	
Landslide Hazards	LUC 20.25H.120
Steep Slopes	LUC 20.25H.120
Coal Mine Hazard Areas	LUC 20.25H.120
<b>Habitat Associated with Species of Local Importance</b>	
Habitat associated with species of local importance	LUC 20.25H.150
<b>Areas of Special Flood Hazard</b>	
Areas of Special Flood Hazard	LUC 20.25H.175

**20.25H.030 Identification of Critical Area.**

**A. Determining Presence of Critical Area.** A determination of whether a site contains a critical area, ~~or critical area buffer, or critical area structure setback~~ shall be made as part of the review

**Changes from September 7, 2005 Final Planning Comm'n Recommendation shown in strike-draft  
(~~deleted text~~ and new text)**

process for the proposal, based on information provided by the applicant. The director may specify the information required to determine the presence and extent of ~~a critical area or buffers~~such areas, including, but not limited to: site surveys, topographic maps, technical environmental analysis, peer reviews, or other information the Director deems necessary. The location and extent of critical areas, ~~and critical area buffers, and critical area structure setbacks~~ may be required to be surveyed, marked in the field with permanent signage, and fenced to separate such areas from development.

**B. Recording required.**

1. Site Plan. The property owner receiving approval of a use or development within the Critical Areas Overlay District pursuant to this Part 20.25H shall record a site plan or other instrument clearly delineating the critical area, ~~and critical area buffer, and critical area structure setback~~ with the King County Division of Records and Elections. The site plans must include a statement that the provisions of this Part 20.25H as now or hereafter amended control use and development of the subject property. Single lot residential development in single-family residential land use districts is exempt from this recording requirement, except where explicitly required in this Part 20.25H.
2. Native Growth Protection Area/Easement. The Director may also require recording of the delineation of, and restrictions of, Native Growth Protection Areas (NGPA) or Native Growth Protection Easements (NGPE) designated as part of an approval of a subdivision, short subdivision or Planned Unit Development within the Critical Areas Overlay District, and as part of any approval to modify a critical area or critical area buffer. The NGPA or NGPE shall contain at minimum:
  - a. An assurance that the NGPA or NGPE will be kept free from all development and disturbance except where allowed or required for habitat improvement projects, vegetation management, and new or expanded city parks pursuant to LUC 20.25H.070; and that native vegetation, existing topography, and other natural features will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering and protecting plants and animal habitat;
  - b. The right of the City of Bellevue to enter the property to investigate the condition of the NGPA or NGPE upon reasonable notice;
  - c. The right of the City of Bellevue to enforce the terms of the restriction; and
  - d. A management plan for the NGPA or NGPE designating future management responsibility.

**20.25H.035 Critical Area Buffers and Structure Setbacks.**

**Changes from September 7, 2005 Final Planning Comm'n Recommendation shown in strike-draft  
(~~deleted text~~ and new text)**

**A. Critical Area Buffer.** The following critical area buffers and structure setbacks are established for each critical area set forth below. For information about modifying required critical area buffers and structure setbacks, see the referenced sections noted in the table.

**[Reviewer note: highlighted portions of the table below are changed from Planning Commission recommendation as a result of Council direction]**

**Changes from September 7, 2005 Final Planning Comm'n Recommendation shown in strike-draft  
 (deleted text and new text)**

Critical Area Category or Type	Critical Area Buffer Width		Structure Setback		Modification of Buffer or Setback
<b>Streams Corridors</b>					
	<u>Undeveloped Site<sup>1</sup></u>	<u>Developed Site<sup>1</sup></u>	<u>Undeveloped Site<sup>1</sup></u>	<u>Developed Site<sup>1</sup></u>	
Type S Water	100 ft	<del>50 ft</del>	20 ft	<del>50 ft</del>	LUC 20.25H.075 LUC 20.25H.230
Type F Water	100 ft	<del>50 ft</del>	20 ft	<del>50 ft</del>	LUC 20.25H.075 LUC 20.25H.230
Type N Water	50 ft	<del>25 ft</del>	15 ft	<del>25 ft</del>	LUC 20.25H.075 LUC 20.25H.230
Type O Water	25 ft	<del>25 ft</del>	10 ft	None	LUC 20.25H.075 LUC 20.25H.230
Closed <del>corridor</del> segment, regardless of type; Kelsey Creek drainage basin	None	None	50 ft or combined buffer and structure setback required for stream type, whichever is less	50 ft or combined buffer and structure setback required for stream type, whichever is less	LUC 20.25H.075 LUC 20.25H.230
Closed <del>corridor</del> segment, regardless of type; all other drainage basins	None	None	10 ft	10 ft	LUC 20.25H.075 LUC 20.25H.230
<b>Wetlands</b>					
	<u>Undeveloped Site<sup>2</sup></u>	<u>Developed Site<sup>2</sup></u>	<u>Undeveloped Site<sup>2</sup></u>	<u>Developed Site<sup>2</sup></u>	
Category I			20 ft		
Natural Heritage wetland	190 ft	As established through previously approved and recorded NGPA or NGPE for wetland		20 ft from edge of previously approved and recorded NGPA or NGPE	LUC 20.25H.095 LUC 20.25H.230
Bogs	190 ft				
Forested wetland	Based on score for habitat or water quality				
Habitat score of 29 to 36	225 ft				
Habitat score of 20 to 28	110 ft				
Water quality score of 24 to 32 and habitat score of less than 20	75 ft				
All others	75 ft				
Category II			20 ft		
Habitat score of 29 to 36	225 ft	As established through previously approved and recorded NGPA or NGPE for wetland		20 ft from edge of previously approved and recorded NGPA or NGPE	LUC 20.25H.095 LUC 20.25H.230
Habitat score of 20 to 28	110 ft				
Water quality score of 24 to 32 and habitat score of less than 20	75 ft				

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Critical Area Category or Type	Critical Area Buffer Width		Structure Setback		Modification of Buffer or Setback
All others	75 ft				
Category III		As established through previously approved and recorded NGPA or NGPE for wetland	15 ft	15 ft from edge of previously approved and recorded NGPA or NGPE	LUC 20.25H.095 LUC 20.25H.230
Habitat score of 20 to 28 points	110 ft				
All others	60 ft				
Category IV over 2500 square feet		As established through previously approved and recorded NGPA or NGPE for wetland	None	None	LUC 20.25H.095 LUC 20.25H.230
All	40 ft				
<b>Shorelines</b>					
	<u>Undeveloped Site<sup>3</sup></u>	<u>Developed Site<sup>3</sup></u>	<u>Undeveloped Site<sup>3</sup></u>	<u>Developed Site<sup>3</sup></u>	
All shorelines	50 ft	25 ft	None	25 ft	LUC 20.25H.115 LUC 20.25H.230
<b>Geologic Hazard Areas</b>					
Landslide Hazards	Toe-of-slope: None		Toe-of-slope: 75 ft		LUC 20.25H.120
	Top-of-slope: 50 ft		Top-of-slope: None		LUC 20.25H.230
Steep Slopes	Toe-of-slope: None		Toe-of-slope: 75 ft		LUC 20.25H.120
	Top-of-slope: 50 ft		Top-of-slope: None		LUC 20.25H.230
Coal Mine Hazard Areas	See LUC 20.25H.130		See LUC 20.25.130		LUC 20.25H.120 LUC 20.25H.230
<b>Habitat Associated with Species of Local Importance</b>					
Habitat associated with species of local importance	Only if required for known species on site		None		N/A
Naturally occurring ponds with no other critical area designation	35 ft		None		LUC 20.25H.230
<b>Areas of Special Flood Hazard</b>					
Areas of Special Flood Hazard	None		None		N/A

<sup>1</sup>For a definition of "undeveloped site" and "developed site" for sites with streams, see LUC 20.25H.075.C.1.a.

<sup>2</sup>For a definition of "undeveloped site" and "developed site" for sites with wetlands, see LUC 20.25H.095.C.1.a.

<sup>3</sup>For a definition of "undeveloped site" and "developed site" for sites with shorelines, see LUC 20.25H.115.B.1.a.

**B. Buffer and Setback on Sites with Existing DevelopmentPrimary Structure(s).**

Where a primary structure legally established on a site prior to ~~December 1, 2005~~[insert effective date] encroaches into the critical area buffer or structure setback established in subsection A, the critical area buffer and/or structure setback shall be modified to exclude the footprint of the existing primary structure. Expansion of any existing structure into the critical area buffer or critical area structure setback shall be allowed only pursuant to the provisions of

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LUC 20.25H.055 (single family primary structures) or LUC 20.25H.230 (all other primary structures).

[insert graphic here]

**20.25H.040 Standards for modifying non-critical area setbacks.**

- A. When Applicable.** Certain provisions of this Part 20.25H allow disturbance within a critical area or critical area buffer. This section applies when, pursuant to another section of this Part 20.25H, the applicant must demonstrate that non-critical area setbacks have been modified to the maximum extent allowed under this section. The provisions of this Section 20.25H.040 may not be modified through a critical areas report.
- B. Allowed Modifications to General Dimensional Chart.** The required dimensions of 20.20.010 for non-critical area setbacks may be reduced to no less than the minimums set forth in this subsection, provided that the modification shall be the minimum necessary to allow avoidance of the critical area and critical area buffer. All other provisions of 20.20.010 shall apply, including the applicable footnotes from the general dimensional chart.

Land Use District	R-1	R-1.8	R-2.5	R-3.5 R-4 R-5 R-7.5*	R-10; R-15; R-20	R-30
Front Yard (ft) (1)	25	20	10	10	10	10
Rear Yard (ft)	20	20	20	15	20	20
Side Yard (ft)	5	5	5	5	5	5(2)
2 Side Yards (ft)	15	10	10	10	10	10

*Not effective within the jurisdiction of the East Bellevue Community Council.*

**Notes:**

- Any garage or other structure shall be set back the minimum necessary to allow on-site parking on any driveway without blocking a sidewalk, for proposals without garages, there shall be sufficient area on the site to allow for required on-site parking without blocking a sidewalk.
  - A side yard setback in R-30 Districts increases to 20 feet on any side yard where the structure exceeds 30 feet above average finished grade.
- C. Allowed Modifications to Transition Area Requirements.** The minimum structure setback established in 20.25B.040.B.1 may not be modified under this section 20.25H.040. The minimum separation between structures established in LUC 20.25B.040.B.2 may be reduced to no less than six feet between structures when the requirements of this section

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apply provided that the modification shall be the minimum necessary to allow avoidance of the critical area and critical area buffer.

**20.25H.045 Development Density/Intensity.**

**A. General.** For development in the Critical Areas Overlay District, the number of dwelling units per acre and the maximum floor area ratio for office space is determined pursuant to this section. The provisions of this Section 20.25H.045 may not be modified through a critical areas report.

**B. Dwelling Units per Acre.** The maximum density allowed for a site in the Critical Areas Overlay District is equal to the number of dwelling units per acre as specified in LUC 20.20.010, times the buildable area in acres, plus the dwelling units per acre times the total area of critical area and critical area buffer in acres times the Development Factor derived from subsection D below:

$$[(DU/acre)(Buildable Area in acres) + (DU/acre)(Total critical area and critical area buffer in acres)(Development Factor)]=Maximum dwelling unit potential$$

**C. Floor Area Ratio for Office Space.**

a. The maximum allowable office floor area for a site which contains a critical area or critical area buffer is equal to 0.5 times the buildable area in square feet plus 0.5 times the total area in critical area and critical area buffer in square feet times the Development Factor derived from subsection D below:

$$[(0.5)(Buildable Area in sq. ft.) + (0.5)(total critical area and critical area buffer in sq. ft.)(Development Factor)]=Maximum Office Development Potential$$

b. A property within the Critical Areas Overlay District is exempt from the sliding scale FAR requirement of LUC 20.20.010, Note 8. The applicable maximum floor area ratio to the buildable area is 0.5 regardless of building square footage.

**D. Development Factor.** The development factor is a percent credit to be used in computing the number of allowed dwelling units or the maximum allowed office floor area for a site within the Critical Areas Overlay District. The development factor is determined by figuring the percentage of the total site that is buildable area, divided by 100. The result should be rounded to the nearest hundredth. The following table illustrates the Development Factor:

Total Site (as %)	Critical area and critical area buffer total (as % of total site)	Buildable Area (as % of total site)	Development Factor (% BA/100)
100	10	90	.9
100	35	65	.65
100	50	50	.5
100	75	25	.25

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100	90	10	.1
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**III. USE AND DEVELOPMENT IN THE CRITICAL AREAS OVERLAY DISTRICT**

**20.25H.050 Uses and Development in the Critical Areas Overlay District.**

**A. Uses.**

1. **General.** ~~Except as set forth in subsection B of this section, t~~The uses established by LUC 20.10.440 for the applicable land use district may be undertaken in the Critical Areas Overlay District as allowed for in the underlying land use district. All development associated with the use shall comply with the provisions of this Part 20.25H.
2. **Shorelines.** Where the Critical Areas Overlay District and Shorelines Overlay District apply to the same site, the uses established by LUC 20.10.440 for the applicable underlying land use district may be undertaken. Additional uses in the Shorelines Overlay District are set forth in LUC 20.25E.080. The applicable permitting process to establish that use the allowed uses within the Shorelines Overlay District is set forth in 20.25E.070. All development associated with the use shall comply with the provisions of this Part 20.25H and Part 20.25E.

**B. Development.**

1. **Coal Mine Hazard Areas and Habitat Associated with Species of Local Importance.** The coal mine hazard areas and habitat associated with species of local importance designated as critical areas by this Part 20.25H do not include absolute restrictions on development or activity. Instead, uses allowed under ~~LUC 20.10.440~~section A above may be undertaken in such critical areas, so long as the performance standards of LUC 20.25H.130 (coal mine hazard areas) or LUC 20.25H.160 (habitat associated with species of local importance) are satisfied.
2. **Other Critical Areas.** Except as set forth in subsection A\_1 above, all development, use, land alteration or other activity within the Critical Areas Overlay District shall be located outside of the critical area and the critical area buffer, unless such use or development is allowed pursuant to the following:
  - a. ~~Allowed u~~Uses and activities—development allowed within critical area or critical area buffer, see 20.25H.055;
  - b. Critical area buffer modifications for the following critical areas:
    - i. Streams ~~corridors~~, see 20.25H.075;
    - ii. Wetlands, see 20.25H.095;
    - iii. Shorelines, see 20.25H.115;
    - iv. Geologic Hazards, see 20.25H.120.
  - c. ~~Uses and Activities—~~Development in the Area of Special Flood Hazard, see 20.25H.180

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- d. Modifications where allowed through a critical areas report, see 20.25H.230;
- e. Reasonable use exceptions, ~~as allowed in~~ see 20.25H.190;
- f. Variances, see Part 20.30G and 20.30H; or
- g. Shoreline specific uses and ~~activities~~ development, where allowed within the shorelines critical area or critical area buffer, see ~~under~~ Part 20.25E.

**C. No Modification.** The critical areas report may not be used to modify the uses allowed in the Critical Areas Overlay District as set forth in 20.10.440 or in the Shorelines Overlay District as set forth in Part 20.25E; nor the provisions of this Section 20.25H.050.

**20.25H.055 ~~Allowed Uses and Activities~~ Development allowed within Critical Areas; and Performance Standards.** The uses and or activities ~~development~~ described in subsection B may be undertaken in a critical area or critical area buffer if all of the requirements of the referenced sections are met. ~~Proposals to develop an allowed use or activity shall require a~~ A critical areas land use permit shall be required unless otherwise noted.

**A. Hierarchy of Alteration.** Where an ~~activity~~ use or development is proposed on a site with more than one type of critical area, preference shall be given to disturbing those critical areas with the least sensitivity to human disturbance, based on a consideration of both existing functions and values, and future functions and values if left undisturbed.

**B. ~~Allowed Uses and Activities~~ Development allowed within Critical Areas.** The following chart lists uses and ~~activities~~ development that may be allowed in a critical area, ~~or critical area buffer, or critical area structure setback.~~ For additional uses and activities allowed in shorelines and shoreline critical area buffers, see LUC 20.25E.080. The sections noted in the chart for each use or activity and critical area refer to the applicable performance standards that must be met. ~~A critical areas report may not be used to add additional uses or activities within a critical area or critical area buffer.~~

		Type of Critical Area				
		Streams Corridors	Wetlands	Shorelines	Geologic Hazard Areas <sup>1</sup>	Areas of Special Flood Hazard
Use or Activity/Dev	Repair and maintenance of parks and parks facilities, including trails <sup>1,2</sup>	20.25H.055.C.1	20.25H.055.C.1	20.25H.055.C.1	20.25H.055.C.1	20.25H.055.C.1
		20.25H.080.A	20.25H.100	20.25E.080.B 20.25E.080.P	20.25H.125	20.25H.180.C 20.25H.180.D.2

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Repair and maintenance of utility facilities, utility systems, stormwater facilities and essential public facilities <sup>1,2</sup>	20.25H.055.C.1 20.25H.080.A	20.25H.055.C.1 20.25H.100	20.25H.055.C.1 20.25E.080.B 20.25E.080.U	20.25H.055.C.1 20.25H.125	20.25H.055.C.1 20.25H.180.C
Repair and maintenance of public rights of way, private roads, access easements, and driveways <sup>1,2</sup>	20.25H.055.C.1 20.25H.080.A	20.25H.055.C.1 20.25H.100	20.25H.055.C.1 20.25E.080.B 20.25E.080.R	20.25H.055.C.1 20.25H.125	20.25H.055.C.1 20.25H.180.C
Repair and maintenance of bridges and culverts <sup>1,2</sup>	20.25H.055.C.1 20.25H.080.A	20.25H.055.C.1 20.25H.100	20.25H.055.C.1 20.25E.080.B 20.25E.080.R	20.25H.055.C.1 20.25H.125	20.25H.055.C.1 20.25H.180.C
Repair and maintenance of surface parking areas <sup>1,2</sup>	20.25H.055.C.1 20.25H.080.A	20.25H.055.C.1 20.25H.100	20.25H.055.C.1 20.25E.080.B 20.25E.080.H	20.25H.055.C.1 20.25H.125	20.25H.055.C.1 20.25H.180.C
Existing agricultural activities <sup>2</sup>	20.25H.055.C.1 20.25H.055.C.3.a 20.25H.080.A	20.25H.055.C.1 20.25H.055.C.3.a 20.25H.100	20.25H.055.C.1 20.25H.055.C.3.a 20.25E.080.B 20.25E.080.C	20.25H.055.C.1 20.25H.055.C.3.a 20.25H.125	20.25H.055.C.1 20.25H.055.C.3.a 20.25H.180.C
Emergency Actions	20.25H.055.C.3.b	20.25H.055.C.3.b	20.25H.055.C.3.b	20.25H.055.C.3.b	20.25H.055.C.3.b
New or expanded utility facilities, utility systems, stormwater facilities <sup>3</sup>	20.25H.055.C.2 20.25H.080.A 20.25H.080.B	20.25H.055.C.2 20.25H.100	20.25H.055.C.2 20.25E.080.B 20.25E.080.U	20.25H.055.C.2 20.25H.125	20.25H.055.C.2 20.25H.180.C
New or expanded essential public facilities	20.25H.055.C.2 20.25H.080.A 20.25H.080.B	20.25H.055.C.2 20.25H.100	20.25H.055.C.2 20.25E.080.B	20.25H.055.C.2 20.25H.125	20.25H.055.C.2 20.25H.180.C 20.25H.180.D.3
Public flood protection measures <sup>4</sup>	20.25H.055.C.2 20.25H.055.C.3.c 20.25H.080.A 20.25H.080.B	20.25H.055.C.2 20.25H.055.C.3.c 20.25H.100	20.25H.055.C.2 20.25H.055.C.3.c 20.25E.080.B	20.25H.055.C.2 20.25H.055.C.3.c 20.25H.125	20.25H.055.C.2 20.25H.055.C.3.c 20.25H.180.C 20.25H.180.D.5

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Instream structures <sup>5</sup>	20.25H.055.C.2 20.25H.055.C.3.d 20.25H.080.A 20.25H.080.B	20.25H.055.C.2 20.25H.055.C.3.d 20.25H.100	20.25H.055.C.2 20.25H.055.C.3.d 20.25E.080.B	20.25H.055.C.2 20.25H.055.C.3.d	20.25H.055.C.2 20.25H.055.C.3.d 20.25H.180.C
New or expanded public rights of way, private roads, access easements and driveways	20.25H.055.C.2 20.25H.080.A 20.25H.080.B	20.25H.055.C.2 20.25H.100	20.25H.055.C.2 20.25E.080.B 20.25E.080.R	20.25H.055.C.2 20.25H.125	20.25H.055.C.2 20.25H.180.C 20.25H.180.D.4
New or expanded bridges and culverts	20.25H.055.C.2 20.25H.055.C.3.e 20.25H.080.A	20.25H.055.C.2 20.25H.055.C.3.e 20.25H.100	20.25H.055.C.2 20.25H.055.C.3.e 20.25E.080.B 20.25E.080.R	20.25H.055.C.2 20.25H.055.C.3.e 20.25H.125	20.25H.055.C.2 20.25H.055.C.3.e 20.25H.180.C
New or expanded private non-motorized trails	20.25H.055.C.2 20.25H.055.C.3.f 20.25H.080.A	20.25H.055.C.2 20.25H.055.C.3.f 20.25H.100	20.25H.055.C.2 20.25H.055.C.3.f 20.25E.080.B 20.25E.080.G	20.25H.055.C.2 20.25H.055.C.3.f 20.25H.125	20.25H.055.C.2 20.25H.055.C.3.f 20.25H.180.C
New or expanded city and public parks	20.25H.055.C.3.g 20.25H.080.A	20.25H.055.C.3.g 20.25H.100	20.25H.055.C.3.g 20.25E.080.B 20.25E.080.P	20.25H.055.C.3.g 20.25H.125	20.25H.055.C.3.g 20.25H.180.C 20.25H.180.D.2
Existing landscape maintenance <sup>2</sup>	20.25H.055.C.3.h 20.25H.080.A	20.25H.055.C.3.h 20.25H.100	20.25H.055.C.3.h 20.25E.080.B 20.25E.080.G	20.25H.055.C.3.h 20.25H.125	20.25H.055.C.3.h 20.25H.180.C
Vegetation Management <sup>6</sup>	20.25H.055.C.3.i 20.25H.080.A	20.25H.055.C.3.i 20.25H.100	20.25H.055.C.3.i 20.25E.080.B 20.25E.080.G	20.25H.055.C.3.i 20.25H.125	20.25H.055.C.3.i 20.25H.180.C
Habitat Improvement Projects	20.25H.055.C.3.j 20.25H.080.A	20.25H.055.C.3.j 20.25H.100	20.25H.055.C.3.j 20.25E.080.B 20.25E.080.G	20.25H.055.C.3.j 20.25H.125	20.25H.055.C.3.j 20.25H.180.C
Stewardship Projects – single-family residential lots	20.25H.055.C.3.k 20.25H.080.A	20.25H.055.C.3.k 20.25H.100	20.25H.055.C.3.k 20.25E.080.B 20.25E.080.G 20.25E.080.Q	20.25H.055.C.3.k 20.25H.125	20.25H.055.C.3.k 20.25H.180.C

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Forest Practices	20.25H.055.C.3. <del>kl</del> 20.25H.080.A	20.25H.055.C.3. <del>lk</del> 20.25H.100	20.25H.055.C.3. <del>lk</del> 20.25E.080.B	20.25H.055.C.3. <del>lk</del> 20.25H.125	20.25H.055.C.3. <del>lk</del> 20.25H.180.C
	Aquaculture 20.25H.055.C.3. <del>ml</del> 20.25H.080.A	20.25H.055.C.3. <del>ml</del> 20.25H.100	20.25H.055.C.3. <del>ml</del> 20.25E.080.B 20.25E.080.D	20.25H.055.C.3. <del>ml</del>	20.25H.055.C.3. <del>ml</del> 20.25H.180.C
Stabilization Measures	20.25H.055.C.3. <del>mn</del> 20.25H.080.A	20.25H.055.C.3. <del>mn</del> 20.25H.100	20.25E.080.B 20.25E.080.E	20.25H.055.C.3. <del>mn</del> 20.25H.125	20.25H.055.C.3. <del>mn</del> 20.25E.080.E
Expansion of Existing Single-family Primary Structures	20.25H.055.C.3. <del>en</del> 20.25H.080.A	20.25H.055.C.3. <del>en</del> 20.25H.100	20.25H.055.C.3. <del>en</del> 20.25E.080.B 20.25E.080.Q	20.25H.055.C.3. <del>en</del> 20.25H.125	20.25H.055.C.3. <del>en</del> 20.25H.180.C <sup>9</sup> 20.25H.180.D.1 20.25H.180.D.7
Reasonable Use Exception <sup>8</sup>	20.25H.080.A	20.25H.100	20.25E.080.B	20.25H.125	20.25H.180.C 20.25H.180.D.7
Recreational Vehicle Storage <sup>10</sup>					20.25H.180.C 20.25H.180.D.6
<u>Additional Shoreline-specific uses or development</u>			<u>Part 20.25E</u>		

**Notes:**

1. For purposes of this section, repair and maintenance includes replacement of facilities and systems, or expansion so long as the area of permanent disturbance of the critical area or critical area buffer is not expanded. As applicable to public rights of way, private roads, access easements and driveways, repair and maintenance also includes removing and replacing improvements within the area of permanent disturbance, and expansion of paved areas, so long as the area of permanent disturbance within the critical area or critical area buffer is not expanded.
2. These uses do not require a critical areas land use permit. The requirements of this Part 20.25H shall be applied through the review process applicable to the underlying use or activity.
3. In the event of a conflict between this section and the utilities code, the utilities code shall prevail.

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4. Examples of public flood protection measures include, but are not limited to: flood control projects, flood damage reduction facilities such as levees, revetments, and pumping stations, streambank stabilization structures and surface water conveyance facilities, bridge piers and abutments.
5. Examples of instream structures include, but are not limited to: sediment ponds, instream ponds, dams, and weirs.
6. Permit requirements may vary. See LUC 20.25H.055.C.3.i. ~~A clearing and grading permit, BCC Ch. 23.76 may be required for such activities.~~
7. For Geologic Hazards other than Coal Mine Hazard areas. Uses and performance standards for Coal Mine Hazard areas set forth in LUC 20.25H.050.
8. Development authorized pursuant to a reasonable use exception, LUC 20.25H.190, shall incorporate the required performance standards to the maximum extent feasible.
9. Authorized only pursuant to a reasonable use exception, LUC 20.25H.190.
10. Such storage is not allowed in critical areas or critical area buffers except within the area of special flood hazard in compliance with applicable performance standards.

**C. Performance Standards.** The following performance standards apply as noted in the table in section B. The critical areas report may not be used to modify the performance standards set forth in this section C:

1. Repair and Maintenance Activities.
  - a. Work shall be consistent with all applicable City of Bellevue codes and standards;
  - b. Removal of significant trees is prohibited; and
  - c. Areas of temporary disturbance associated with the work shall be restored to pre-project conditions, pursuant to a restoration plan meeting the requirements of LUC 20.25H.210.
2. New and Expanded Uses or Activities Development. As used in this section "facilities and systems" is a general term that encompasses all structures and improvements associated with the allowed uses and activities development described in the table in subsection B:
  - a. New or expanded facilities and systems are allowed within the critical area or critical area buffer only where no technically feasible alternative with less impact on the critical area or critical area buffer exists. A determination of technically feasible alternatives will consider:
    - i. the location of existing infrastructure;
    - ii. the function or objective of the proposed new or expanded facility or system;

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- iii. demonstration that no alternative location or configuration outside of the critical area or critical area buffer achieves the stated function or objective, including construction of new or expanded facilities or systems outside of the critical area;
  - iv. whether the cost of avoiding disturbance is substantially disproportionate as compared to the environmental impact of proposed disturbance; and
  - v. the ability of both permanent and temporary disturbance to be mitigated.
- b. If the applicant demonstrates no technically feasible alternative with less impact on the critical area or critical area buffer exists, then the applicant shall comply with the following:
- i. location and design shall result in the least impacts on the critical area or critical area buffer;
  - ii. Disturbance of the critical area and critical area buffer, including disturbance of vegetation and soils, shall be minimized;
  - iii. Disturbance shall not occur in habitat used for salmonid rearing or spawning or by any species of local importance unless no other technically feasible location exists;
  - iv. Any crossing over of a wetland or stream ~~corridor~~ shall be designed to minimize critical area and critical area buffer coverage and critical area and critical area buffer disturbance, for example by use of bridge, boring, or open cut and perpendicular crossings, and shall be the minimum width necessary to accommodate the intended function or objective; provided that the Director may require that the facility to designed to accommodate additional facilities where the likelihood of additional facilities exists, and one consolidated corridor would result in fewer impacts to the critical area or critical area buffer than multiple intrusions into the critical area or critical area buffer;
  - v. All work shall be consistent with applicable City of Bellevue codes and standards;
  - vi. The facility or system shall not have a significant adverse impact on overall aquatic area flow peaks, duration or volume or flood storage capacity, or hydroperiod;
  - vii. Associated parking and other support functions, including, for example, mechanical equipment and maintenance sheds, must be located outside critical area or critical area buffer except where no feasible alternative exists; and
  - viii. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.
3. Performance Standards for Specific Uses or Activities Development. In the event of a conflict between the generally-applicable performance standards and specific standards, those more protective of critical area functions and values shall prevail.
- a. Existing agricultural uses:
- i. Erosion control measures, such as crop rotation, mulching, strip cropping and contour cultivation must be used in conformance with guidelines and standards

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- established by the Natural Resources Conservation Service, U.S. Department of Agriculture;
- ii. Wetland areas must be protected from significant impacts of agricultural chemicals and pesticides as required by the Storm and Surface Water Utility Code, BCC 24.06.195, now or as hereafter amended, and must meet the water quality standards of BCC 24.06.060K, now or as hereafter amended;
  - iii. All ~~activities~~ development shall be consistent with the City of Bellevue's "Environmental Best Practices Manual" now or as hereafter amended.
- b. **Emergency Actions.** Emergency actions are those that must be undertaken immediately or within a time too short to allow full compliance with this Part 20.25H, to avoid an imminent threat to public health or safety, to prevent an imminent danger to public or private property, or to prevent an imminent threat of serious environmental degradation. The Director, or the designee thereof, shall designate when such an action constitutes an emergency action.

Emergency actions within the critical area or critical area buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or critical area buffer. The person or agency undertaking such action shall notify the Director of the existence of the emergency and emergency actions within one (1) working day following commencement of the emergency activity. Within ten (10) working days following completion of the emergency activity, the person or agency undertaking such action shall provide a written description of the work undertaken, site plan, description of pre-emergency site conditions and such other information required by the Director to make the determination required under this subsection.

Within thirty (30) days, the Director shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the Director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then the applicant shall be subject to penalties and enforcement pursuant to BCC Chapter 1.18. If the Director determines that the action taken was within the scope of an allowed emergency action, the applicant shall submit a restoration and/or mitigation plan pursuant to LUC 20.25H.210 based on the impacts of the emergency action to the critical area or critical area buffer within sixty (60) days following the director's determination.

- c. **Public Flood Protection Measures.** New public flood protection measures and expansion of existing ones may be permitted only in accordance with a design prepared by a qualified professional.
- d. **Instream Structures.** Instream structures may be permitted only in accordance with a design prepared by a qualified professional and where the applicant demonstrates measurable benefits, such as decreased erosion, peak flow reduction, improved water quality, stream stabilization or improved habitat from the proposal. The

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applicant shall obtain any required state or federal permits prior to undertaking development.

- e. **New or Expanded Bridges and Culverts.** New culverts shall be designed in accordance with the Washington State Department of Fish and Wildlife "Design of Road Culverts for Fish Passage" now or as hereafter amended. Culvert expansions shall be considered new culverts and be required to be designed in accordance with "Design of Road Culverts for Fish Passage" now or as hereafter amended when the expansion is associated with a project increasing vehicular capacity and (i) there are fish present downstream; (ii) there is potential fish habitat upstream, and (iii) the benefits of so designing the culvert are substantial when compared to expanding the culvert based on its then-existing design.
- f. **Private Non-motorized Trails.** New non-motorized trails within the critical area or critical area buffer are limited to those serving nonresidential uses, multifamily residential uses and more than one single-family lot. Private non-motorized trails shall comply with the performance standards for trails in subsection g below. Nothing in this section prohibits the creation of a soft surface non-motorized trail in a critical area buffer on a single-family lot for use of the residents of that lot. Such trail shall not exceed 4 feet in width, and shall not involve the removal of any significant trees or bank stabilizing roots. In stream ~~corridor~~ and wetland buffers, trails shall not be generally parallel to the stream or wetland edge closer than a distance of 25 feet. Any clearing of brush or vegetation shall be the minimum necessary, and shall be with hand tools only.
- g. **New and Expanded City and Public Parks.**
  - i. **Trails.** New non-motorized trails within the critical area or critical area buffer must meet following standards:
    - (A) Trail location and design shall result in the least impacts on the critical area or critical area buffer;
    - (B) Trails shall be designed to compliment and enhance the environmental, educational, and social functions and values of the critical area with trail design and construction focused on managing and controlling public access and limiting uncontrolled access;
    - (C) Trails shall be designed to avoid disturbance of significant trees and to limit disturbance of native understory vegetation;
    - (D) Trails shall be designed to avoid disturbance of habitat used for salmonid rearing or spawning or by any species of local importance;
    - (E) The trail shall be the minimum width necessary to accommodate the intended function or objective;
    - (F) All work shall be consistent with the City of Bellevue's "Environmental Best Management Practices" and all applicable City of Bellevue codes and standards, now or as hereafter amended;
    - (G) The facility shall not significantly change or diminish overall aquatic area flow peaks, duration or volume or flood storage capacity, or hydroperiod;

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- (H) Where feasible and consistent with any accessibility requirements, any trail shall be constructed of pervious materials;
- (I) Crossings over and penetrations into wetlands and streams corridors shall be generally perpendicular to the critical area, and shall be accomplished by bridging or other technique designed to minimize critical area disturbance considering the entire trail segment and function; and
- (J) Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.

ii. Public Use Structures.

- (A) New or expanded permanent public use structures, including interpretative centers, community centers, and other structures designed for public use and access are allowed in the critical area or critical area buffer only if no technically feasible alternative with less impact on the critical area or critical area buffer exists. A determination of technically feasible alternatives will consider:

- (1) the location of existing infrastructure;
- (2) the function or objective of the proposed new or expanded structure;
- (3) demonstration that no alternative achieves the stated function or objective;
- (4) whether the cost of avoiding disturbance is substantially disproportionate as compared to the environmental impact of proposed disturbance; and
- (5) the ability of both permanent and temporary disturbance to be mitigated.

- (B) If the applicant demonstrates no technically feasible alternative with less impact on the critical area or critical area buffer exists, then the applicant shall comply with the generally applicable performance standards of subsection C.2.b above.

- iii. Other parks uses – Other parks uses proposed within the critical area or critical area buffer, including public access drives, public loading areas, and public boat launches and ramps shall meet the generally applicable performance standards of subsection C.2.b above, provided that active use playfields shall not be allowed in critical area or critical area buffers; and provided that parking supporting parks uses shall be allowed in a critical area buffer only if no technically feasible alternative, as demonstrated through application of the criteria of subsection C.2.a above exists.

- h. Existing ~~Landscaping~~Landscape Maintenance. Routine maintenance of existing legally established landscaping and landscape features developed prior to ~~December 1, 2005~~[insert effective date] in the critical area or critical area buffer may be continued in accordance with this section. For purposes of this section, routine ~~landscape-maintenance activities~~ include mowing, pruning, weeding, planting annuals, perennials, fruits and vegetables, and other activities associated with

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maintaining a legally established ornamental or garden landscape and landscape features. Also, for purposes of this subsection, landscape features refers to fences, trellises, rockeries and retaining walls, pathways, arbors, patios, play areas and other similar improvements. To be considered routine maintenance, activities shall have been consistently carried out so that the ornamental species predominate over native or invasive species. Maintenance shall be performed with hand tools or light equipment only, and no significant trees may be removed, except in accordance with a Vegetation Management Plan under subsection i below. Use of fertilizers, insecticides and pesticides is prohibited unless performed in accordance with the City of Bellevue's "Environmental Best Management Practices" now or as hereafter amended.

- i. **Vegetation Management.** Modification of vegetation in a critical area or critical area buffer that is not considered routine maintenance under subsection h above may be allowed if it meets the requirements of this section. Except where otherwise noted, a critical areas land use permit is required. The following activities may also require a clearing & grading permit, BCC Ch. 23.76 and/or SEPA review and must comply with all other Land Use Code provisions related to tree preservation and landscaping, including but not limited to LUC 20.20.520 and 20.20.900.

- i. **Noxious Species.** The removal of the following vegetation with hand labor and hand-operated equipment from a critical area buffer, or from a geologic hazard critical area, is allowed without requiring a critical areas land use permit or a Vegetation Management Plan:

- (A) Invasive and noxious weeds;
- (B) English Ivy (*Hedera helix*);
- (C) Himalayan blackberry (*Rubus discolor*, *R. procerus*); and
- (D) Evergreen blackberry (*Rubus laciniatus*).

~~A clearing and grading permit, BCC Ch. 23.76, and SEPA review may still be required.~~

- ii. **Hazard Trees.** The removal of trees from the critical area or critical area buffer that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to an existing structure, public or private road or sidewalk, or other permanent improvement, is allowed without requiring a critical areas land use permit or a Vegetation Management Plan, provided that:

- (A) The applicant submits a report on a form provided by the director from a certified arborist, registered landscape architect, or professional forester that documents the hazard and provides a replanting schedule for the replacement trees;
- (B) Tree cutting shall be limited to pruning and crown thinning, unless otherwise justified by a qualified professional. Where pruning or crown thinning is not sufficient to address the hazard, trees should be converted to wildlife snags

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- and completely removed only where no other option removes the identified hazard;
- (C) All vegetation cut (tree stems, branches, etc.) shall be left within the critical area or buffer unless removal is warranted due to the potential for creating a fire hazard or for disease or pest transmittal to other healthy vegetation;
  - (D) The landowner shall replace any trees that are removed pursuant to a restoration plan meeting the requirements of LUC 20.25H.210 ;
  - (E) If a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods or removal that will minimize impacts; and
  - (F) Hazard trees determined to pose an imminent threat or danger to public health or safety, to public or private property, or of serious environmental degradation may be removed or pruned by the landowner on whose property the tree is located prior to receiving ~~written approval from city~~ the permits required under this Part 20.25H, provided that the landowner makes reasonable efforts to notify the city, and within fourteen (14) days following such action, the landowner shall submit a restoration plan that demonstrates compliance with the provisions of this ~~Title~~Part.
- iii. **Forest Health.** Measures to control a fire or halt the spread of disease or damaging insects, provided that the removed vegetation shall be replaced pursuant to a restoration plan meeting the requirements of LUC 20.25H.210.
- iv. **Fire Safety.** Where required pursuant to the International Fire Code, Section 304.1.2, as adopted and amended by the City of Bellevue, vegetation may be removed from the critical area or critical area buffer, provided that the removed vegetation shall be replaced pursuant to a restoration plan meeting the requirements of LUC 20.25H.210.
- v. **Vegetation Management Plan -- Maintenance for other Activities** ~~utility, transportation, parks and public facility projects.~~ utility, transportation, parks and public facility projects. Vegetation may be periodically removed from the critical area or critical area buffer as part of an on-going routine maintenance plan for ~~other utility, transportation, park and other public facility projects~~ uses and activities allowed pursuant to LUC 20.25H.055.B. Such removal shall be pursuant to a Vegetation Management Plan meeting the requirements of this subsection.
- (A) The Vegetation Management Plan shall be prepared by a qualified professional.
  - (B) The Vegetation Management Plan shall include:
    - (1) A description of existing site conditions, including existing critical area functions and values;
    - (2) A site history;
    - (3) A discussion of the Plan objectives;
    - (4) A description of all sensitive features;

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- (5) Identification of soils, existing vegetation, and habitat associated with species of local importance present on the site;
- (6) Allowed work windows;
- (7) A clear delineation of the area within which clearing and other vegetation management practices are allowed under the plan; and
- (8) Short and long term management prescriptions, including restoration and revegetation requirements. Cleared areas shall be restored and revegetated with native species to the extent such vegetation does not interfere with the function of the allowed structure, trail, facility or system.

vii. ~~Select vegetation replacement~~Vegetation Management Plan – other uses. The director may approve proposals for vegetation replacement in a critical area buffer, or within a geologic hazard critical area, pursuant to a Vegetation Management Plan. The Vegetation Management Plan may also include a description of proposed vegetation pruning, including pruning techniques and timing and extent of proposed pruning, provided that proposals to prune vegetation within geologic hazard areas and geologic hazard area buffers may be undertaken without a critical areas land use permit or a Vegetation Management Plan in accordance with subsection vii below. The Vegetation Management Plan shall satisfy the requirements of subsection v.B above, except that the following replaces subsection (8):

- (8) Short and long term management prescriptions, including characterization of trees and vegetation to be removed, and restoration and revegetation plans with native species, including native species with a lower growth habit. Such restoration and revegetation plans shall demonstrate that the proposed Vegetation Management Plan will not significantly diminish the functions and values of the critical area or alter the forest and habitat characteristics of the site over time.

Trees and vegetation may not be removed pursuant to this subsection if removal would result in a significant impact to habitat associated with species of local importance, unless the impacted function can be replaced elsewhere within the management area subject to the plan. In no event may a tree or vegetation which is an active nest site for a species of local importance be removed pursuant to this subsection.

vii. ~~Select vegetation pruning.~~ Pruning of existing trees and vegetation ~~in a critical area buffer, or within a geologic hazard critical area or geologic hazard critical area buffer,~~ with hand labor and hand-operated equipment in accordance with this subsection is allowed without requiring a critical areas land use permit or a Vegetation Management Plan, so long as the area is not included within an Native Growth Protection Area (NGPA) or Native Growth Protection Area Easement (NGPE). A clearing and grading permit, BCC Ch. 23.76, and SEPA review may still be required. Such The pruning allowed by this subsection shall be performed in accordance with guidelines established by the director for each of the following pruning techniques; and may include pruning canopy reduction;

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canopy cleaning; crown canopy thinning, canopy raising or lifting; structural pruning; and canopy restoration. Where vegetation has been consistently managed by topping or other pruning methods, nothing in this ordinance shall preclude the continuation of such practices. ~~windowing, limbing and other techniques approved by the director~~ Pruning shall be performed in a manner that ensures continued survival of the vegetation.

In no event may a tree or vegetation which is an active nest site for a species of local importance be pruned pursuant to this subsection.

- j. **Habitat Improvement Projects.** Disturbance, clearing and grading is allowed in the critical area or critical area buffer for habitat improvement projects demonstrating an improvement to functions and values of a critical area or critical area buffer. Habitat improvement projects shall be:
  - i. sponsored or co-sponsored by a public agency or federally-recognized tribe and whose primary function is habitat restoration; or
  - ii. Approved by the director pursuant to LUC 20.25H.230.
  
- ~~k. **Stewardship Projects** — single family residential lots. Pursuant to a restoration plan approved under LUC 20.25H.210, the director may approve proposals to encroach into the first 35 percent (or first 10 feet, whichever is greater) of a required critical area buffer for certain passive recreational uses, in conjunction with an approved restoration plan for the remaining critical area buffer that enhances existing critical area functions and values of the site as a whole compared to functions and values prior to the proposed project. Allowed encroachments shall be limited to non-structural improvements that utilize pervious surfaces, such as pervious patios or decks, trails, rockeries, trellises and pervious play areas. The director may require that the restoration plan be recorded with the King County Division of Records and Elections, and may require allowed improvements to be removed if the restoration plan is violated.~~
  
- lk. **Forest Practices.** Forest practices may be allowed without requiring a critical areas land use permit, where such practice is regulated and conducted in accordance with the provisions of Chapter 76.09 RCW, now or as hereafter amended, and forest practices regulations, Title 222 WAC, now or as hereafter amended, and those that are exempt from the City's jurisdiction, provided that forest practice conversions are not exempt. The applicant shall demonstrate that all required federal and state permits have been obtained prior to undertaking any work.
  
- m]. **Aquaculture.**
  - a. Aquaculture development must be conducted in a way which does not adversely affect the aesthetic or environmental quality of the wetland and interrelated stream habitat; and
  - b. Aquaculture must to the extent feasible use underwater structures for fish rearing facilities.

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- am.** Stabilization Measures. See LUC 20.25E.080.E for standards regulating shoreline stabilization measures. Proposed stabilization measures within a critical area or critical area buffer to protect against streambank erosion or steep slopes or landslide hazards may be approved in accordance with this subsection.
- i. When Allowed. New or enlarged stabilization measures shall be allowed only to protect existing primary structures and infrastructure, or in connection with uses and ~~activities~~ development allowed pursuant to LUC 20.25H.055.B. Stabilization measures shall be allowed only where avoidance measures are not technically feasible.
  - ii. Type of Stabilization Measure Used. Where a stabilization measure is allowed, soft stabilization measures shall be used, unless the applicant demonstrates that soft stabilization measures are not technically feasible. An applicant asserting that soft stabilization measures are not technically feasible shall provide the information relating to each of the factors set forth in subsection (D) below for a determination of technical feasibility by the director. Only after a determination that soft stabilization measures are not technically feasible shall hard stabilization measures be permitted.
  - iii. Definitions.
    - (A) Hard Stabilization Measures. As used in this Part, hard stabilization measures include: rock revetments, gabions, concrete groins, retaining walls, bulkheads and similar measures which present a vertical or nearly vertical interface with the water.
    - (B) Soft Stabilization Measures. As used in this Part, soft stabilization measures include: biotechnical measures, bank enhancement, anchor trees, gravel placement, stepped back rockeries, vegetative plantings and similar measures that use natural materials engineered to provide stabilization while mimicking or preserving the functions and values of the critical area.
    - (C) Avoidance Measures. As used in this Part, avoidance measures refer to techniques used to minimize or prevent erosion or slope collapse that do not involve modification of the bank or slope. Avoidance measures include vegetation enhancement, upland drainage control, and protective walls or embankments placed outside of the critical area and critical area buffer.
    - (D) Technically feasible. The determination of whether a technique or stabilization measure is technically feasible shall be made by the director as part of the decision on the underlying permit after consideration of a report prepared by a qualified professional addressing the following factors:
      - (1) site conditions, including topography and the location of the primary structure in relation to the critical area;

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- (2) the location of existing infrastructure necessary to support the proposed measure or technique;
- (3) the level of risk to the primary structure or infrastructure presented by erosion or slope failure and ability of the proposed measure to mitigate that risk;
- (4) whether the cost of avoiding disturbance of the critical area or critical area buffer is substantially disproportionate as compared to the environmental impact of proposed disturbance, including any continued impacts on functions and values over time; and
- (5) the ability of both permanent and temporary disturbance to be mitigated.

en. Expansion of Existing Single-family Primary Structures into Critical Area Buffer and Critical Area Structure Setback. Expansion into the critical area buffer and critical area structure setback may be allowed, pursuant to a critical areas land use permit, where expansion outside of the critical area buffer and critical area structure setback is not feasible and where the purpose of the expansion is to serve a function that is an essential component of a single-family residence. Expansion into the critical area is prohibited. Any expansion must comply with all other applicable requirements of the Code, including LUC 20.20.010.

- i. Where allowed, expansions into the critical area buffer and critical areas structure setback shall be limited as follows:
  - (A) The expansion shall be along the existing building line of ~~nonconformity~~ parallel to the edge of the critical area, unless such expansion is not feasible. Only when such expansion is not feasible may expansion encroach further into the critical area buffer and critical area structure setback.
  - (B) Expansions ~~into the critical area buffer~~ shall be the minimum necessary to achieve the intended functions of the expansion, but in no event may the footprint expansion within the critical area buffer and critical area structure setback exceed 500 square feet over the life of the structure. Expansions ~~into stream corridor critical areas and critical area buffers~~ allowed pursuant to the City's previous critical areas regulations (prior LUC Section 20.25H.085.B) shall be included in determining the allowed lifetime expansion; and
  - (C) Areas of new permanent disturbance and all areas of temporary disturbance within the critical area buffer shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.
- ii. For purposes of this section, expansion outside of the critical area buffer and critical area structure setback shall be considered not feasible only when, considering the function to be served by the expansion and the existing structure's layout and infrastructure (including plumbing, drainage and electrical systems):

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- (A) expansion away from the critical area buffer and critical area structure setback within the buildable area of the site will not realize the intended functions of the expansion; and
- (B) expansion away from the critical area buffer and critical area structure setback, including into non-critical area setbacks modified pursuant to LUC 20.25H.040, will not realize the intended functions of the expansion; and
- (C) expansion upwards to the maximum building height of the underlying land use district, within the existing footprint, or together with expansions permitted under subsections (ii)(A) and (B) above, will not realize the intended functions of the expansion.

**[insert graphic here showing preferred hierarchy of expansion area]**

**20.25H.065 Existing Nonconforming Development Uses and Development within Critical Area Buffer or Critical Area Structure Setback not allowed pursuant to 20.25H.055.**

This ~~Section~~ section applies to uses and development and ~~uses~~ legally established within the critical area or critical area buffer prior to ~~December 1, 2005~~ **[insert ordinance effective date]** and which is not included as an allowed use or activity development in Section 20.25H.055 above, except that Section 20.25E.055 applies to uses and development and ~~uses nonconforming to requirements for within~~ the shoreline critical area and shoreline critical area buffer. See performance standards at 20.25H.180 for provisions relating to the repair, remodeling, expansion or reconstruction of structures located in the Area of Special Flood Hazard. Any alterations to existing ~~structures development~~ development allowed under this Section 20.25H.065 shall also comply with ~~these provisions~~ provisions for the Area of Special Flood Hazard. In the event of conflict, the provisions that result in most protection for the critical area or critical area buffer shall govern.

**A. Existing primary structures. See 20.25H.035.B**

**B. Existing non-primary structures. Nonconforming Structures**—A structure, other than a primary structure, legally established within a critical area, critical area buffer or critical area structure setback prior to [insert effective date] shall be considered a nonconforming structure. If no modifications to an ~~existing~~ nonconforming structure are proposed, then the structure may continue without coming into compliance with the regulations of this Part 20.25H. Compliance may in whole or in part be required when changes to a structure are proposed, as follows:

1. Repair and remodeling of an ~~existing~~ nonconforming structure is limited to minor, non-structural repairs, and repairs of mechanical systems within or supporting the accessory structure. If repair or remodeling exceeds these limits, the structure shall be brought into compliance with existing Land Use Code requirements, including requirements of Part 20.25H.
2. Expansion of existing nonconforming structures, other than as allowed under LUC 20.25H.055, into the critical area or critical area buffer is prohibited.

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3. If an existing nonconforming structure is destroyed by fire, explosion or other unforeseen circumstance requiring repairs consistent with those allowed under subsection 1 above, it may be repaired within the footprint existing at the time of destruction; provided that such repair is commenced within one year of the date of destruction and diligently pursued. Areas of temporary disturbance resulting from the reconstruction shall be restored pursuant to a mitigation plan approved by the director under LUC 20.25H.210. If such a structure is destroyed and requires structural or other repairs more extensive than those allowed under subsection 1 above, then any reconstruction of such structure shall be in compliance with existing Land Use Code requirements, including requirements of Part 20.25H.

The critical areas report process may not be used to modify the provisions of this section B.

**BC.** **Nonconforming Sites.** Non-structural development legally established within a critical area or critical area buffer prior to [insert effective date] shall be considered a nonconforming site condition. A nonconforming site condition may not be changed unless the change conforms to the regulations of this Code, except that parking lots may be reconfigured within the existing paved surface.

#### **IV. STREAMS CORRIDORS**

##### **20.25H.075 Designation of Critical Area and Buffers.**

**A. Definition of Stream.** An aquatic area where surface water produces a channel, not including a wholly artificial channel, unless the artificial channel is:

1. Used by salmonids; or
2. Used to convey a stream that occurred naturally before construction of the artificial channel.

**B. Designation of Streams Corridors.** The following streams corridors are hereby designated as critical areas subject to the regulations of this Part 20.25H.

1. **"Type S Water"** means all waters, other than shoreline critical areas designated under LUC 20.25E.017, within their bankfull width, as inventoried as "shorelines of the state" under chapter 90.58 RCW and the rules promulgated pursuant to chapter 90.58 RCW including periodically inundated areas of their associated wetlands.
2. **"Type F Water"** means all segments of waters that are not Type S Waters, and that contain fish or fish habitat, including waters diverted for use by a federal, state, or tribal fish hatchery from the point of diversion for one thousand five hundred feet or the entire tributary if the tributary is highly significant for protection of downstream water quality.
3. **"Type N Water"** means all segments of waters that are not type S or type F waters and that are physically connected to a type S or F waters by an above ground channel system, stream or wetland.

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4. **"Type O Water"** means all segments of waters that are not type S, F or N waters and that are not physically connected to type S, F or N waters by an above ground channel system, stream, or wetland.

**C. Designation of Stream ~~Corridor~~ Critical Area Buffers.** The following critical areas buffers are established.

**1. Stream Critical Area Buffers:**

**a. General -- ~~Open Streams~~ Corridors.**

- i. Undeveloped site. An undeveloped site is a site that contains no primary structure. Open streams ~~corridors on undeveloped sites~~ shall have the following critical area buffers, measured from the top-of-bank:

Type S	100 feet
Type F	100 feet
Type N	50 feet
Type O	25 feet

- ii. Developed site. A developed site is a site that contains a primary structure. Lots created through subdivision, short subdivision, or the Planned Unit Development process from a developed site shall be considered undeveloped and subject to the requirements of subsection (i) above, except that the lot containing the existing primary structure shall be considered developed. Open streams on developed sites shall have the following critical area buffers, measured from the top-of-bank:

<u>Type S</u>	<u>50 feet</u>
<u>Type F</u>	<u>50 feet</u>
<u>Type N</u>	<u>25 feet</u>
<u>Type O</u>	<u>25 feet</u>

- b. **General -- Closed Stream ~~Segments~~ Corridors.** Regardless of type, closed stream ~~segments corridors~~ shall have no critical area buffer and shall have a ~~the~~ structure setback established in LUC 20.25H.075.D.2.b of 10 feet; ~~provided that closed stream segments in the Kelsey Creek drainage basin shall have a structure setback of 50 feet or a structure setback representing the combined dimension of the critical area buffer and structure setback required for its stream type, whichever is less.~~

- c. **~~Existing Development. Buffer and Setback on Sites with Existing Primary Structure(s).~~** Where a primary structure legally established on a site prior to [insert effective date] encroaches into the critical area buffer or structure setback established in this section, the critical area buffer and/or structure setback shall be modified to exclude the footprint of the existing primary structure. Expansion of any existing structure into the critical area buffer or critical area structure setback shall be allowed only pursuant to the provisions of LUC 20.25H.055 (single family primary structures) or LUC 20.25H.230 (all other primary structures). ~~Where a primary~~

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~~structure legally established on a site prior to December 1, 2005 encroaches into the critical area buffer established in subsection 1, the critical area buffer and structure setback shall be modified to exclude the footprint of the existing structure. Expansion of an existing structure into the critical area buffer shall be allowed only pursuant to the provisions of LUC 20.25H.065.~~

- d. Measurement of buffer on eroding stream bank.** A stream ~~corridor~~ critical area buffer and any applicable structure setback may be measured from a fixed location representing the historic location of the top-of-bank where an applicant demonstrates that:
- i. The location of the top-of-bank has changed over the time as a result of ~~extraordinary erosive activity in the natural stream channel processes;~~ and
  - ii. The applicant provides existing surveys, maps or other information acceptable to the director, which ~~The historic location of the top-of bank may be accurately determined~~determines, based on the historic location of the top of bank existing surveys, maps or other information acceptable to the director.
- e. Buffers Modified Under Prior LUC 20.25H.070.A.2.d.** Where the critical area buffer on a site was modified through an approved reach study and restoration plan pursuant to the city's previous critical areas regulations (prior LUC section 20.25H.070.A.2.d), the critical area buffer for that site shall be as determined in that adopted reach study and restoration plan.

- 2. Buffer Modification.** Modifications to the stream critical area buffer may be approved pursuant to this section. Modifications to the stream critical area buffer that do not meet the criteria of this subsection may be considered through a critical areas report, LUC 20.25H.230:
- a. Buffer averaging.** Buffer averaging may be allowed if all the following criteria are satisfied. Proposals to average the stream critical area buffer under this subsection shall require a critical areas land use permit, provided that a mitigation or restoration plan is not required for buffer averaging.
- i. Buffer averaging may be approved only if the applicant demonstrates that a modification to non-protected area setbacks pursuant to LUC 20.25H.040 would not accommodate the proposed development in a manner consistent with its intended use and function.
  - ii. Through buffer averaging, the ecological structure and function of the resulting buffer is equivalent to or greater than the structure and function before averaging;
  - iii. The total buffer area is not reduced;
  - iv. The buffer area is contiguous;

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- v. ~~Averaging does not result in the reduction of the minimum buffer for the buffer area waterward of the top of the associated steep slopes~~any impact to slope stability and does not increase the likelihood erosion or landslide hazard;
  - vi. Averaging does not result in a significant adverse impact to habitat associated with species of local importance; and
  - vii. At no point is the critical area buffer width less than 75% of the required buffer dimension.
- b. Transportation or Utility Infrastructure.** Where a legally established right of way, railroad right of way or other similar infrastructure of a linear nature crosses a stream ~~corridor~~-critical area buffer, the edge of the improved right of way shall be the extent of the buffer, if the part of the critical area buffer on the other side of the right of way provides insignificant biological or hydrological function in relation to the portion of the buffer adjacent to the stream ~~corridor~~.

**CD. Structure Setbacks.**

**1. General.**

The requirements of this section apply along with any other dimensional requirements of the Land Use Code (see LUC 20.20.010, 20.20.130, 20.20.190 and Parts 20.25A – 20.25G). The most restrictive dimension controls. Structure setbacks are required in order to:

- a. Minimize long-term impacts of development adjacent to critical areas and critical area buffers; and
- b. Protect critical areas and critical area buffers from adverse impacts during construction.

**2. Minimum Setback of Structures.**

**a. Open Streams ~~Corridors~~.**

- i. Undeveloped site. An undeveloped site is a site that contains no primary structure. The following structure setbacks apply on undeveloped sites, measured from the edge of the critical area buffer:

Type S-waters 20 feet  
Type F-waters 20 feet  
Type N-waters 15 feet  
Type O-waters 10 feet

- ii. Developed site. A developed site is a site that contains a primary structure. Lots created through subdivision, short subdivision, or the Planned Unit Development process from a developed site shall be considered undeveloped and subject to the requirements of subsection (i) above, except that the lot containing the existing

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primary structure shall be considered developed. The following structure setbacks apply on developed sites, measured from the edge of the critical area buffer:

Type S	50 feet
Type F	50 feet
Type N	25 feet
Type O	None

- b. Closed Stream Segments~~Corridors~~. Closed stream segments, regardless of type, shall have a structure setback of 10 feet; provided that closed stream segments in the Kelsey Creek drainage basin shall have a structure setback of 50 feet or a structure setback representing the combined dimension of the critical area buffer and structure setback required for its stream type, whichever is less. ~~Structure setbacks are not required on closed stream segments.~~

**3. Structure Setback Modification – Undeveloped Sites.** The director may waive or modify the structure setback on an undeveloped site as part of the permit or approval for the underlying proposal if the applicant demonstrates that:

- a. Water quality, or slope stability as documented in a geotechnical report, will not be adversely affected;
- b. Encroachment into the structure setback will not disturb habitat of a species of local importance within a critical area or critical area buffer; and
- c. Vegetation in the critical area and critical area buffer will not be disturbed by construction, development or maintenance activities and will be maintained in a healthy condition for the anticipated life of the development; and
- d. Enhancement planting on the boundary between the structure setback and the critical area buffer will reduce impacts of development within the structure setback.

**4. Structure Setback Modification – Developed Sites.** Structure setbacks on developed sites may be modified only through an approved critical areas report.

**20.25H.080 Performance Standards.**

**A. General.** Development on sites with a Types S or F stream ~~corridor~~ or associated critical area buffer shall incorporate the following performance standards in design of the development, as applicable:

1. Lights shall be directed away from the stream ~~corridor~~.
2. Activity that generates noise such as parking lots, generators, and residential uses shall be located away from the stream ~~corridor~~ or any noise shall be minimized through use of design and insulation techniques.

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3. Toxic runoff from new impervious area shall be routed away from the stream ~~corridor~~.
4. Treated water may be allowed to enter the stream ~~corridor~~-critical area buffer.
5. The outer edge of the stream ~~corridor~~-critical area buffer shall be planted with dense vegetation to limit pet or human use.
6. Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream ~~corridor~~-critical area buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices, now or as hereafter amended.

**B. Modification of Stream Channel.**

1. When allowed. A stream channel shall not be modified by relocating the open channel, or by closing the channel through pipes or culverts unless in connection with the following uses allowed under LUC 20.25H.055:
  - a. a new or expanded utility facility or system;
  - b. a new or expanded essential public facility;
  - c. public flood control measures;
  - d. instream structures; or
  - e. new or expanded public right of way, private roads, access easements or driveways;
  - f. habitat improvement project; or
  - g. reasonable use exception, provided that a modification may be allowed under this section for a reasonable use exception only where the applicant demonstrates that no other alternative exists to achieve the allowed development.

A critical areas report may not be used to modify the uses set forth in this subsection 1.

2. Critical areas report required. Any proposal to modify a stream channel under this section may be approved only through a critical areas report.
3. Relocation of closed stream channel. Any proposal to relocate an existing closed stream channel may be approved only through a critical areas report.

**20.25H.085 Mitigation and Monitoring – Additional Provisions.** In addition to the provisions of LUC 20.25H.210, mitigation plans designed to mitigate impacts to streams ~~corridors~~ and stream ~~corridor~~-critical area buffers shall meet the requirements of this section.

**A. Mitigation Preference.** Mitigation plans for streams ~~corridors~~ and stream ~~corridor~~-critical area buffers shall provide mitigation for impacts to critical area functions and values in the following order of preference:

1. On-site through replacement of lost critical area buffer;
2. On-site, through enhancement of the functions and values of remaining critical area buffer;

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3. Off-site, through replacement or enhancement, in the same sub-drainage basin;
4. Off-site, through replacement or enhancement, out of the sub-drainage basin but in the same drainage basin.

Mitigation off-site and out of the drainage basin shall be permitted only through a critical areas report.

- B. Buffer Mitigation Ratio.** Critical area buffer disturbed or impacted under this Part 20.25H shall be replaced at a ratio of 1-to-1.

**20.25H.090 Critical Areas Report – Additional Provisions.** In addition to the provisions of LUC 20.25H.230, any proposal to modification ~~modify to a stream corridor or stream corridor~~ critical area buffer shall comply with the requirements of this section.

Any critical areas report proposing a modification to the structure setbacks required for closed stream segments ~~corridors~~ shall be based on a consideration of the impact of the modification on the feasibility of reopening the closed stream segment ~~corridor~~ in the future, when compared with the feasibility of reopening the closed stream ~~corridor~~ segment without the proposed modification. Where the proposed modification significantly decreases the feasibility of a future reopening, such modification shall be denied, unless the proposal includes mitigation for the functions and values that could have been achieved by reopening the stream segment.

## V. WETLANDS

### 20.25H.095 Designation of Critical Area and Buffers

- A. Definition of Wetland.** Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.
- B. Designation of Critical Area.** The following wetlands are hereby designated as critical areas subject to the requirements of this Part 20.25H. Wetlands are classified into category I, category II, category III and category IV wetlands based on the adopted Washington State Wetland Rating System for Western Washington, Washington State Department of Ecology publication number 04-06-025, published August, 2004.
1. **Category I wetlands.** Category I wetlands are those that 1) represent a unique or rare wetland type; or 2) are more sensitive to disturbance than most wetlands; or 3) are

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relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or 4) provide a high level of functions.

2. **Category II wetlands.** Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection. Category II wetlands in western Washington include: wetlands scoring between 51-69 points (out of 100) on the questions related to the functions present are Category II wetlands. Wetlands scoring 51-69 points were judged to perform most functions relatively well, or performed one group of functions very well and the other two moderately well.
3. **Category III wetlands.** Category III wetlands are wetlands with a moderate level of functions (scores between 30 -50 points). Wetlands scoring between 30 -50 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.
4. **Category IV wetlands over 2500 square feet.** Category IV wetlands have the lowest levels of functions (scores less than 30 points) and are often heavily disturbed. These are wetlands that we should be able to replace, and in some cases be able to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and also need to be protected.

**C. Designation of Wetland Critical Area Buffer:** The following critical area buffers are hereby established. ~~Buffers are measured from the wetland boundary.~~

**1. Wetland Critical Area Buffer**

a. General.

- i. Undeveloped sites. An undeveloped site is any site where the wetland and wetland buffer have not previously been included within a Native Growth Protection Area (NGPA) or Native Growth Protection Easement (NGPE), regardless of whether the site contains a primary structure. Wetlands on undeveloped sites shall have the following critical area buffers, measured from the wetland boundary:

Category	Wetland Characteristic	Buffer
I	Natural Heritage wetlands	190 feet
	Bogs	190 feet
	Forested	Based on score for habitat or water quality functions
	Habitat score of 29 to 36	225 feet
	Habitat score of 20 to 28	110 feet
	Water quality score of 24 to 32	75 feet

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<b>Category</b>	<b>Wetland Characteristic</b>	<b>Buffer</b>
	and habitat score of less than 20	
	Not meeting any of the above	75 feet
<b>II</b>	Habitat score of 29 to 36	225 feet
	Habitat score of 20 to 28	110 feet
	Water quality score of 24 to 32 and habitat score of less than 20	75 feet
	Not meeting any of the above	75 feet
<b>III</b>	Habitat score of 20 to 28 points	110 feet
	Not meeting any of the above	60 feet
<b>IV over 2500 square feet</b>	Score for functions less than 30 points	40

ii. Developed site. A developed site is any site where the wetland and wetland buffer have previously been included within an approved and recorded NGPE or NPGA, or any site abutting an approved and recorded NGPA containing the wetland and wetland buffer where such site does not also contain a wetland. Wetlands on developed sites shall be governed by the buffer established within the approved and recorded NGPA or NGPE, no additional wetland buffer shall apply.

b. Existing Development Buffer and Setback on Sites with Existing Development. Where a primary structure legally established on a site prior to **December 1, 2005** [insert effective date] encroaches into the critical area buffer or structure setback established in subsection 4 this section, the critical area buffer and/or structure setback shall be modified to exclude the footprint of the existing primary structure. Expansion of any existing primary structure into the critical area buffer or critical area structure setback shall be allowed only pursuant to the provisions of LUC 20.25H.065-.055 (single family primary structures) or LUC 20.25H.230 (all other primary structures).

2. **Buffer Modification.** Modifications to the wetland critical area buffer may be approved pursuant to this section. Modifications to the wetland critical area buffer that do not meet the criteria of this subsection may be considered through a critical areas report, LUC 20.25H.230:

a. **Buffer averaging.** Buffer averaging may be allowed if all the following criteria are satisfied. Proposals to average the wetland critical area buffer under this subsection

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shall require a critical areas land use permit, provided that a mitigation or restoration plan is not required for buffer averaging.

- i. Buffer averaging may be approved only if the applicant demonstrates that a modification to non-protected area setbacks pursuant to LUC 20.25H.040 would not accommodate the proposed development in a manner consistent with its intended use and function.
  - ii. Through buffer averaging, the ecological structure and function of the resulting buffer is equivalent to or greater than the structure and function before averaging;
  - iii. The total buffer area is not reduced;
  - iv. The buffer area is contiguous;
  - v. Averaging does not result in any impact to slope stability and does not increase the likelihood erosion or landslide hazard~~the reduction of the minimum buffer for the buffer area waterward of the top of the associated steep slopes;~~
  - vi. Averaging does not result in a significant adverse impact to habitat associated with species of local importance; and
  - vii. At no point is the critical area buffer width less than 75% of the required buffer dimension.
- b. Transportation or Utility infrastructure.** Where a legally established right of way, railroad right of way or other similar infrastructure of a linear nature crosses a wetland critical area buffer, the edge of the improved right of way shall be the extent of the buffer, if the part of the critical area buffer on the other side of the right of way provides insignificant biological or hydrological function in relation to the portion of the buffer adjacent to the wetland.

**D. Structure Setbacks.**

**1. General.**

The requirements of this section apply along with any other dimensional requirements of the Land Use Code (see LUC 20.20.010, 20.20.130, 20.20.190 and Parts 20.25A – 20.25G). The most restrictive dimension controls. Structure setbacks are required in order to:

- a. Minimize long-term impacts of development adjacent to critical areas and critical area buffers; and
- b. Protect critical areas and critical area buffers from adverse impacts during construction.

**2. Minimum Setback of Structures.**~~--- The following structure setbacks apply, measured from the edge of the critical area buffer:~~

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Undeveloped and developed sites. The following structure setbacks apply to both undeveloped and developed sites. Structure setbacks shall be measured from the edge of the critical area buffer on undeveloped sites, or from the edge of the approved and recorded NGPE or NGPA on developed sites:

Category I wetlands	20 feet
Category II wetlands	20 feet
Category III wetlands	15 feet
Category IV wetlands	none required

**3. Structure Setback Modification – Undeveloped Sites.** The director may waive or modify the structure setback on an undeveloped site as part of the permit or approval for the underlying proposal if the applicant demonstrates that:

- a. Water quality, or slope stability as documented in a geotechnical report, will not be adversely affected;
- b. Encroachment into the structure setback will not disturb habitat of a species of local importance within a critical area or critical area buffer; and
- c. Vegetation in the critical area and critical area buffer will not be disturbed by construction, development, or maintenance activities and will be maintained in a healthy condition for the anticipated life of the development; and-
- d. Enhancement planting on the boundary between the structure setback and the critical area buffer will reduce impacts of development within the structure setback.

**4. Structure Setback Modification – Developed Sites.** Structure setbacks on developed sites may be modified only through an approved critical areas report.

**20.25H.100 Performance Standards.**

Development on sites with a wetland or wetland critical area buffer shall incorporate the following performance standards in design of the development, as applicable:

1. Lights shall be directed away from the wetland.
2. Activity that generates noise such as parking lots, generators, and residential uses, shall be located away from the wetland, or any noise shall be minimized through use of design and insulation techniques.
3. Toxic runoff from new impervious area shall be routed away from the wetlands.
4. Treated water may be allowed to enter the wetland critical area buffer.
5. The outer edge of the wetland critical area buffer shall be planted with dense vegetation to limit pet or human use.

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6. Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream ~~corridor~~-buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices, now or as hereafter amended.

**20.25H.105 Mitigation and Monitoring – Additional Provisions.** In addition to the provisions of LUC 20.25H.210, mitigation plans designed to mitigate impacts to wetlands and wetland critical area buffers shall meet the requirements of this section.

**A. Preference of Mitigation Actions.**

1. Mitigation for impacted wetland critical area. Mitigation actions that require compensation of impacted wetland critical area shall occur in the following order of preference, subject to the location requirements of subsection B:
  - a. Restoring wetlands on upland sites that were formerly wetlands.
  - b. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of non-native introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.
  - c. Enhancing significantly degraded wetlands.
2. Mitigation for impacted wetland critical area buffer. Mitigation actions that require compensation of impacted critical area buffer shall occur in the following order of preference and in the following locations:
  - a. On-site through replacement of lost critical area buffer;
  - b. On-site, through enhancement of the functions and values of remaining critical area buffer;
  - c. Off-site, through replacement or enhancement, in the same sub-drainage basin;
  - d. Off-site, through replacement or enhancement, out of the sub-drainage basin but in the same drainage basin.

**B. Type and Location of Mitigation for Wetland Critical Area.** Compensatory mitigation for critical areas functions and values shall be either in-kind and on-site, or in-kind and within the same drainage sub-basin. Mitigation actions may be conducted off-site and outside of the drainage sub-basin when all of the following are demonstrated through a critical areas report:

1. There are no reasonable on-site or in-subdrainage basin opportunities or on-site and in-subdrainage basin opportunities do not have a high likelihood of success, after a determination of the natural capacity of the site to mitigate for the impacts. Consideration should include: anticipated wetland mitigation replacement ratios, buffer

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conditions and proposed widths, hydrogeomorphic classes of on-site wetlands when restored, proposed flood storage capacity, potential to mitigate stream corridor-fish and wildlife impacts (such as connectivity);

2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and
3. Off-site locations shall be in the same sub-drainage basin unless established watershed goals for water quality, flood or conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation at another site.

**C. Mitigation Ratios**

1. **Wetland Acreage Replacement Ratios.** The following ratios shall apply to creation or restoration that is in-kind, is on-site, is the same category of wetland, is timed prior to or concurrent with alteration, and has a high probability of success. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

Category I	6-to-1
Category II	3-to-1
Category III	2-to-1
Category IV	1.5-to-1

2. **Increased Replacement Ratio.** The director may increase the ratios where proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted.
3. **Critical Area Buffer Mitigation Ratio.** Critical area buffer disturbed or impacted under this Part 20.25H shall be replaced at a ratio of 1-to-1.

**E. Wetlands Enhancement as Mitigation.** Impacts to wetland critical area functions may be mitigated by enhancement of existing significantly degraded wetlands. Applicants proposing to enhance wetlands must produce a critical areas report meeting the requirements of LUC 20.25H.110 and 20.25H.230 that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show whether existing wetland functions will be reduced by the enhancement actions.

**20.25H.110 Critical Area Report – Additional Provisions.**

**A. Limitation on Modification.** A critical areas report may not be used to fill a wetland critical area, except where filling is required to allow a use set forth in LUC 20.25H.055.

**B. Additional Content.** In addition to the general requirements of LUC 20.25H.230, a critical areas report for wetlands shall include a written assessment and accompanying maps of the

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wetlands and buffers within three hundred (300) feet of the project area, including the following information at a minimum:

- A~~1~~. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.
- B~~2~~. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and wetland functions.
- C~~3~~. Functional evaluation for the wetland and adjacent buffer using a local or state agency staff-recognized method and including the reference of the method and all data sheets.

## VI. SHORELINES

### 20.25H.115 Designation of Critical Area and Buffers.

- A. **Designation of Shoreline Critical Areas.** See LUC 20.25E.017 for designated shoreline critical areas.
- B. **Designation of Shoreline Critical Area Buffers.** The following critical areas buffers are established. The shoreline critical area buffer on Lake Sammamish shall be measured from elevation 31.8 NAVD 88. The shoreline critical area buffer on all other shoreline critical areas shall be measured from the ordinary high water mark.

#### 1. Shoreline Critical Area Buffers:

- a. General. ~~---~~All shoreline critical areas:

- i. Undeveloped sites. An undeveloped site is a site that contains no primary structure. All shoreline critical areas on undeveloped sites shall have a 50 foot critical area buffer. ~~---~~ 50 ft.
- ii. Developed sites. A developed site is a site that contains a primary structure. Lots created through subdivision, short subdivision, or the Planned Unit Development process from a developed site shall be considered undeveloped and subject to the requirements of subsection (i) above, except that the lot containing the existing primary structure shall be considered developed. All shoreline critical areas on developed sites shall have a 25 foot critical area buffer.

- b. Buffer and Setback on Sites with Existing Development. Where a primary structure legally established on a site prior to [insert effective date] encroaches into the critical area buffer or structure setback established in this section, the critical area buffer and/or structure setback shall be modified to exclude the footprint of the existing primary structure. Expansion of any existing primary structure into the critical area buffer or critical area structure setback shall be allowed only pursuant to the provisions of LUC 20.25H.055 (single family primary structures) or LUC

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~~20.25H.230 (all other primary structures). Existing Development. Where a primary structure legally established on a site prior to December 1, 2005 encroaches into the critical area buffer established in subsection 1, the critical area buffer and structure setback shall be modified to exclude the footprint of the existing structure. Expansion of an existing structure into the critical area buffer shall be allowed only pursuant to the provisions of LUC 20.25E.055.~~

- 2. Buffer Modification.** Modifications to the shoreline critical area buffer may be approved pursuant to this section as part of the permit or approval for the underlying proposal. Modifications to the shoreline critical area buffer that do not meet the criteria of this subsection may be considered through a critical areas report, LUC 20.25H.230:
  - a. Adjustment Based on Surrounding Development.** Where the shoreline critical area buffer on all developed properties immediately abutting the site is less than the buffer required in subsection 1 above, the required buffer may be modified as set forth in this subsection. Such modification shall allow only a primary structure to encroach into the required buffer. The buffer adjustment shall be determined by connecting the portion of each adjacent primary structure that most encroaches into the required buffer. The line established represents the shoreline critical area buffer for the site, however, in no event may the adjusted shoreline critical area buffer be less than 25 feet.
  - b. Transportation or Utility Infrastructure.** Where a legally established right of way, railroad right of way or other similar infrastructure of a linear nature crosses a shoreline critical area buffer, the edge of the improved right of way shall be the extent of the buffer, if the part of the critical area buffer on the other side of the right of way provides insignificant biological or hydrological function in relation to the portion of the buffer adjacent to the shoreline.

**C. Structure Setbacks.**

**1. General.**

The requirements of this section apply along with any other dimensional requirements of the Land Use Code (see LUC 20.20.010, 20.20.130, 20.20.190 and Parts 20.25A – 20.25G). The most restrictive dimension controls. Structure setbacks are required in order to:

- a. Minimize long-term impacts of development adjacent to critical areas and critical area buffers; and
- b. Protect critical areas and critical area buffers from adverse impacts during construction.

**2. Minimum Setback of Structures.**

- a. Undeveloped site. An undeveloped site is a site that contains no primary structure. Undeveloped sites shall not require a shoreline critical area structure setback.

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- b. Developed site. A developed site is a site that contains a primary structure. Lots created through subdivision, short subdivision, or the Planned Unit Development process from a developed site shall be considered undeveloped and subject to the requirements of subsection (i) above, except that the lot containing the existing primary structure shall be considered developed. Developed sites shall require a 25 foot shoreline critical area structure setback, measured from the edge of the shoreline critical area buffer.

**3. Structure Setback Modification.**

- a. Modification Based on Surrounding Development. Where the shoreline critical area structure setback on all developed properties immediately abutting the site is less than the structure setback required in subsection 2 above, the required structure setback may be modified as set forth in this subsection. Such modification shall allow only a primary structure to encroach into the required structure setback. The modification shall be determined by connecting the portion of each adjacent primary structure that most encroaches into the required structure setback. The line established represents the shoreline critical area structure setback for the site, however, in no event may this subsection modify the required critical area buffer.
- b. Structure Setback Modification – Other (Developed Sites). Structure setbacks on developed sites not meeting the requirements of subsection 3.a above may be modified only through an approved critical areas report.

**20.25H.118 Mitigation and Monitoring – Additional Provisions.** In addition to the provisions of LUC 20.25H.210, mitigation plans designed to mitigate impacts to shorelines and shoreline critical area buffers shall meet the requirements of this section.

**A. Mitigation Preference.** Mitigation plans for shorelines and shoreline critical area buffers shall provide mitigation for impacts to critical area functions and values in the following order of preference:

1. On-site through replacement of lost critical area buffer;
2. On-site, through enhancement of the functions and values of remaining critical area buffer;
2. Off-site, through replacement or enhancement, in the same sub-drainage basin;
3. Off-site, through replacement or enhancement, out of the sub-drainage basin but in the same drainage basin.

Mitigation off-site and out of the drainage basin shall be permitted only through a critical areas report.

**B. Buffer Mitigation Ratio.** Shoreline Critical area buffer disturbed or impacted under this Part 20.25H shall be replaced at a ratio of 1-to-1.

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**20.25H.119 Critical Areas Report – Additional Provisions.** An applicant proposing a modification to the shoreline critical area buffer which would reduce the buffer to less than 25 feet shall establish by survey the site's ordinary high water mark, notwithstanding any other provision of this Part or Part 20.25E.

**VII. GEOLOGIC HAZARD AREAS**

**20.25H.120 Designation of Critical Area and Buffers.**

**A. Designation of Critical Area.** The following geologic hazard areas are hereby designated critical areas subject to the regulations of this Part 20.25H.

1. **Landslide Hazards.** Areas of slopes of 15 percent or more with more than 10 feet of rise, which also display any of the following characteristics:
  - a. Areas of historic failures, including those areas designated as Quaternary slumps, earthflows, mudflows, or landslides.
  - b. Areas that have shown movement during the Holocene Epoch (past 13,500 years) or that are underlain by landslide deposits.
  - c. Slopes that are parallel or subparallel to planes of weakness in subsurface materials.
  - d. Slopes exhibiting geomorphological features indicative of past failures, such as hummocky ground and back-rotated benches on slopes.
  - e. Areas with seeps indicating a shallow ground water table on or adjacent to the slope face.
  - f. Areas of potential instability because of rapid stream incision, stream bank erosion, and undercutting by wave action.
2. **Steep Slopes.** ~~Slopes of 40 percent or more, provided that slopes of 40 percent or more that do not exceed 1000 square feet in area and do not exceed 10 feet in rise shall not be considered critical areas~~ that have a rise of at least 10 feet and exceed 1000 square feet in area.
3. **Coal Mine Hazards.** Areas designated on the Coal Mine Areas maps or in the City's Coal Mine Area Regulations, LUC 20.25H.130, as potentially affected by abandoned coal mines; provided, that compliance with the Coal Mine Area Regulations shall constitute compliance with the requirements of this chapter in regard to coal mines.

**B. Geologic Hazard Area buffers.** The following critical area buffers are established.

1. **General Geologic Hazard Critical Area Buffers:**
  - a. **Landslide Hazards** \_\_\_\_\_ Top-of-slope buffer of
    - i. Top-of-slope setback of 50 feet.
    - ii. Toe-of-slope setback of 75 feet
  - b. **Steep Slopes** \_\_\_\_\_ Top-of-slope buffer of

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- ~~i. Top of slope setback of 50 feet~~
  - ~~ii. Toe of slope setback of 75 feet~~
- 2. Existing Development. Where a primary structure legally established on a site prior to ~~December 1, 2005~~ insert effective date encroaches into the critical area buffer established in subsection 1, the critical area buffer and structure setback shall be modified to exclude the footprint of the existing structure. Expansion of an existing structure into the critical area buffer shall be allowed only pursuant to the provisions of LUC 20.25H.065.
- 3. Buffer Modification.
  - a. Modifications to the geologic hazard critical area buffer may be considered through a critical areas report, LUC 20.25H.230.
  - ~~b. **Transportation or Utility infrastructure.** Where a legally established right of way, railroad right of way or other similar infrastructure of a linear nature crosses a geologic hazard critical area buffer, the edge of the improved right of way shall be the extent of the buffer, if the part of the critical area buffer on the other side of the right of way provides insignificant biological or hydrological function in relation to the portion of the buffer adjacent to the geologic hazard area.~~

**C. Structure Setbacks.**

**1. General.**

The requirements of this section apply along with any other dimensional requirements of the Land Use Code (see LUC 20.20.010, 20.20.130, 20.20.190 and Parts 20.25A – 20.25G). The most restrictive dimension controls. Structure setbacks are required in order to:

- a. Minimize long-term impacts of development adjacent to critical areas and critical area buffers; and
- b. Protect critical areas and critical area buffers from adverse impacts during construction.

**2. Minimum Setback of Structures.**

- a. Landslide Hazards                      Toe-of-slope setback of 75 feet.
- b. Steep Slopes                              Toe-of-slope setback of 75 feet.

- 3. Structure Setback Modification.** Structure setbacks may be modified only through an approved critical areas report.

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**20.25H.125. Performance Standards – Landslide Hazards and Steep Slopes.** In addition to generally applicable performance standards set forth in LUC 20.25H.060 and 20.25H.070, development within a landslide hazard or steep slope critical area or the critical area buffers of such hazards shall incorporate the following additional performance standards in design of the development, as applicable. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function.

- A. Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;
- B. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
- C. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;
- D. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes where graded slopes would result in increased disturbance as compared to use of retaining wall; and
- E. Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer.
- F. Where change in grade outside the building footprint is necessary, the site retention system should be stepped and regrading should be designed to minimize topographic modification. On slopes in excess of 40 percent, grading for yard area may be disallowed where inconsistent with this criteria;
- G. Building foundation walls shall be utilized as retaining walls rather than rockeries or retaining structures built separately and away from the building wherever feasible. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundation;
- H. On slopes in excess of 40 percent, use of pole-type construction which conforms to the existing topography is required where feasible. If pole-type construction is not technically feasible, the structure must be tiered to conform to the existing topography and to minimize topographic modification;
- I. On slopes in excess of 40 percent, piled deck support structures are required where technically feasible for parking or garages over fill-based construction types;
- J. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.

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**20.25H.130. Performance Standards -- Coal Mine Hazard Area.** The full text of Section 20.25H.130 is set forth in Appendix 1. The requirements of this Section 20.25H.130 may not be modified through a critical areas report.

**20.25H.135 Mitigation and Monitoring – Additional Provisions for Landslide Hazards and Steep Slopes.** In addition to the general mitigation and restoration plan requirements of LUC 20.25H.210, each mitigation or restoration plan for geologic hazard critical areas shall include:

- A. Erosion and Sediment Control Plan.** The erosion and sediment control plan shall be prepared in compliance with requirements set forth in BCC Ch. 23.76, now or as hereafter amended. Such plans shall also include, if not otherwise addressed in BCC Ch. 23.76, the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan, and/or other means for maintaining long-term soil stability;
- B. Drainage Plan.** The technical information shall include a drainage plan for the collection, transport, treatment, discharge, and/or recycle of water prepared in accordance with applicable city codes and standards. The drainage plan should consider on-site septic system disposal volumes where the additional volume will affect the erosion or landslide hazard area;
- C. Monitoring Surface Waters.** If the director determines that there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to the receiving waters, or the sensitivity of the receiving waters, the technical information shall include a plan to monitor the surface water discharge from the site.

**20.25H.140 Critical Areas Report – Additional Provisions for Landslide Hazards and Steep Slopes.**

In addition to the provisions of LUC 20.25H.230, any proposal to modify a landslide hazard or steep slope or associated critical area buffer through a critical areas report shall comply with the requirements of this section.

**A. Limitation on Modification.**

1. ~~The provisions for Coal Mine Hazard Areas in LUC 20.25H.130 may not be modified through a critical areas report.~~
2. Removal from critical area status. An area otherwise designated as a landslide hazard area or a steep slope or geologic hazard critical area buffer may be removed from critical area status and from regulation under this Part 20.25H only if all the following apply:
  - b. ~~The applicant provides a geotechnical report prepared by a qualified professional demonstrating that modification of the critical area or critical area buffer will have no adverse impacts on stability of any adjacent slopes, and will not impact stability of~~

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~~any existing structures. Geotechnical reporting standards shall comply with requirements developed by the director in City of Bellevue Submittal Requirements sheet 25, Geotechnical Report and Stability Analysis Requirements, now or as hereafter amended;~~

~~c. Any modification complies with recommendations of the geotechnical support with respect to best management practices, construction techniques or other recommendations; and~~

~~d. The proposed modification to the critical area or critical area buffer with any associated mitigation does not significantly impact habitat associated with species of local importance, or such habitat that could reasonably be expected to exist during the anticipated life of the development proposal if the area were regulated under this Part 20.25H.~~

**B. Area Addressed in Critical Area Report.** In addition to the general requirements of LUC 20.25H.230, the following areas shall be addressed in a critical areas report for geologically hazardous areas:

1. **Site and Construction Plans.** The report shall include a copy of the site plans for the proposal showing and a topographic survey;
2. **Assessment of Geological Characteristics.** The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region;
3. **Analysis of Proposal.** The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties; and
4. **Minimum Critical Area Buffer and Building Setback.** The report shall make a recommendation for a minimum geologic hazard critical area buffer, if any, and minimum building setback, if any, from any geologic hazard based upon the geotechnical analysis.

**20.25H.145 Critical Areas Report – Approval of Modification**

Modifications to geologic hazard critical areas and critical area buffers shall only be approved if the director determines that the modification:

- A. Will not increase the threat of the geological hazard to adjacent properties over conditions that would exist if the provisions of 20.25H were not modified;
- B. Will not adversely impact other critical areas;

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- C. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than would exist if the provisions of 20.25H were not modified; and
- D. Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington; -
- E. The applicant provides a geotechnical report prepared by a qualified professional demonstrating that modification of the critical area or critical area buffer will have no adverse impacts on stability of any adjacent slopes, and will not impact stability of any existing structures. Geotechnical reporting standards shall comply with requirements developed by the director in City of Bellevue Submittal Requirements sheet 25, Geotechnical Report and Stability Analysis Requirements, now or as hereafter amended;
- F. Any modification complies with recommendations of the geotechnical support with respect to best management practices, construction techniques or other recommendations; and
- G. The proposed modification to the critical area or critical area buffer with any associated mitigation does not significantly impact habitat associated with species of local importance, or such habitat that could reasonably be expected to exist during the anticipated life of the development proposal if the area were regulated under this Part 20.25H.

**VIII HABITAT ASSOCIATED WITH SPECIES OF LOCAL IMPORTANCE**

**20.25H.150 Designation of Critical Area.**

- A. Definition of a Species of Local Importance.** The following species are hereby designated as species of local importance:
- 1. Bald Eagle (*Haliaeetus leucocephalus*)
  - 2. Peregrine falcon (*Falco peregrinus*)
  - 3. Common loon (*Gavia immer*)
  - 4. Pileated woodpecker (*Dryocopus pileatus*)
  - 5. Vaux's swift (*Chaetura vauxi*)
  - 6. Merlin (*Falco columbarius*)
  - 7. Purple martin (*Progne subis*)
  - 8. Western grebe (*Aechmophorus occidentalis*)
  - 9. Great blue heron (*Ardea herodias*)
  - 10. Osprey (*Pandion haliaetus*)
  - 11. Green heron (*Butorides striatus*)

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12. Red-tailed hawk (*Buteo jamaicensis*)
  13. Western big-eared bat (*Plecotus townsendii*)
  14. Keen's myotis (*Myotis keenii*)
  15. Long-legged myotis (*Myotis volans*)
  16. Long-eared myotis (*Myotis evotis*)
  17. Oregon spotted frog (*Rana pretiosa*)
  18. Western toad (*Bufo boreas*)
  19. Western pond turtle (*Clemmys marmorata*)
  20. Chinook salmon (*Oncorhynchus tshawytscha*)
  21. Bull trout (*Salvelinus confluentus*)
  22. Coho salmon (*Oncorhynchus kisutch*)
  23. River lamprey (*Lampetra ayresii*)
- B.** Habitat (other than the critical areas and critical areas buffers otherwise designated in LUC 20.25H.025) associated with species of local importance is hereby designated a critical area; provided, that compliance with these species of local importance regulations, LUC 20.25H.150 through LUC 20.25H.170 inclusive, shall constitute compliance with the requirements of this Part where such habitat is located outside of other critical areas designated in this Part 20.25H..
- C.** Naturally occurring ponds of under 20 acres (see LUC 20.50.036) are hereby designated critical areas.
- D. Designation of critical area for naturally occurring ponds.** The following critical area buffer is hereby established for naturally occurring ponds that are not classified as a stream corridor, shoreline, or wetland:

Naturally occurring ponds where no other critical area designation applies: 35 feet

**20.25H.155 Uses in Habitat for Species of Local Importance.**

The uses allowed in the underlying land use district are allowed within habitat associated with species of local importance, so long as the development complies with the performance standards of LUC 20.25H.160. The section does not allow modification of other critical areas or critical area buffers.

**20.25H.160 Performance Standards**

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If habitat associated with species of local importance will be impacted by a proposal, the proposal shall implement the wildlife management plan developed by the Department of Fish & Wildlife for such species. Where the habitat does not include any other critical area or critical area buffer, compliance with the wildlife management plan shall constitute compliance with this Part 20.25H.

**20.25H.165 Critical Areas Report – Additional Provisions.** In addition to the general critical areas report requirements of LUC 20.25H.230, critical areas reports to modify the performance standards for habitat for species of local importance must meet the requirements of this Section.

**A. Habitat Assessment.** A habitat assessment is an investigation of the site to evaluate the potential presence or absence of designated species of local importance or habitat for species of local importance. A critical areas report for habitat for species of local importance shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:

1. Detailed description of vegetation on and adjacent to the site;
2. Identification of any species of local importance that have a primary association with habitat on or adjacent to the site, and assessment of potential project impacts to the use of the site by the species;
3. 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 species or habitats located on or adjacent to the site;
4. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;
5. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed use or activity and to be conducted in accordance with the mitigation sequence set forth in LUC 20.25H.215; and
6. A discussion of ongoing management practices that will protect habitat after the site has been developed, including proposed monitoring and maintenance programs.

**20.25H.170 Process to Identify Additional Species of Local Importance**

**A. Designation Process.** Additional species of local importance may be designated pursuant to the Land Use Code Amendment process, LUC 20.30J.

**B. Additional Decision Criteria.** In addition to the decision criteria of LUC 20.30J.135, a species may be designated a species of local importance only if it demonstrates the following characteristics:

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1. Local populations of native species are in danger of extirpation based on existing trends:

Local populations of native species that are likely to become endangered; or  
Local populations of native species that are vulnerable or declining;

2. The species or habitat has recreation, commercial, game, tribal, or other special value;
3. Long-term persistence of a species is dependent on the protection of the species through the provisions of this Part 20.25H;
4. Protection by other county, state, or federal policies, laws, regulations, or nonregulatory tools is not adequate to prevent degradation of the species or habitat in the city; and
5. Without protection, there is a likelihood that the species or habitat will be diminished over the long term.

**C. Effect of Designation.** Designation of a species of local importance under this section shall not impact projects or proposals with a vested application or approved permit.

## **IX. AREAS OF SPECIAL FLOOD HAZARD**

### **20.25H.175 Designation of Critical Area.**

**A. Designation of Critical Area-** Areas of Special Flood Hazard shall include:

1. **Land subject to One Hundred Year Flood.** The land in the floodplain subject to the flood having a one percent chance or greater of being equaled or exceeded in any given year as determined by customary methods of statistical analyses defined in the Utility Code, Chapter 24.06 BCC. Also referred to as the One Hundred-Year Flood.
2. **Areas Identified on the Flood Insurance Rate Map(s).** Those areas identified by the Federal Insurance Administration in a scientific and engineering report entitled *The Flood Insurance Study for Bellevue* dated December 1978, with an accompanying flood insurance map(s) and any revisions thereto. The Flood Insurance Study and accompanying map(s) are hereby adopted by reference, declared part of this Chapter, and are available for public review at the City of Bellevue.
3. **Additional Areas.** Other areas designated by the director pursuant to this section shall be considered areas of special flood hazard.
4. **Designation of Areas of Special Flood Hazard.** Flood Insurance Rate Maps are to be used as a guide for the City of Bellevue, project applicants, and/or property owners to identify areas of special flood hazard. Flood Insurance Rate Maps may be continuously updated as areas are reexamined or new areas are identified, newer and more restrictive information for flood hazard area identification shall be the basis for regulation.

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- 5. Use of Additional Information.** The director may use additional flood information that is more restrictive or detailed than that provided in the Flood Insurance Study to designate areas of special flood hazard, including data on channel migration, historical data, high water marks, photographs of past flooding, location of restrictive floodways, maps showing future build-out conditions, maps that show stream corridor-habitat areas, or similar information.
- 6. Flood Elevation Data.** When Base Flood Elevation data is not available (A and V zones), the director shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer provisions for the area of special flood hazard. In areas of special flood hazard where the BFE has increased due to remapping efforts, the new BFE will establish the regulatory limit.

**20.25H.177 Definitions.** For purposes of the regulations for the area of special flood hazard, the following definitions apply:

**Basement.** Means any area of the building having its floor subgrade (below ground level) on all sides.

**Base Flood Elevation (BFE).** The flood having a one percent chance of being equaled or exceeded in any given year as determined by customary methods of statistical analyses defined in the Utility Code, Chapter 24.06 BCC. Also referred to as the One Hundred-Year Flood.

**Flood or Flooding.** A general and temporary condition of partial or complete inundation of normally dry land areas from:

- i. The overflow of inland or tidal waters; or
- ii. The unusual and rapid accumulation or runoff of surface waters from any source.

**Flood Insurance Rate Map.** The map delineating special flood hazard areas effective December, 1978, that was prepared by the Federal Insurance Administration for the City or as subsequently revised by the Federal Emergency Management Agency.

**Floodproofing.** Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

**Hyporheic zone** The saturated zone located beneath and adjacent to streams that contains some portion of surface waters, serves as a filter for nutrients and maintains water quality.

**Lowest Floor.** Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking vehicles, building access or storage, in an area other than a basement area, is not considered a building lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance found in LUC 20.25H.180.

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**Manufactured Home.** Means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include "recreational vehicle."

**One Hundred Year Flood.** See "Base Flood Elevation."

**Pre-FIRM Buildings.** A building constructed prior to December 1, 1978.

**Recreation Vehicle.** Means a vehicle which is:

- (a) Built on a single chassis;
- (b) 400 square feet or less when measured at the largest horizontal projection;
- (c) Designed to be self-propelled or permanently towable by a light duty truck; and
- (d) Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

**Structure.** A walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a mobile home.

**Substantial Improvement.** Substantial improvement includes the following: Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the replacement value of the structure either, (1) before the improvement or repair is started, or (2) if the structure has been damaged, and is being restored, before the damage occurred. For the purpose of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either (1) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions or (2) any alteration of a structure listed on the National Register of Historic Places.

**20.25H.180 Development in the Area of Special Flood Hazard.**

No use, development or activity may occur in an Area of Special Flood Hazard except as specifically allowed by this Part 20.25H. All use, development or activity which is allowed is subject to the performance standards of this subsection and shall not result in a rise in the BFE. The requirements of this section may not be modified through a critical areas report.

**A. Existing Development Declared Legally Nonconforming.** All development within the Area of Special Flood Hazard for which a vested Building Permit application exists prior to the effective date of this Part 20.25H and which fails to comply with the requirements of this Part 20.25H is legal nonconforming development. Lateral additions, new development or substantial improvements to a legally nonconforming development shall be allowed in compliance with subsection D, and shall comply with the applicable performance standards

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of this section. Any other modification to a legally nonconforming development shall not result in a rise in the BFE.

**B. Review of Proposed Development – Applicable Process.**

Proposals for development in the Areas of Special Flood Hazard shall require a critical areas land use permit, Part 20.30P. The director shall determine that all necessary permits have been obtained from federal, state, or local agencies prior to approval.

**C. General Performance Standards.** Where use or development is allowed pursuant to subsection LUC 20.25H.055, the following general performance standards apply.

1. **Intrusion over the area of special flood hazard allowed.** Any structure may intrude over the area of special flood hazard if:
  - a. The intrusion is located above existing grade, and does not alter the configuration of the Area of Special Flood Hazard; and
  - b. The intrusion is at an elevation and orientation which maintains the existing vegetation of the Area of Special Flood Hazard in a healthy condition. Solar access to vegetation must be maintained at least 50 percent of daylight hours during the normal growing season.

Development not meeting the requirements of this subsection 1 may be allowed pursuant to LUC 20.25H.055 and only in accordance with the requirements set forth in the remainder of this section C.

2. **Elevation Certificate Following Construction.** Following construction of a structure within the area of special flood hazard, where the Base Flood Elevation is provided, the applicant shall obtain an elevation certificate. The elevation certificate shall be completed by a surveyor or engineer licensed in the state of Washington and shall be submitted to City of Bellevue, Utilities Department. The director of Planning and Community Development shall obtain and transmit to the director of the Utilities Department the elevation in relation to City of Bellevue vertical datum (NAVD 88) the lowest floor, including basement, and attendant utilities of a new or substantially improved structure permitted by this part.

**3. Construction Materials and Methods**

- a. **Site Design.** All structures, utilities, and other improvements shall be located on the buildable portion of the site out of the area of special flood hazard unless there is no buildable site out of the area of special flood hazard. For sites with no buildable area out of the area of special flood hazard, structures, utilities, and other improvements shall be placed on the highest land on the site, oriented parallel to flow rather than perpendicular, and sited as far from the stream and other critical areas as possible. Located in flood-fringe where flood flow velocities are less than 3 feet per second and flood depths are less than 3-feet. If the director detects any evidence of active

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- hyporheic exchange on a site, the development shall be located to minimize disruption of such exchange.
- b. **Methods that Minimize Flood Damage.** All new construction and substantial improvements shall be constructed using flood resistant materials and using methods and practices that minimize flood damage.
  - c. **Utility Protection.** Electrical, heating, ventilation, plumbing, air-conditioning equipment, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
  - d. **Anchoring.** All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- 4. No rise in the Base Flood Elevation (BFE).** Any allowed use or development shall not result in a rise in the BFE.
- a. **Post and pile.** Post and piling techniques are preferred and are presumed to produce no increase in the BFE. Demonstration of no net rise in the BFE through calculation is not required.
  - b. **Compensatory storage.** Proposals using compensatory storage techniques to assure no rise in the BFE shall demonstrate no net rise in the BFE through the calculation by methods established in the Utilities Engineering Standards, Section D4-04.5, Flood Plain/Floodway Analysis.
- 5. Modification of Stream Channel.** Alteration of open stream channels shall be avoided, if feasible. If unavoidable, the following provisions shall apply to the alteration:
- a. Modifications shall only be allowed in accordance with the habitat improvement projects.
  - b. Modification projects shall not result in blockage of side channels.
  - c. The City of Bellevue shall notify adjacent communities, the state departments of Ecology and Fish and Wildlife, and the Federal Insurance Administration about the proposed modification at least thirty (30) days prior to permit issuance.
  - d. The applicant shall maintain the altered or relocated portion of the stream channel to ensure that the flood carrying capacity is not diminished. Maintenance shall be bonded for a period of five years, and be in accordance with an approved maintenance program.
- 6. Compensatory Storage.** Development proposals must not reduce the effective base flood storage volume of the area of special flood hazard. Grading or other activity that would reduce the effective storage volume must be mitigated by creating compensatory storage on the site. The compensatory storage must:

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- a. provide equivalent elevations to that being displaced;
- b. be hydraulically connected to the source of flooding;
- c. be provided in the same construction season and before the flood season begins on September 30;
- d. occur on site or off site if legal arrangements can be made to assure that the effective compensatory storage volume will be preserved over time;
- e. be supported by a detailed hydraulic analysis that:
  - i. is prepared by a licensed engineer
  - ii. demonstrates that the proposed compensatory storage does not adversely affect the BFE; and
- f. meet all other critical areas rules subject to this part 20.25H. If modification to a critical area or critical area buffer is required to complete the compensatory storage requirement, such modification shall be mitigated pursuant to an approved mitigation and restoration plan, LUC 20.25H.210.

**D. Specific Performance Standards.** Where use or development is allowed pursuant to subsection LUC 20.25H.055, the following specific performance standards apply.

1. **Modification of Existing Development and Existing Nonconforming Development.** Lateral additions and substantial improvements to existing development and existing nonconforming development is allowed only through a reasonable use exception, LUC 20.25H.190.
  - a. **Substantial Improvements.** Substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation (BFE). Fully enclosed areas below the BFE that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
    - i. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding shall be provided.
    - ii. The bottom of all openings shall be no higher than one (1) foot above grade.
    - iii. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

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- iv. Enclosed areas (including breakaway walls) below the BFE shall be no larger than 300 square feet.
    - b. Lateral Additions. Lateral additions to structures that qualify as a substantial improvement must meet the elevation standards of new construction. If the common wall between the lateral addition and the existing structure is demolished as part of the project, then the entire structure must meet the elevation standards of new construction. If only a doorway or similar opening is knocked through, only the addition has to meet the elevation standards.
    - c. Pre-FIRM Buildings. Pre-FIRM buildings that qualify as a substantial improvement (including lateral additions) must meet the elevation standards of new construction.
2. Repair and maintenance of existing parks and park facilities; new or expanded city and public parks. Substantial improvement of any structure in the area of special flood hazard must comply with the nonresidential performance standards found in this section.
3. New or Expanded Essential Public Facilities.
  - a. The facility is elevated or protected to the 100-year flood elevation.
  - b. Dry flood proofing and sealing measures must be taken to ensure that hazardous or toxic substances will not be displaced by or released into floodwaters.
4. New or Expanded Public Rights of Way, private roads, access easements and driveways.
  - a. The low chord on the bridge structure will be no less than the elevation of the BFE
  - b. Access to Essential Public Facilities must be elevated to or above the BFE to the nearest maintained public street or roadway.
5. Public Flood Protection Measures. Such projects may be allowed in the area of special flood hazard and may increase the BFE provided that the project produces measurable benefits, such as decreased erosion, peak flow reduction, improved water quality, improved aquatic habitat and doesn't threaten structures. Prior to approval, the applicant shall obtain conditional approval from the Region X FEMA office to increase the BFE, where applicable.
6. Recreational Vehicles. Recreational vehicles are required to either:
  - i. Be on the site for fewer than one hundred eighty (180) consecutive days;
  - ii. Be fully licensed and ready for highway use on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or

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- iii. Obtain a development permit and meet the requirements, including elevation and anchoring, for manufactured homes.
7. Reasonable Use Exception. Where a reasonable use exception is granted under LUC 20.25H.190, the following performance standards apply:
- a. Residential Construction (single-family and multi-family dwellings).
    - i. Must be Above Base Flood Elevation. New construction of any residential structure shall have the lowest floor, including basement and attendant utilities, elevated one (1) foot or more above the Base Flood Elevation.
    - ii. Enclosed areas (including breakaway walls) below the BFE shall be no larger than 300 square feet.
  - b. Manufactured Homes. All manufactured homes must meet the elevation standards for new construction. All manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.
  - c. Nonresidential Construction.
    - i. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot (1) or more above the Base Flood Elevation, or,
      - ii. together with attendant utility and sanitary facilities, shall:
        - (A) Be floodproofed so that below one (1) foot or more above the Base Flood Elevation the structure is watertight with walls substantially impermeable to the passage of water;
        - (B) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
        - (C) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this Subsection based on their development and/or review of the structural design, specifications, and plans. Such certification shall be provided to the Department of Planning and Community Development. Following construction of the structure, Elevation Certificates shall be submitted to the city that record the actual (as-built) elevation to which the structure was floodproofed.
    - iii. Fully enclosed areas below the BFE that are not floodproofed shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must

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either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:

- (A) A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided;
  - (B) The bottom of all openings shall be no higher than one (1) foot above grade;  
and
  - (C) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- iv. Lateral Additions. Lateral additions to structures that qualify as a substantial improvement must meet the elevation standards of new non-residential construction. If the common wall between the lateral addition and the existing structure is demolished as part of the project, then the entire structure must meet the standards of new, non-residential construction. If only a doorway or similar is knocked through, only the addition has to meet the construction standards.
  - v. Pre-FIRM Buildings. Pre-FIRM buildings that qualify as a substantial improvement (including lateral additions) must meet the elevation standards of new construction.

**X. REASONABLE USE EXCEPTION**

**20.25H.190 Reasonable Use Exception – Purpose.**

The reasonable use exception is a mechanism by which the City may approve limited use and disturbance of a critical area and critical area buffer when no other use of the property constitutes a reasonable alternative.

**20.25H.195 Reasonable Use Exception – Process.**

A request for a reasonable use exception shall be processed as a critical areas land use permit, Part 20.30P.

**20.25H.200 Reasonable Use Exception – Applicability.**

**A. When allowed.** A reasonable use exception may be granted when no other reasonable use of property exists by the application of the regulations of this Part 20.25H. Reasonable use is defined for each land use district and site as follows:

- 1. Single family land use districts – Large lots.

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- a. Large lot defined. A large lot is any lot that earns more than one unit of density under the density/intensity calculation set forth in LUC 20.25H.045.
  - b. Reasonable use for large lots. A large lot will be considered to have no reasonable uses under the regulations of this Part 20.25H where no more than one ~~buildable lot~~unit can be created through the subdivision process, Part 20.45A, or the short subdivision process, Part 20.45B after maximizing the dimensional modifications allowed in LUC 20.25H.040 and in Part 20.45A or 20.45B for conservation subdivisions or conservation short subdivisions, as applicable. In such cases, the director may allow disturbance within a critical area and critical area buffer as follows:
    - i. Up to 10 percent of the total site area may be disturbed for development, including all structures, grading, utility installation, landscaping and other necessary land alteration; but not including areas temporary disturbance associated with construction, which areas shall be restored pursuant to LUC 20.25H.205. The director shall allow more than 10 percent of the total site area to be disturbed where necessary to allow the creation of two ~~buildable lots~~units, each of which includes an area for development equal to the area set forth in subsection A.2.b below;
    - ii. Density shall not exceed the density allowed under LUC 20.25H.045, provided that in no event shall allowed density be less than two units;
    - iii. Where more than one unit is created, the applicant shall also follow the processes of subdivision (Part 20.45A), short subdivision (Part 20.45B), or Planned Unit Development (Part 20.30D), including applicable decision criteria except as modified in this section; and
    - iv. Through this reasonable use exception, minimum lot size and other dimensional requirements may be modified as necessary to accommodate the allowed reasonable development, provided that 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.
  - c. Performance standards. Where disturbance of a critical area or critical area buffer is allowed under this section, development is subject to the performance standards of LUC 20.25H.205 below.
2. Single family land use districts – small lots.
- a. Small lot defined. A small lot is any lot that does not earn more than one unit under the density/intensity calculation of LUC 20.25H.045.
  - b. Reasonable use for small lots. A small lot will be considered to have no reasonable use under the regulations of this Part 20.25H where the area available for development, including all structures, grading, utility installation, landscaping and other necessary land alteration, is less than the amount set forth in the table in subsection b.i below; but not including areas temporary disturbance associated with construction, which areas shall be restored pursuant to LUC 20.25H.205. In such

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cases, the director may allow disturbance within a critical area and critical area buffer as allowed in this subsection A.2. For purposes of this section, the area available for development is that consolidated area of the site outside of the critical area and critical area buffer.

i. Minimum available development area:

Land Use District	R-1	R-1.8	R-2.5	R-3.5	R-4	R-5	R-7.5*
<del>Buildable Area</del> <u>Area Available for Development</u> (in square feet)	3000	3000	3000	2625	2231	2160	1410

*\*Not effective within the jurisdiction of the East Bellevue Community Council*

ii. Where the area available for development is less than described above, the director may allow disturbance in a critical area and critical area buffer to the extent required to create a consolidated area for development equal to the amounts set forth in subsection b.i above.

c. Performance standards. Where disturbance of a critical area or critical area buffer is allowed under this section, development is subject to the performance standards of LUC 20.25H.205 below.

3. Single-family land use districts – nonresidential uses.

a. Reasonable use. The reasonable use process applies to lots that are more than 90 percent constrained by critical area and critical area buffer and proposed for a nonresidential use. In such cases, the director may allow disturbance within a critical area and critical area buffer as follows:

i. Up to 10 percent of the total site area, or 3000 square feet, whichever is greater, may be disturbed for development, including all structures, grading, utility installation, landscaping and other necessary land alteration; but not including areas temporary disturbance associated with construction, which areas shall be restored pursuant to LUC 20.25H.205; and

ii. Density shall not exceed the density allowed under LUC 20.25H.045.

b. Performance standards. Where disturbance of a critical area or critical area buffer is allowed under this section, development is subject to the performance standards of LUC 20.25H.205 below.

~~3. Multi-family land use districts.~~

~~a. Reasonable use. The reasonable use process applies to lots that are more than 90 percent constrained by critical area and critical area buffer. In such cases, the director may allow disturbance within a critical area and critical area buffer as follows:~~

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- ~~i. Up to 10 percent of the total site area, or 3000 square feet, whichever is greater, may be disturbed for development, including all structures, grading, utility installation, landscaping and other necessary land alteration; and~~
  - ~~ii. Density shall not exceed the density allowed under LUC 20.25H.045.~~
  
  - ~~b. Performance standards. Where disturbance of a critical area or critical area buffer is allowed under this section, development is subject to the performance standards of LUC 20.25H.205 below.~~
4. All other land use districts.
- a. Reasonable use. The reasonable use process applies to lots that are more than 90 percent constrained by critical area and critical area buffer. In such cases, the director may allow disturbance within a critical area and critical area buffer as follows:
    - i. Up to 10 percent of the total site area, or 3000 square feet, whichever is greater, may be disturbed for development, including all structures, grading, utility installation, landscaping and other necessary land alteration; but not including areas temporary disturbance associated with construction, which areas shall be restored pursuant to LUC 20.25H.205; and
    - ii. Density shall not exceed the density allowed under LUC 20.25H.045.

**20.25H.205 Reasonable Use Exception – Performance Standards.**

Where disturbance of a critical area or critical area buffer is allowed under this section, development is subject to the following performance standards. Additional performance standards apply to development in streams corridors (LUC 20.25H.080), wetlands (LUC 20.25H.100), geologic hazard areas (LUC 20.25H.125), and areas of special flood hazard (LUC 20.25H.180). Where a conflict exists with the performance standards of this section, the provisions providing the most protection to critical area functions and values apply.

- A. The structure shall be located on the site in order to minimize the impact on the critical area or critical area buffer, including modifying the non-critical area setbacks to the maximum extent allowed under LUC 20.25H.040;
- B. Ground floor access points on portions of the structure adjacent to undisturbed critical area or critical area buffer shall be limited to the minimum necessary to comply with the requirements of the International Building Code and International Fire Code, as adopted and amended by the City of Bellevue;
- C. Associated development, including access driveways and utility infrastructure shall be located outside of the critical area or critical area buffer to the maximum extent technically feasible;
- D. Areas of disturbance for associated development, including access and utility infrastructure shall be consolidated to the maximum extent technically feasible;

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- E. All areas of temporary disturbance associated with utility installation, construction staging and other development limits shall be determined by the Director and delineated in the field prior to construction and temporary disturbance shall be restored pursuant to a restoration plan meeting the requirements of LUC 20.25H.210;
- F. Areas of permanent disturbance shall be mitigated to the maximum extent feasible on-site pursuant to a mitigation plan meeting the requirements of LUC 20.25H.210; and
- G. Fencing, signage and/or additional buffer plantings should be incorporated into the site development in order to prevent long-term disturbance within the critical area or critical area buffer.

**XI. GENERAL MITIGATION AND RESTORATION REQUIREMENTS**

**20.25H.210 Applicability.**

Where a mitigation or restoration plan is required ~~for an activity in a critical area or critical area buffer under this Part or Part 20.25E,~~ the plan shall be developed in accordance with the standards of these sections 20.25H.210 through 20.25H.225 inclusive. Any mitigation or restoration plan shall be approved as part of the permit or approval required for the underlying activity. Where a project requires a critical areas report and a mitigation or restoration plan, the mitigation or restoration plan may be included with the critical areas report.

**20.25H.215 Mitigation Sequencing.** Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to the critical area and/or critical area buffer. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following order of preference:

- A. Avoiding the impact altogether by not taking a certain action or parts of an action;
- B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
- C. Performing the following types of mitigation (listed in order of preference):
  - 1. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  - 2. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
  - 3. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments;
- D. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

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Mitigation for individual actions may include a combination of the above measures.

**20.25H.220 Mitigation and Restoration Plan Requirements.** ~~When mitigation and/or restoration is required, the applicant shall submit a mitigation or restoration plan for approval as part of the review of the underlying proposal. Alternatively, w~~Where standard restoration requirements or templates have been approved by the director for the proposal in question, those requirements or templates may be followed without need for submission of an individual mitigation or restoration plan.

**A. Plan Phases.** ~~Where an applicant is seeking modifications to the requirements and standards of this Code Part or Part 20.25E through a critical areas report pursuant to LUC 20.25H.230, the mitigation plan required for the proposal may be submitted in phases. A conceptual plan shall be submitted as part of the critical areas report and approved with the land use approval for the proposal. A detailed plan shall be submitted and approved prior to or with approval of the first permit or other approval required to alter or otherwise perform work associated with the proposal. The applicant may choose to submit both phases of the plan with the critical areas report.~~

**B. Restoration and Mitigation Project Details.** The plan shall be prepared by a qualified professional and shall at minimum include the content identified in this section. Additional requirements may be found for specific critical areas in subsections 20.25H.085 (streams corridors); 20.25H.105 (wetlands); 20.25H.135 (geologic hazard areas). ~~Additional D~~details about the contents of restoration and mitigation plans ~~will~~ may be developed by the director in submittal requirements. The director may waive any of the plan requirements, where, in the director's discretion, the information is not necessary to develop a mitigation or restoration plan that addresses the impacts of the proposed action.

1. ~~a~~ A written report identifying environmental goals and objectives of the restoration or compensation proposed, based on replacing or restoring the critical area and critical area buffer functions and values impacted by the proposal;
2. ~~measurable~~ Measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation or restoration project have been successfully attained and whether or not the requirements of this Part 20.25H have been met; and
3. ~~written~~ Written specifications and descriptions of the restoration or mitigation proposed.
  - a. When the mitigation plan is submitted as a single-phase, or for the detailed plan phase when submitted in two phases, these written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.
  - b. ~~Where~~ When the mitigation plan is submitted in phases pursuant to subsection A above, the written specifications may be general in nature for the conceptual phase,

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including general identification of areas for work, planting species, size and number. The more precise details may be provided in the detailed plan phase.

- C. Timing of Work.** Unless a different time period is established in another section of this Part 20.25H, or is established by the director in the approval for a specific project, all work required in a mitigation or restoration plan shall be completed prior to final inspection or issuance of a Temporary Certificate of Occupancy or Certificate of Occupancy, as applicable, for the development.
- D. Monitoring Program.** The plan shall include a program for monitoring construction of the mitigation project and for assessing a completed project. The ~~compensation-mitigation~~ project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five (5) years. The required monitoring period for a plan involving restoration only shall be reduced to a period of not less than three (3) years.
- E. Contingency Plan.** The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met and such failure would result in significant impact on the critical area or buffer. A plan involving restoration only is not required to include a contingency plan.
- F. Assurance Devices.** The director may require assurance devices in compliance with LUC 20.40.490 to ensure that the approved mitigation, monitoring program, contingency plan and any conditions of approval are fully implemented.
- G. Mitigation for City Park Projects.** Through a critical areas report, impacts of city park projects on critical areas and critical area buffers may be mitigated through restoration or enhancement of critical areas on other city park sites. Such restoration or enhancement may include restoration or enhancement projects completed prior to the proposal for which mitigation is required, so long as the restoration or enhancement project was not performed as mitigation for any other public or private project. The critical areas report shall demonstrate that the proposed mitigation restores the impacted critical area functions and values at least as well as mitigation performed on-site and in-kind associated with the development proposal. The director may require an NGPE or NGPA be recorded for the mitigation area to ensure that it is maintained in perpetuity.

**20.25H.225 Innovative Mitigation**

The director may encourage, facilitate, and approve innovative mitigation projects that are based on the best available science.

**XII. CRITICAL AREAS REPORT**

**20.25H.230 Critical Areas Report -- Purpose**

A critical areas report is a mechanism by which the requirements of this Part 20.25H, except where otherwise stated, certain requirements of Part 20.25E as set forth in that Part, and the

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impervious surface standards set forth in 20.20.010 may be modified for a specific proposal. The critical areas report must demonstrate that the proposal with the requested modifications leads to equivalent or better protection of critical area functions and values as would result from the application of the requirements of this Part 20.25H. The critical areas report is intended to provide flexibility for sites where the expected critical area functions and values are not present due to degraded conditions or other unique site characteristics, or for proposals providing unique design or protection of critical area functions and values not anticipated by this Part. The scope and complexity of information required in a critical areas report will vary, depending on the scope and complexity and magnitude of impact on critical areas and critical area buffers associated with the proposed development.

**20.25H.235 Critical Areas Report -- Review Process.**

Requests for modifications to the requirements of Part 20.25H through a critical areas report shall be processed through a critical areas land use permit. Where additional permits are required for the underlying use or activity, the permits may be merged.

**20.25H.240 Critical Areas Report --Limitation on Modifications.**

—The critical areas report may not be used to modify sections of the Land Use Code outside of Part 20.25H and Part 20.25E unless otherwise noted, including uses allowed in land use districts, LUC 20.10.440, and transition area requirements, Part 20.25B. The critical areas report may not be used to modify the definitions of critical areas or definitions of stream types or wetland categories, or any other provision of this Part 20.25H that prohibits modification. The critical areas report may not be used to modify streams, wetlands, or the shoreline below the ordinary high water mark unless otherwise noted. Additional limitations on modifications for specific critical areas may be found in the sections of this Part 20.25H addressing that critical area.

**20.25H.245 Incorporation of Best Available Science.**

The critical areas report shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance and reference the source of science used, where applicable. The critical area report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this Part 20.25H.

**20.25H.250 Critical Areas Report – Submittal Requirements.**

- A. Specific Proposal Required.** A critical areas report must be submitted as part of an application for a specific development proposal. In addition to the requirements of this section, additional information may be required for the permit applicable to the development proposal.
- B. ~~General~~ Minimum Report Requirements.** The critical areas report shall be prepared by a qualified professional and shall at minimum include the content identified in this section. The director may waive any of the report requirements, where, in the director's discretion,

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the information is not necessary to assess the impacts of the proposal and the level of protection of critical area function and value accomplished.

**~~C. Minimum Report Contents.~~ At a minimum, the report shall contain the following:**

1. Identification and classification of all critical areas and critical area buffers on the site;
2. Identification and characterization of all critical areas and critical area buffers on those properties immediately adjacent to the site;
3. Identification of each regulation or standard of this Code proposed to be modified;
3. A habitat assessment consistent with the requirements of 20.25H.165;
4. An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;
5. An analysis of the level of protection of critical area functions and values provided by the regulations or standards of this Code, compared with the level of protection provided by the proposal. The analysis shall include:
  - a. A discussion of the functions and values currently provided by the critical area and critical area buffer on the site and their relative importance to the ecosystem in which they exist;
  - b. A discussion of the functions and values likely to be provided by the critical area and critical area buffer on the site through application of the regulations and standards of this Code over the anticipated life of the proposed development; and
  - c. A discussion of the functions and values likely to be provided by the critical area and critical area buffer on the site through the modifications and performance standards included in the proposal over the anticipated life of the proposed development; and
6. A discussion of the performance standards applicable to the critical area and proposed activity pursuant to LUC 20.25H.160, and recommendation for additional or modified performance standards, if any;
7. A discussion of the mitigation requirements applicable to the proposal pursuant to LUC 20.25H.210, and a recommendation for additional or modified mitigation, if any; and
8. Any additional information required for the specific critical area as specified in the sections of this Part 20.25H addressing that critical area.

**D. Additional Report Submittal Requirements.**

1. Unless otherwise provided, a critical areas report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the director.

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2. Where a project requires a critical areas report and a mitigation or restoration plan, the mitigation or restoration plan may be included with the critical areas report, and may be considered in determining compliance with the applicable decision criteria.
  3. The applicant may consult with the director prior to or during preparation of the critical areas report to obtain approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.
- E. Incorporation of Previous Study.** Where a valid critical areas report or report for another agency with jurisdiction over the proposal has been prepared within the last five (5) years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical areas report. The applicant shall submit an assessment detailing any changed environmental conditions associated with the site.

**20.25H.255 Critical Areas Report – Decision Criteria.** The director may approve, or approve with modifications, the proposed modification of the regulations and standards of this Code as part of the decision on the underlying development proposal where the applicant demonstrates:

- A. The modifications and performance standards included in the proposal lead to levels of protection of critical area functions and values at least as protective as application of the regulations and standards of this Code;
- B. Adequate resources to ensure completion of any required mitigation and monitoring efforts;
- C. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and
- D. The resulting development is compatible with other uses and development in the same land use district.

**20.25H.260 Critical Areas Report -- Assurance Devices.** The director may require assurance devices to ensure that any conditions of approval are fully implemented. Assurance devices shall be posted in accordance with LUC 20.40.490.

Section 4. This ordinance shall take effect on \_\_\_\_\_.

PASSED by the City Council this \_\_\_\_\_ day of \_\_\_\_\_, 2006, and signed in authentication of its passage this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

(SEAL)

\_\_\_\_\_

April 3, 2006

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Grant Degginger, Mayor

Approved as to form:

Lori M. Riordan, City Attorney

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Attest:

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Myrna L. Basich, City Clerk

Published \_\_\_\_\_

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**Appendix 1  
Full Text of LUC 20.25H.130**

**20.25H.130. Performance Standards -- Coal Mine Hazard Area.** The full text of Section 20.25H.130 is set forth in Appendix 1. The requirements of this Section 20.25H.130 may not be modified through a critical areas report.

**A. Application of Regulation and Disclosure on Plats.**

1. The subdivision or development of land potentially affected by abandoned coal mines, as described in these regulations or as designated on the Coal Mine Area (CMA) map, or the Coal Seams map, maintained by the Department of Planning and Community Development (PCD), shall be subject to the requirements of this Section. Development includes construction of buildings, utilities, and other infrastructure as defined in subsection B. The requirements of this Section are in addition to other pertinent City of Bellevue requirements.

**EXCEPTIONS:**

- (1) Additions to existing single family residences, in CMS zone 1, that were not originally subject to this Section, are exempted as follows:
  - (a) Additions of 500 square feet or less of new covered floor area are completely exempted.
  - (b) Additions and replacements which are less than 50% of the total proposed floor area are exempted, except for subsections I.1.e, I.4.c, I.4.d, and I.4.e.
- (2) Detached uninhabited structures less than 500 square feet in CMS. zone 1, which are accessory to single family residences and on the same property, are completely exempted.
2. Any subdivision or short subdivision that includes property designated as within a CMS zone shall disclose the designation on the face of the plat and shall include a reference to the requirements of this Regulation.

**B. Definitions.** For purposes of this section only, the following defined terms apply:

1. Angle of Draw (also termed Limit Angle): The angle of inclination from the vertical of the line connecting the edge of the coal mine workings with the outer limit of the trough subsidence area. For inclined coal seams (such as those in the Coal Creek area), downdip and updip limit angles (which in general will not be identical) are defined at the downdip and updip limits of the coal mine workings, respectively. See Figure 1. [to be inserted]
2. Coal Mine Subsidence (CMS) Zones: Areas where there is a potential for future trough

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subsidence or sinkhole development due to collapse of abandoned coal mines as delineated on the Coal Mine Area (CMA) map.

3. Coal Mine Area (CMA) Map: A map (Exhibit A) delineating zones of possible mine subsidence and hazards due to abandoned coal mines based on calculated potential surface strains and tilts, and documented possible coal mine hazards.
4. Coal Mine Waste Dump: Also termed spoil piles, coal mine waste dumps are a loose-dumped mix of soil, rock, coal and any other materials that are produced as a waste product during mining.
5. Development: Any structure, habitable or non-habitable, or other modification of the natural landscape above and below ground or water.
6. Extraction Ratio: Ratio or percentage of extracted coal relative to total coal in a given area of a seam.
7. Gas Emissions: Explosive, poisonous, or suffocating gases emitted from coal seams.
8. Lithology: Type of rock, such as sandstone, siltstone, or shale.
9. Limit Angle: See Angle of Draw.
10. Mine Hazard: Any hazard associated with abandoned coal mines or prospects including but not limited to trough subsidence, coal mine waste dumps, and public safety mine hazards such as sinkholes and shafts.
11. Mine Subsidence: Lowering of the ground surface, with resulting tilts and strains, due to movement of the underlying soil and/or rock into a void resulting from an underground mine or mine entry.
12. Outcrop: The exposure of bedrock or strata projecting through the overlying soil cover.
13. Panel: The area of a seam from which coal has been systematically extracted.
14. Prospect: An excavation used for exploration or sampling of coal seam.
15. Public Safety Mine Hazards: Mine hazards that may constitute a danger to public safety, including sinkholes, shafts, mine entries, slope entries, gas emissions, mine fires, and others identified as a public safety hazard by the qualified engineer or geologist.
16. Qualified Engineer or Geologist: A Washington State registered geotechnical (civil branch) or mining engineer, or an engineering geologist, who is experienced in evaluation of coal mine subsidence and coal mine hazards, and who is accepted by the City of Bellevue to undertake such evaluations for projects regulated by the City of Bellevue; engineers or geologists without such experience may not be considered to be qualified.

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17. Remaining Mine Height: Current true thickness (measured perpendicular to the seam) of cumulative voids in and above mine workings, which corresponds approximately to the original coal seam thickness less the subsidence that has already occurred at depth.
  18. Seam: A stratum or bed of coal or other mineral. Individual coal seams in the Coal Creek area are generally identified by name, such as the Primrose, Jones, and Muldoon seams.
  19. Shaft: A vertical or inclined tunnel for access to, or ventilation of, mine workings.
  20. Sinkhole: A type of subsidence consisting of collapse of the ground surface into an underground void in which the surface expression has a characteristic funnel or shaft shape. Also referred to as a collapse pit. See Figure 2. [to be inserted]
  21. Slope Entry: Mine entry where the mine access tunnel is inclined to horizontal or sloped.
  22. Sphere of Influence: City of Bellevue's potential annexation area based on an agreement among the cities of Bellevue, Renton and Issaquah.
  23. Spoil Pile: See Coal Mine Waste Dump.
  24. Strain: Change in length per unit length, e.g., a change in length of 0.1 feet over a 100 foot length corresponds to a strain of 0.001.
  25. Subcrop: Location of strata such as a coal seam beneath an overlying soil cover.
  26. Subsidence Factor: Ratio of maximum surface subsidence to extracted coal seam thickness.
  27. Tilt: Differential settlement per unit length, e.g., a tilt of 1 in 500 corresponds to a differential settlement of 0.2 feet over a length of 100 feet.
  28. Trough Subsidence (also termed Regional Downwarping): A surface depression caused by mine subsidence that is generally characterized by a gentle and continuous dish shape that extends beyond the vertical projections of the limits of mining within the seam. See Figure 1.
- C. Overview of Coal Mine Subsidence (CMS) Zones.** The Coal Mine Area (CMA) map delineates areas within the City of Bellevue and associated potential annexation area (sphere of influence) that could be affected by subsidence of abandoned coal mines. The CMA map defines and identifies Coal Mine Subsidence (CMS) Zones based on potential surface tilts and strains and whether there is a potential for sinkhole development.

The CMS zones have been developed based on generalized evaluation of available mine maps and records. Direct subsurface information (boring data) on the condition of the mine workings was not available for development of these zones and regulations except for the

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Newcastle-King Mine. This Newcastle-King Mine information was used to evaluate potential coal mine impacts associated with the existing plat of The Woods. Alternative interpretations of potential subsidence effects could result from site-specific evaluation and analysis based on detailed review of historic data, direct subsurface information, or alternative assumptions.

A surface reconnaissance report and site-specific evaluations are required prior to permitting subdivision or development on any site in a CMS Zone. Methods of analysis shall be described as appropriate. Construction will be permitted in any CMS Zone after elimination of risk to public safety associated with abandoned coal mines, and mitigation of coal mine waste dumps (if any) and potential trough subsidence.

1. CMS Zone 1 Strain Exceeds 0.003  
Tilt Exceeds 1:350

Construction is permitted only after a site-specific evaluation of potential trough subsidence and incorporation of appropriate mitigation measures.

Site-specific structural and civil design is required in all areas per Sections I & J.

2. CMS Zone 2 Areas directly underlain by coal mine workings at a depth of 200 feet or less, documented prospects and areas within 100 feet of such areas.

There is a potential for sinkhole development, or for other public safety mine hazards. Construction is permitted only after potential public safety mine hazards are investigated and eliminated. A direct subsurface investigation program is required to investigate potential sink hole development. In addition, if any mine workings could potentially cause trough subsidence at the site, construction is permitted only after a site-specific evaluation of potential trough subsidence and incorporation of project-specific mitigation measures as required for CMS zone 1.

3. Areas of Potential Undocumented Workings

CMS Zones are based on an evaluation of documented workings. There is, however, some potential for undocumented workings to exist in the vicinity of outcropping or subcropping seams. The potential for undocumented workings must be evaluated for any property within 100 feet of the subcrop lines of the Jones and Primrose seams between and beyond known coal mine workings, except for construction of attached additions to, or miscellaneous structures accessory to and within 50 feet of, existing residential buildings. The subcrop lines indicating those areas of potential undocumented workings are shown on the Coal Seams map.

NOTE: The Primrose seam subcrop through the plats of Forest Ridge Estates Divisions I and II, The Woods, and Forest Park No. 4, has not been shown on the Coal Seams map because geotechnical exploration and abandoned mine hazard assessments were completed and accepted by the City at the time these plats

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were developed. Therefore, as no undocumented workings were found by those investigations and subsequent development, the Primrose seam subcrop through those plats has not been shown on the Coal Seams map so that it is clear that future building permit applications for lots in those plats are not subject to these regulations.

**4. Changing a CMS Zone Designation**

The CMS Zone designation for a property in CMS Zone 1 may be removed if it is demonstrated by site-specific evaluation of trough subsidence that magnitudes of potential surface strains and tilts at the property are less than the levels specified above.

The site-specific evaluation of trough subsidence shall be completed by a Qualified Engineer or Geologist and shall be performed in accordance with the requirements of these regulations. The same or similar assumptions as were used in developing these regulations and the CMA map shall be used when undertaking the site-specific evaluation of trough subsidence. If the evaluation results in a proposed change to the CMS Zone designation based on additional information identified from mine records, or new information available from direct investigation of subsurface conditions by drilling or other means, then the engineer shall be required to demonstrate that the tilts and strains calculated represent the maximum tilts and strains at the site for all possible time sequences of mine collapse.

A CMS Zone 2 designation may be changed to a Zone 1 designation if a direct subsurface investigation demonstrates the absence of coal mine workings or that the coal mine workings, if present, are in a fully collapsed condition.

Any change in a CMS Zone designation must be accepted by the director of the Department of Planning and Community Development or his or her designee.

**D. Application/pre-permit Issuance Requirements**

1. **General Requirements:** A surface reconnaissance shall be undertaken for the CMS Zones and for areas of potential undocumented workings. All surface reconnaissance and evaluation of coal mine hazards and potential trough subsidence shall be performed by, or under the direct supervision of, a Qualified Engineer or Geologist.
2. **CMS Zone 1:** Applicants shall:
  - a. Conduct a surface reconnaissance and submit at application a report identifying any public safety mine hazards, coal mine waste dumps, or evidence of mine subsidence.
  - b. If hazards other than trough subsidence are identified in the surface reconnaissance reports, mitigate the hazards after acceptance of an

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- evaluation and remediation plan by PCD.
- c. Conduct a site-specific evaluation of potential trough subsidence.
  - d. Mitigate for trough subsidence including future surface settlements above collapsed mine workings by developing site-specific design that can accommodate calculated potential subsidence effects.
3. OMS Zone 2: Applicants shall:
- a. Conduct a surface reconnaissance and submit at application a report identifying all public safety mine hazards, coal mine waste dumps, and evidence of mine subsidence.
  - b. Conduct site-specific evaluation of potential for sinkhole development, including subsurface investigation. Test pits may be used to investigate coal mine waste dumps and other shallow hazards such as slope entry portals and shaft collar areas. Drilling is required for coal mine workings or other hazards that cannot be adequately investigated by investigations from surface. Drilling may demonstrate that there is no risk of sinkhole development due to the absence or fully collapsed condition of mine workings. Alternatively, drilling may document sinkhole risks, and the applicant must then design a mitigation program to eliminate all such risks.
  - c. Eliminate risk of sinkhole development and mitigate other public safety mine hazards and/or coal mine waste dumps after acceptance of an evaluation and remediation plan by PCD.
  - d. If the site could be subject to trough subsidence due to coal mine workings, conduct a site-specific evaluation of potential trough subsidence.
  - e. Mitigate for trough subsidence including future surface settlements above collapsed mine workings by developing site-specific design that can accommodate calculated potential subsidence effects as required for CMS zone 1.
4. Areas of Potential Undocumented Workings: If the property lies within 100 feet of a coal seam outcrop or subcrop shown on the Coal Seams map, but outside any CMS zones, applicants shall (except as exempted under subsection C.3):
- a. Conduct a surface reconnaissance and submit at application a report identifying any public safety mine hazards, coal mine waste dumps, or evidence of mine subsidence.
  - b. If hazards other than trough subsidence are identified in the surface reconnaissance report, mitigate the hazards after acceptance of an evaluation and remediation plan by the DCD.

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5. Requirements for More Than One Zone: If a property lies within more than one CMS Zone and development will include construction of multiple structures, each structure shall be designed to meet the regulatory requirements for the zone in which the structure is located. Any structure except roads and utility lines that lies within more than one zone shall be designed in accordance with the requirements for the higher zone number. Roads and utility lines shall be designed in accordance with the requirements for each zone throughout the length of the facility located within that zone.

- E. Surface Reconnaissance Reports. A surface reconnaissance shall be undertaken for all CMS Zones and for areas of potential undocumented workings.

The surface reconnaissance shall be undertaken following review of available geologic hazard maps, mine maps, mine hazard maps, and air photographs to identify any subsidence features or mine hazards including but not limited to surface depressions, sinkholes, mine shafts, mine entries, coal mine waste dumps, and any indication of combustion in underground workings or coal mine waste dumps that are present on or within 100 feet of the property. The surface reconnaissance shall include, but not be limited to, inspection, review, and documentation of any known hazards that have previously been documented by the Office of Surface Mining, Abandoned Mined Land program (Smelly and Loy, 1985), or that have been identified from review and interpretation of air photographs or other sources.

The surface reconnaissance report shall include:

1. Historical mining data, including available copies of original mine records for mine workings in coal seams.
2. A map showing property boundaries, CMS Zone boundaries, and any potential hazards identified on or within 100 feet of the property.
3. If hazards are identified; a proposed program of detailed site investigation to support engineering design for remediation.
4. For sites in CMS Zone 2, proposed subsurface investigation program, including exploratory test pit and drill hole locations, and mine plans for all seams that lie within 200 feet of the ground surface.

For sites where trough subsidence must be calculated, the surface reconnaissance report may also include proposed site evaluation and trough subsidence calculation methodology; alternatively, that can be submitted in a separate report.

- F. Remediation or Mitigation of Hazards Other Than Trough Subsidence. If hazards are identified in the surface reconnaissance report:

1. Include a separate section in the surface reconnaissance report that proposes a program of detailed site investigation to support engineering for remediation of the hazards.

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2. Upon acceptance of the site investigation approach by the PCD, conduct the evaluation. Submit the results to the PCD along with a proposal for remediation design including the following types of mitigation:

- a. Mine Entries and Shafts. Mine entries and shafts shall be permanently sealed using controlled backfill and/or grouting, or an approved, engineered seal. Acceptable seal construction consists of a tapered, reinforced concrete plug constructed within a steel form; a below grade reinforced concrete cap constructed over shaft collars; and a reinforced concrete plug for sealing horizontal mine entries.

Site preparation prior to installation of the plug shall include permanently diverting surface drainage away from the shaft or mine entry, and excavating loose rock and soil away from the collar of the shaft or the mine entry portal.

Shaft and slope entry seals shall be designed and installed so that they are bearing on competent bedrock or dense, competent till. The top of the tapered plug or the base of the cap shall extend a minimum of two feet in all directions beyond the shaft or slope entry. The length of any plug used to seal a horizontal mine entry shall not be less than the maximum dimension of the entry. The need for installing additional backfill behind the seal of a horizontal mine entry to prevent potential subsidence over the entry shall be determined on a case by case basis.

- b. Existing Sinkholes and Shallow Prospect Excavations. Existing sinkholes and shallow prospect excavations shall be backfilled to surface using controlled placement of suitable backfill. Surface drainage shall be permanently diverted away from existing sinkholes and prospect excavations.
- c. Potential Sinkholes. Demonstrate by direct subsurface investigation that coal mine workings either do not exist, or that the workings have fully collapsed so that there is no remaining potential for sinkhole development; or show that the hazards associated with any voids that are identified are fully mitigated by backfilling, grouting, or other approved means such that the potential for sinkhole development is eliminated.

A fence may be required to be constructed along the CMS Zone 2 boundary, or around known hazards, to prevent access to the area if the potential for sinkhole development has not been eliminated. If a fence is required, signs shall be posted on it, at intervals of no more than 100 feet, warning of danger due to possible sinkholes.

Any sinkholes that develop shall be promptly backfilled and surface drainage shall be diverted away from the sinkhole.

- d. Coal Mine Waste Dumps. Any coal mine waste dump from which springs or seeps are discharging, or which shows evidence of seasonal discharge of springs or seeps, shall be removed or regarded to expose the source of the spring or seep.

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Unless the stability of the coal mine waste dump is verified by a slope stability analysis meeting the requirements of the Minimum Standards for Slope Stability Analysis of the City of Bellevue Development Standards, the coal mine-waste dumps shall be removed from the site, or shall be regarded as necessary such that no slope in the coal waste material exceeds 2(H):1 (V) and meets City of Bellevue stability criteria.

All coal mine waste material shall be covered with a minimum of two feet of clean soil and shall be revegetated in accordance with BCC Ch. 23.76.

No construction shall be permitted over coal mine waste material unless a geotechnical investigation is completed by a soils engineer, and specific design and construction criteria are developed to mitigate the potential impacts of the coal mine waste on foundation stability and performance. Construction shall not be permitted within 100 feet of any coal mine waste dump that shows evidence of current or past combustion.

- e. Mine Gases. Potential hazards associated with mine gases shall be mitigated by backfilling all mine entries, shafts, and sinkholes in accordance with these Regulations.
  - f. Mine Fires. Construction shall not be permitted over workings where surface or subsurface investigations indicate the possible presence of combustion in the underlying seam or seams.
3. Once the proposed remediation approach is accepted by PCD, complete the engineering design drawings and specifications for the remediation. Upon acceptance by the DCD, complete the actual remediation.
  4. Document the hazard mitigation by submitting as-builds and a remediation construction report. PCD must agree that hazards have been mitigated before any construction is allowed on the site.
  5. Any public safety mine hazards shall be eliminated prior to any other development activities on the site. Hazard mitigation shall be performed by or under the direction of a Qualified Engineer or Geologist. Any hazards found during any development activities shall be immediately reported to PCD.
  6. No construction shall be allowed within 100 feet of an existing public safety mine hazard, regardless of whether the hazard is located on the property for which the permit application is being submitted or not. The decision on whether to permit construction directly over a public safety mine hazard that has been mitigated will be made on a case by case basis based on the type of mitigation and the proposed construction.
- G. Site-Specific Evaluation: Potential Trough Subsidence

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1. **Review of Available Records:** The site-specific evaluation of potential trough subsidence shall include a detailed review of available copies of original mine records for mine workings in coal seams that could potentially influence the site by trough subsidence. The locations, depths, and thicknesses of such seams and workings shall be documented. Coal mine workings that could potentially influence the site shall be determined by projecting the downdip limit angle from the lowest limit of the documented workings to the ground surface. Mine workings are considered to potentially influence the property if the property lies within the line at which the limit angle intersects the ground surface.
2. **Subsurface Investigations:** Subsurface conditions may be evaluated by drilling. Although drilling is not compulsory, it is the most acceptable method for providing information that is acceptable for reducing the Remaining Mine Height value used in subsidence calculations.

If the applicant wishes to conduct a subsurface investigation, the proposed approach must be submitted to PCD for review and acceptance.

Rotary drilling is an acceptable method of drilling provided it is used in combination with downhole geophysical logging, including caliper logs. Core drilling is preferred, but is not compulsory, immediately above and through the predicted coal seam locations to facilitate interpretation of the condition of the mine workings. Rotary drillholes shall be logged continuously from 100 feet above to 20 feet below mine workings, including lithology at 5-foot intervals, drill fluid circulation, penetration rate, and free fall of the drill string. Greater confidence will be placed in core drilling logs than rotary drilling logs.

As a guideline, it is recommended that a minimum of one drillhole penetrating each coal seam that could potentially cause trough subsidence at the site should be drilled for each 200 foot length of the south property boundary.

If a drillhole encounters solid or broken coal in an area that available mine maps indicates has been mined out, it shall be assumed that the true thickness of coal represents the thickness of intact or crushed pillars, and corresponds to the Remaining Mine Height for calculating potential trough subsidence affects at surface. If the drillhole encounters voids at or above the location of the coal seam, the cumulative length of the voids shall be used to calculate the true cumulative thickness of the voids, which shall be taken to correspond to the Remaining Mine Height. These assumptions can be modified based on additional drilling.

Direct evidence of the condition of panels in the same seam with similar dimensions, similar extraction ratios, and at a similar or shallower depth, shall be accepted as evidence of the condition of mine workings at any point.

Surface geophysics, or other indirect means, may be used to assist in projecting information between and beyond drillholes, but shall not be accepted as the sole method for evaluating the condition of underground mine workings and calculating Remaining Mine Height. Assumptions concerning the extent of collapse of mine workings based on

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recorded extraction ratios shall be conservative because of possible inaccuracies of mine records, the likely presence of remnant pillars and the lack of data to accurately locate them, and because uncollapsed mine workings have been documented under similar conditions in King County.

3. Calculation of Trough Subsidence Magnitudes, Tilts, and Strains: Proposed calculation methods, design parameters, and assumptions that will be used shall be submitted for review and acceptance by the director prior to calculating trough subsidence.

The recommended method for calculating potential trough subsidence magnitudes, strains, and tilts is the empirical function method of the British National Coal Board, as presented in their Subsidence Engineers' Handbook, adjusted to reflect the effects of inclined seams and a downdip limit angle of 45 degrees. Recommended calculation procedures are detailed in subsection K.1 of these regulations.

Calculations shall be based on a conservative evaluation of site conditions developed from the review of available records, site investigation or other acceptable means, such as previous documentation by subsurface exploration of the condition of the coal seam(s) in the immediate vicinity of the site and at an equivalent depth below the ground surface. A subsidence factor of 0.5, a downdip limit angle of 45 degrees, and a value of Remaining Mine Height equal to the seam thickness shall be used for the subsidence calculations unless direct field evidence or a review of detailed mine records is used to modify these values. The effects of individual panel widths and barrier pillar widths shall be considered in the calculation of potential tilts and strains. If direct subsurface investigation indicates that the mine workings are fully collapsed, an estimate of potential surface settlements due to consolidation of rubble and loose material shall be made for sites directly underlain by coal mine workings.

The subsidence analysis shall evaluate the cumulative effect of all seams that could induce trough subsidence at the site.

Alternative methods of calculating potential subsidence magnitudes, strains, and tilts may be used provided they incorporate similar assumptions to those specified in the preceding paragraphs. If alternative design parameters and assumptions are proposed, detailed justification must be provided to the DCD for consideration during their review and acceptance of the proposed calculation approach.

4. Documentation of trough subsidence evaluation: The results of the detailed site evaluation shall be documented. Site plans shall be prepared showing the proposed development and calculated magnitudes of potential subsidence, strains, and tilts at the property boundaries and at the locations of any proposed structures. In addition, a map showing contours of potential subsidence magnitudes, strains, and tilts throughout the property shall be submitted for use in design of roads and utilities.

Appropriate recommendations shall be provided for structural and civil design requirements outlined in Sections I and J respectively.

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**H. Site-Specific Evaluation: Potential Sinkhole Development or Other Public Safety Mine Hazards**

1. Review of Available Record: To evaluate the potential for sinkholes in CMS Zone 2, the applicant's Qualified Engineer or Geologist shall first conduct a detailed review of available copies of the original mine records for mine workings that could potentially influence the property. Coal mine workings that could potentially influence the site shall be determined by projecting the downdip limit angle from the lowest limit of the documented workings to the ground surface. Mine workings are considered to potentially influence the property if the property lies within the line at which the limit angle intersects the ground surface. The locations, depths, and thicknesses of such seams shall be documented.
2. Proposed Site Investigation: Based on the review of available mine records, the qualified engineer or geologist shall then propose a site investigation program and submit it for review and acceptance by PCD as part of the surface reconnaissance report. The proposed program shall include the items and meet the requirements listed below:
  - a. Drillhole locations. Subsurface conditions for coal seams located within 200 feet of the ground surface shall be investigated by drilling. Drillhole sites shall be selected at representative locations and at representative coal seam depths. Drillholes shall be located adjacent to, but not within, coal pillars that are shown on the mine plans. A minimum of five drillholes shall be drilled along the alignment of any linear structure, such as roads or utility lines designed to cross CMS Zone 2, or within the property boundary for other development of properties of five acres or less. The minimum number of drillholes for properties larger than five acres shall be one hole per acre or as determined by the director.
  - b. Method of drilling. Rotary drilling is an acceptable method of drilling provided it is used in combination with downhole geophysical logging, including caliper logs. Core drilling is preferred, but is not compulsory, immediately above and through the predicted coal seam locations to facilitate interpretation of the condition of the mine workings. Drillholes shall be logged continuously throughout their length, including lithology at 5-foot intervals for rotary drillholes, drill fluid circulation, penetration rate, and free fall of the drill string. Greater confidence will be placed in core drilling logs than in rotary drilling logs; this may result in less drillholes being required if core drilling is used in the vicinity of coal seams instead of rotary drilling.
  - c. Shallow Public Safety Hazards. Shallow hazards such as slope entry portals, shaft collars, prospects and mine waste dumps may be investigated by test pits or trenching, providing the method enables investigation to an adequate depth for the hazard being investigated.
  - d. Any other site investigation techniques proposed. Indirect means of subsurface evaluation, including geophysics, geologic projection, and evaluation of mining records, may be used to supplement drilling results, but shall not be used as the sole

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source for evaluating subsurface conditions prior to construction in Zone 2 areas.

**3. Investigation Results and Interpretation**

Once the director has accepted the proposed site-evaluation, the applicant can proceed to the actual site-investigation and must submit the results and the interpretation of those results to PCD.

The need for additional drilling shall be determined by the director based on the results of the initial five drillholes. If a drillhole encounters solid or broken coal in an area that available mine maps indicate has been mined out, it shall be assumed that the true thickness of coal represents the thickness of intact or crushed pillars. If true coal thickness approximately corresponds to the original seam thickness, it shall be assumed that the mine workings have not collapsed. If the drillhole encounters a void at the location of the coal seam, the true length of the void shall be taken to correspond to the Remaining Mine Height for evaluating the potential for sinkhole development. These assumptions can be modified based on additional drilling. If all drillholes verify that mine workings have effectively collapsed at all depths, further subsurface investigation shall not be required.

**I. Mitigation of Trough Subsidence: Buildings in CMS Zone 1.**

These mitigation requirements apply to all new construction in CMS zone 1, except as exempted by subsection A.1.

**1. GENERAL DESIGN REQUIREMENTS**

- a. Every building site shall be investigated by a Qualified Engineer or Geologist who shall calculate tilts and strains, and determine appropriate design values for the building site.
- b. The foundation elements of each building or structure shall be designed by a Washington State licensed structural engineer, with consideration of the subsidence effects anticipated at the site. The requirements of section I are minimum standards. The structural engineer is responsible to ensure the adequacy of the foundation for the building or structure under consideration. The Building Official may accept alternate designs meeting the intent of these standards. Any portion of the building lateral system not meeting the conventional bracing requirements of the International Building Code, as adopted and amended by the City of Bellevue, must be designed by a structural engineer.
- c. Building and structure foundations shall be designed for the loads and conditions specified in subsections I.2, I.3, and I.4 below in conjunction with all applicable loads stipulated in the International Building Code, as adopted and amended by the City of Bellevue. Vertical steps and horizontal offsets of footings and walls must be reinforced to meet the requirements of the International Building Code, as adopted and amended by the City of Bellevue, and the American Concrete Institute, to

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provide continuity of the reinforcement.

- d. The forces generated by subsidence effects of tilt and strain shall be treated as live loads with the appropriate load factors and/or factors of safety in design. The friction drag force loads of subsection 1.2 must be combined simultaneously with the lateral earth pressure loads specified in subsection 1.3, with both loads treated as earth pressure in load combinations. The subsection 1.4.a, 1.4.b, and 1.4.d design requirements may be applied independently of the friction and earth pressure loads.
- e. Utility lines shall not be rigidly connected to the foundation wall. A flexible joint shall be provided at the point of transition from soil support to building support for all utilities.

**2. DESIGN FOR FRICTION FORCE LOADS**

- a. CMS Zone 1 includes both tension and compression ground strain zones. Foundations and slabs on grade shall be designed to resist not less than the following ultimate friction forces for tension and/or compression as determined from the geotechnical investigation. Rigid crosstie struts may be used to reduce the span of foundation elements under horizontal load.

$$F_d = f(DL + 0.5 LL)$$

where,  $F_d$  = Drag Force Parallel to Ground Strain Direction

$f$  = Ultimate Coefficient of Friction from Soil to Footing  
DL = Design Dead Load  
LL = Design Live Load (including snow load)

- b. Isolated pad footings and posts shall be designed and constructed to ensure that the post remains plumb. This may be accomplished by reducing the friction under the footing, by rigid bracing of the post in each of four directions, or by other approved means. When post footings are incorporated into rigid crosstie struts, the struts must meet the requirements of subsection 1.4.a below.

**3. DESIGN FOR LATERAL EARTH PRESSURE LOADS**

- a. Ultimate passive soil pressure shall be assumed to act on all vertical surfaces in contact with foundation soil due to horizontal strain occurring from a subsidence event. This applies to the horizontal projection of all below grade elements. These ultimate pressures, and the distribution, shall be determined by a Qualified Engineer or Geologist in accordance with established engineering practice. Rigid crosstie struts may be used to reduce the span of foundation elements under horizontal load.
- b. Where walls and footings are subject to compression zone forces, these lateral forces may be reduced by the use of compressible backfill material such as wood chips, shredded rubber, or other approved materials. If such a material is used, it is

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the responsibility of a Qualified Engineer or Geologist to determine the appropriate design loads to be applied to the structure.

**4. DESIGN FOR TILT & CURVATURE CONDITIONS**

- a. Foundations shall be rigid and shall be designed in accordance with standard engineering practices, but shall be able to resist as a minimum the shears and moments generated by (DL + 0.5 LL) on the support conditions specified in items (1) and (2) below, where L is the total length of the building foundation in the direction under consideration.
    - (1) An unsupported simple span length of 8 feet or 0.4 L, whichever is less, anywhere within each segment of the foundation in each -direction of the building.
    - (2) An unsupported cantilever length, fixed at one end and pinned at the other end, of 4 feet or 0.2 L, whichever is less, anywhere within each segment of the foundation in each direction of the building.
  - b. Rigid foundations longer than 60 feet in severe subsidence conditions (tilts greater than 1 in 200) shall be designed based on an analysis made by a Qualified Engineer or Geologist to account for the specific curvature, but shall meet subsection I.4.a above as a minimum.
  - c. If rigid materials, such as masonry, veneer or stucco, are used in construction, allowance shall be made at all corners, joints and transitions to other materials for differential movement and settlement.
  - d. Stone, brick or masonry arches are not allowed unless the supporting footing is designed per subsection I.4.a above for any downward gravity load directly supported on it and upward full allowable soil bearing pressure, spanning unsupported the entire outer length of the arch.
  - e. The superstructure shall be bolted to the foundation to resist earth pressure, wind, and seismic forces. Bolts shall have 4 inches of additional thread such that the building can be disconnected, releveled, shimmed and reconnected if so required.
- J. Mitigation of Trough Subsidence: ROADS, UTILITIES, GRADING, RETAINING WALLS.**

Utilities shall be designed to accommodate the magnitudes of strains and tilts specified in these regulations by using available engineering design techniques, such as those presented by Yokel and others (1981). The following requirements shall apply to CMS Zones 1 and 2.

Structures associated with roads and utilities shall be strong enough to resist the forces induced by maximum predicted subsidence-related tilts and strains, or flexible enough to accommodate the resulting deformations. Where more stringent performance criteria are

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specified in these regulations, the more stringent criteria apply.

1. **Grading:** Gradients of landscaped areas shall be designed for the intended drainage under the most critical predicted subsidence conditions. Minimum required slopes needed for positive drainage shall be increased and maximum allowable slopes decreased by amounts equal to the slope of the predicted subsidence profile averaged over a 50 foot length. Gradients away from building foundations shall be not less than 2 percent.
2. **Retaining Walls:** Concrete or masonry retaining walls, not used as foundation elements for buildings or structures, shall be constructed with expansion joints spaced not greater than 40 feet along the length of the wall and at each corner. The joints shall extend through the wall and footing. Smooth reinforcing dowels may be used for shear connection if one end is greased to prevent bonding of the concrete or grout. Such retaining walls shall be designed to meet the International Building Code, as adopted and amended by the City of Bellevue, other City of Bellevue regulations, and any requirements determined to be appropriate by a Qualified Engineer or Geologist, or a licensed structural engineer.
3. **Water:** The system design shall be able to provide for twice the maximum predicted tilts and strains, including service lines, structures, and related appurtenances.
4. **Sewer:** The system design shall be able to provide for 1.5 times the maximum predicted tilts and strains, including service lines, structures, and related appurtenances. Design grades shall provide positive grade after allowing for the maximum predicted subsidence profiles.
5. **Storm Drainage:** The system design shall be able to provide for 1.5 times the predicted tilts and strains, including service lines, structures, and related appurtenances. Design grades shall provide positive grade after allowing for the maximum predicted subsidence profile. Detention and retention facilities shall be designed to remain functional following the occurrence of twice the maximum predicted tilts and strains. Such facilities shall only be located in CMS Zone 2 if all risk of sinkhole development has been eliminated. Detention and retention facilities shall be designed and located so that they will not cause damage or a risk to public safety.
6. **Roadways and Bridges:** All roadways shall be flexible material. Roadways shall have a minimum slope of not less than 1/2 percent plus the slope of the maximum predicted subsidence profile to facilitate maintaining positive drainage. Bridges shall be designed to safely accommodate twice the maximum strains and tilts predicted at the bridge location.
7. **Private Utilities:** Utility cables and pipelines shall be designed to accommodate the maximum predicted tilts and strains with suitable safety factors applied to these magnitudes. Utilities shall be designed such that failure of the utility line will not present a risk to public safety. The applicant shall present certification from the respective private utility that utilities have been designed in accordance with the above.

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K. Background Information, References, and Sources for Site Evaluation The Coal Mine Subsidence Zone Maps have been developed in general by using conservative design criteria for shallow workings and by explicitly considering the condition of the workings in some of the northernmost deeper workings. The Zone 1 boundary is intended to represent the limit of subsidence effects that could potentially occur; the probable magnitudes of future subsidence within Zone 1 may be less or more severe based on site specific analysis. The methods used to develop the maps are described below to facilitate calculation of potential subsidence effects at specific sites.

1. CMS Zone1

Development of the zone boundary for Zone 1 was based on conservative assumptions regarding the existing condition of the documented workings within 700 feet of the ground surface and with explicit consideration of the condition of the workings below approximately 700 feet based on available records of the mining activities in the No. 3, No. 4 and Muldoon seams.

Analyses of the workings above 700 feet and workings below 700 feet not explicitly considered as described above (i.e. No.3, No.4 and Muldoon seams) included the assumption that the coal seams were worked with a high extraction ratio, but have not collapsed so that the Remaining Mine Height is equal to the seam thickness, and that the magnitude of the remaining subsidence (equivalent to the Remaining Mine Height times the subsidence factor) will occur in the future. Individual seam thicknesses are taken from a published survey of abandoned coal mines in the Coal Creek area (Skelly and Loy, 1985). The distribution of coal mine workings has been based primarily on maps prepared for the Office of Surface Mining by Dunrud (1987). These maps are basically skeletal and do not provide complete details of past coal extraction activities. They were spot checked against the most recent submittals of the more detailed mine maps available from the Washington Department of Natural Resources, Division of Geology and Earth Resources.

Analyses of the workings in the No. 3, No. 4 and Muldoon seams below a depth of 700 feet considered the average panel width, the width and location of the barrier pillars, and the extraction ratio. The likelihood of previous collapse was assumed to have been high where mine records indicated pillars have been recovered, resulting in a high extraction ratio. Previous collapse and high extraction ratios were modeled through a reduced subsidence factor. Extraction ratios were estimated based on detailed mine maps available from the Washington Department of Natural Resources.

Subsidence profiles, tilts, and strains were calculated using the methods detailed in the Subsidence Engineers' Handbook (SEH, 1975) with adjustments as noted below. Important assumptions and calculation procedures were as follows:

- a. A subsidence factor of 0.5 was used for workings above approximately 700 feet depth and for any deeper workings not explicitly considered as noted above. The subsidence factor is based on site conditions and previous experience under similar

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conditions. For workings below 700 feet, a maximum subsidence factor of 0.25 was used for workings with extraction ratios of 50 percent. This subsidence factor was reduced using a curve approximating an inverted parabola. For extraction ratios of 90 percent and 10 percent on the parabolic curve, a subsidence factor of 0.1 was used.

- b. The maximum vertical subsidence for each seam was calculated as the maximum subsidence that would be predicted for a horizontal seam, multiplied by the cosine of the seam dip (Whittaker, et. al., 1989, Equation 62). Coal seams in the Newcastle area of King County generally dip about 40 degrees.
- c. The maximum vertical subsidence for each panel of the workings below 700 feet was corrected for the panel width to depth ratio and for the face length to depth ratio as per Fig. 3 and Fig. 4 of the Subsidence Engineers Handbook (SEH, 1975, pp. 8-11). Barrier pillar widths were estimated from available mine maps.
- d. Downtip, centerline, and uptip limit angles of 45, 15, and 15 degrees, respectively have been assumed based on data developed by Ren, et. al., as presented by Whittaker (1989, pp. 254-255). These limit angles are considered to be conservative based on lithology, but have been used in the absence of specific site data.
- e. Topography is considered in determining the point at which the limit angle intersects the ground surface.
- f. Trough subsidence profiles were first calculated for a flat seam, and then adjusted to account for seam inclination by proportioning the subsidence profile for a flat seam between the limit lines at which the limit angles determined for the inclined seams intersect the ground surface.
- g. Predicted ground tilts are calculated as the slope between adjacent points of the calculated subsidence profile.
- h. Maximum ground strains applicable for horizontal seams were multiplied by Correction factors for inclined seams prior to calculating the strain profile. Correction factors to determine the uptip and downtip maximum tensile strain are 0.25 and 1.75 respectively, based on Table 6 of SEH. A correction factor of 1.75 was used to determine the maximum compressive strain (Whittaker, 1989, p. 239). Strain profiles were first calculated for flat seam conditions and then converted to develop inclined seam strain profiles using the same limit angles used for the subsidence profiles. Additional correction factors for ground strain calculations considering the panel width to depth ratio (SEH, 1975, Fig. 15, p. 28) have been included in the analysis.
- i. The inclined seam subsidence and strain profiles were determined by superimposing the effects of multiple seams across eight cross sections. Subsidence and strain values were calculated at 10 foot intervals along the cross sections.

The interaction of the subsidence effects of multiple seams results in canceling of

**Changes from September 7, 2005 Final Planning Comm'n Recommendation shown in strike-draft  
(~~deleted text~~ and new text)**

calculated tilts and strains as, for example, when the zone of compressive strains from the subsidence of one seam corresponds to the zone of tensile strains from the subsidence of an underlying seam. Depending on the assumptions that are made regarding the timing of collapse of coal mine workings, a variety of different strain and tilt values could be calculated at points located within areas potentially influenced by multiple seams.

**2. CMS Zone 2**

The zone of potential sinkhole development (CMS Zone 2) has been defined as all areas directly underlain by coal mine workings at a depth of 200 feet or less, documented prospects, and the area within 100 feet of such areas. The area within 100 feet of a shaft collar or slope entry is included in CMS Zone 2 even if additional coal mine workings have not been identified in the immediate area. Gangways between documented mine workings that are within 300 feet of the ground surface and are accessed by the same entry as the documented workings are included in CMS Zone 2 because of the possibility of undocumented workings at such locations.

**III. References and Sources For Detailed Site Evaluation**

The following sources have been used in developing these regulations. Additional information available from these sources could be used in performing detailed site evaluations for specific properties.

Dunrud, Richard, 1987, Mine Map of Newcastle Area, King County, Washington. Prepared for U.S. Department of the Interior, Office of Surface Mining, Denver, Colorado.

National Coal Board, 1975, Subsidence Engineers' Handbook.

Skelly and Loy, 1985, Abandoned Coal Mine Survey, Coal Creek, King County, Washington. Prepared for the U.S. Department of the Interior, Office of Surface Mining, Denver, Colorado.

Washington Department of Natural Resources, Division of Geology and Earth Resources. Available copies of original mine maps for the No. 3, No. 4 and Muldoon seams.

Whittaker, Barry N., and David J. Reddish, 1989, Subsidence, Occurrence, Prediction, and Control. Developments in Geotechnical Engineering, 56, published by Elsevier.

Yokel, F. Y., L. A. Salomone, and R. M. Chung, 1981, Construction of Housing in Mine Subsidence Areas. NBSIR 81-2215.

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

CITY OF BELLEVUE, WASHINGTON  
ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE amending the Bellevue Land Use Code to adopt amendments to critical area requirements applicable to subdivisions and Planned Unit Developments; amending Sections 20.45A.030, 20.45A.130, 20.45B.020, 20.45B.130, 20.30D.120, 20.30D.150, 20.30D.160, 20.30D.165, 20.30D.170, 20.30D.200, 20.30D.250 of the Bellevue Land Use Code; creating new Sections 20.45A.060, 20.45A.055, and 20.30D.167 in the Bellevue Land Use Code; deleting Section 20.45A.280 and 20.45B.270; and establishing an effective date.

WHEREAS, the City of Bellevue is a designated urban growth area under the state's Growth Management Act (GMA); and

WHEREAS, as an urban growth area, the City of Bellevue plans for and accepts its portion of the forecasted growth and development expected in King County; and

WHEREAS, the state Growth Management Act (GMA) requires local jurisdictions to designate and protect critical areas; and

WHEREAS, GMA requires local jurisdictions to include the best available science (BAS) in developing policies and regulations to protect critical area functions and values, and to give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries; and

WHEREAS, the City of Bellevue has a long history of protecting environmentally sensitive critical areas, with its first protective regulations adopted in 1987; and

WHEREAS, the City of Bellevue has a long history of developing and protecting exceptional neighborhoods and commercial areas, which contribute to economic development and the to citizens' quality of life; and

WHEREAS, the City of Bellevue initiated its Critical Areas Update process in order to review existing regulations and policies protecting critical areas in 2001; and

WHEREAS, following substantial work by the Critical Areas Citizens Advisory Committee and the Planning Commission, the City Council adopted updated critical areas policies into the Environmental Element of the Comprehensive Plan, in November, 2004; and

WHEREAS, the Comprehensive Plan policies directs a regulatory and non-regulatory approach to protecting critical area functions and values; and

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

WHEREAS, the City of Bellevue protects critical areas with a variety of non-regulatory measures, including acquisition of critical areas, rehabilitation projects, education programs, and best management practices in city operations and management of city property and rights of way; and

WHEREAS, the proposed amendments to the Land Use Code updating the City's critical areas regulations, together with other regulations, including the City's clearing and grading regulations and stormwater regulations, and together with non-regulatory measures and incentives, provide protection of critical area functions and values; and

WHEREAS, the amendments to Part 20.45A, Part 20.45B and Part 20.30D of the Land Use Code are designed to ensure protection of critical area functions and values in the subdivision and Planned Unit Development processes; and

WHEREAS, the amendments to Part 20.45A, Part 20.45B, and Part 20.30D of the Land Use Code also significantly increase flexibility and incentives for property owners to provide enhanced protection of critical area functions and values and to accomplish desired development; and

WHEREAS, development of the proposed amendments included BAS, with BAS sources set forth completely in the Planning Commission Transmittal dated September 7, 2005; and

WHEREAS, the City prepared a risk analysis of the proposed amendments, entitled "City of Bellevue's Critical Areas Update – Risk Analysis of Regulatory, City Programs, and Best Available Science Alternatives for Improving Critical Area Protection," dated June 16, 2005 and updated on \_\_\_\_\_ which discloses any departure from best available science and the risks associated with such departures; and

WHEREAS, the Council adopts the analysis and discussion of GMA and BAS obligations as set forth in the Planning Commission Transmittal dated September 7, 2005; and

WHEREAS, the Planning Commission held a public hearing on July 6, 2005 with regard to such proposed Land Use Code amendment; and

WHEREAS, the Planning Commission finds that the Land Use Code amendment satisfies the criteria of LUC 20.30J.135 and therefore recommends that the City Council approve such proposed amendment; and

WHEREAS, the City Council concurs in the analysis of the Land Use Code amendment criteria as set forth in the Planning Commission Transmittal dated September 7, 2005 and finds that the Land Use Code amendment, as modified pursuant to Council direction satisfies the criteria of LUC 20.30J.135; and

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

WHEREAS, the City of Bellevue has complied with the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, and the City's Environmental Procedures Code, BCC 22.02 including preparation of the Draft Environmental Impact Statement dated \_\_\_\_\_ and the Final Environmental Impact Statement dated \_\_\_\_\_; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Section 20.45A.030 of the Bellevue Land Use Code is hereby amended as follows:

**20.45A.030 Purpose.**

This chapter is adopted in furtherance of the Comprehensive Plan of the City. It is hereby declared that the regulations contained in this chapter are necessary for the protection and preservation of the public health, safety and general welfare in accordance with the standards established by the State of Washington, Chapter 58.17 RCW, and established by the City of Bellevue to prevent the overcrowding of land; to lessen congestion in the streets and highways; to promote effective use of land; to promote safe and convenient travel by the public on streets and highways; to provide for adequate light and air; to facilitate adequate provision for water, sewerage, storm water drainage, parks and recreation areas, sites for schools and schoolgrounds and other public requirements; to provide for proper ingress and egress; to provide for the expeditious review and approval of proposed subdivisions which conform to zoning standards and local plans and policies; to adequately provide for the housing and commercial needs of the community; to protect ~~sensitive areas~~ critical areas and critical area buffers as designated in the Sensitive Area Overlay District and the Sensitive Area Notebook Part 20.25H; and to require uniform monumenting of land subdivisions and conveyance by accurate legal description.

Section 2. A new Section 20.45A.060 of the Bellevue Land Use Code is hereby created as follows:

**20.45A.060 Special requirements for Plats with critical areas or critical area buffers.**

**A. Allowed density.** Density shall be calculated pursuant to LUC 20.25H.045.

**B. Conservation Subdivision.**

**1. When Required.** Proposals for residential subdivision within the Critical Areas Overlay District shall be processed as a conservation subdivision pursuant to this section 20.45A.060.B in the following cases:

- a. the amount of critical area and critical area buffer on the site totals at least 1 acre; or**
- b. the site abuts a known salmon-bearing stream; or**

Changes since September 7, 2005 Planning Comm'n Recommendation **highlighted**

- c. the critical area or critical area buffer on the site abuts a critical area or critical area buffer on another site, or a site owned or managed by the City or other public agency for open space or park uses.
2. Tract required. The property owner receiving approval of a residential subdivision pursuant to this section shall delineate the critical area and critical area buffer and set aside such areas in separate tracts, designated as Native Growth Protection Area(s) (NGPA) on the face of the final plat. The final plat shall contain the following restrictions for use, development and disturbance of such NGPA(s) in a format approved by the City Attorney:
- a. An assurance that: the tract will be kept free from all development and disturbance except where allowed or required for habitat improvement projects, vegetation management, or new or expanded city parks pursuant to LUC 20.25H.070; and that native vegetation, existing topography, and other natural features will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering and protecting plants and animal habitat;
  - b. The right of the City of Bellevue to enter the property to investigate the condition of the NGPA;
  - c. The right of the City of Bellevue to enforce the terms of the **restriction**NGPA; and
  - d. A management plan for the NGPA designating future management responsibility.
3. Dimensional standards modification. The dimensional standards set forth in 20.20.010 are modified as follows for sites processed through the conservation subdivision process. All other dimensional standards and requirements of 20.20.010 shall apply, including applicable footnotes:

<b>Land Use District</b>	<b>R-1</b>	<b>R-1.8</b>	<b>R-2.5</b>	<b>R-3.5</b>	<b>R-4</b>	<b>R-5</b>	<b>R-7.5*</b>	<b>R-10 (3)</b>	<b>R-15 (3)</b>	<b>R-20 (3)</b>	<b>R-30 (3)</b>
<u>Minimum Setbacks of structures (feet)</u>											
<u>Front Yard (1) (2) (7)</u>	<u>25</u>	<u>20</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
<u>Rear Yard (4) (7)</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>
<u>Side Yard (4) (7)</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>
<u>2 Side Yards (4) (7)</u>	<u>15</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
<u>Minimum Lot Area Acres (A) or Sq.</u>	<u>22,750</u>	<u>13,000</u>	<u>8775</u>	<u>6500</u>	<u>5525</u>	<u>4680</u>	<u>3055</u>	<u>5525</u>	<u>5525</u>	<u>5525</u>	<u>5525</u>

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

<u>Land Use District</u>	<u>R-1</u>	<u>R-1.8</u>	<u>R-2.5</u>	<u>R-3.5</u>	<u>R-4</u>	<u>R-5</u>	<u>R-7.5*</u>	<u>R-10</u> (3)	<u>R-15</u> (3)	<u>R-20</u> (3)	<u>R-30</u> (3)
<u>Ft.</u>											
<u>Maximum Lot Coverage by Structures (percent)</u>	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
<u>Impervious Surface</u>	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)

\*Not effective within the jurisdiction of the East Bellevue Community Council.

**Notes:**

- (1) Any garage or other structure shall be set back the minimum necessary to allow on-site parking on any driveway without blocking a sidewalk, for proposals without garages, there shall be sufficient area on the site to allow for required on-site parking without blocking a sidewalk.
- (2) Where the front yard setback is reduced below the minimum setback established in 20.20.010, all front yard setbacks along a public right of way shall be the same for each lot in the development, so that the minimum front yard setback is also the maximum front yard setback.
- (3) Where there is a conflict between this section B.3 and the requirements of the Transition Area Overlay District, the provisions of the Transition Area Overlay District shall prevail.
- (4) The required yard setback may not be reduced below the minimum required for the underlying land use district where the development abuts another subdivision or development with the same land use designation, where the majority of the lots in the abutting development meet or exceed the minimum dimensional requirements for the land use district.
- (5) Lot coverage. The maximum lot coverage for each lot is determined by multiplying the maximum lot coverage in the underlying land use district by the lot coverage factor. The lot coverage factor is:

$$\text{lot coverage factor} = 1 + ((\text{required minimum lot size} - \text{actual lot size}) / \text{required minimum lot size})$$

The following example illustrates this calculation:

Underlying land use district, R-3.5  
Maximum lot coverage for district is 0.35  
Required minimum lot size is 10,000  
Actual lot size in proposed conservation subdivision is 6800 square feet

$$\text{Lot coverage factor} = 1 + ((10,000 - 6800) / 10,000) = 1.32$$

$$\text{Allowed lot coverage} = 0.35 \times 1.32 = 0.46 \text{ (rounded to nearest hundredth)}$$

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

- (6) Impervious surface. Impervious surface for the subdivision considered on the whole shall not exceed 50%, based on the total site size. The final plat shall designate the allowed impervious surface for each separate lot.
- (7) A required minimum setback may not be reduced below that required to maintain the minimum separation between structures required by the International Building Code, as adopted and amended by the City of Bellevue, considering the location of existing structures on abutting properties.

4. Site Design.

- a. Roads must be designed parallel to contours with consideration to maintaining consolidated areas of natural topography and vegetation. Access must be located in the least sensitive area feasible; and
- b. Change in grade, cleared area and volume of cut or fill on the site must be minimized; and
- c. Utilities and other facilities should be located to utilize common corridors wherever possible; and
- d. Each lot with slopes in excess of 25 percent shall demonstrate provision for feasible driveway access to a future residence not to exceed 15 percent or provide for meeting emergency access and fire protection by other means allowed by applicable codes, and shall demonstrate feasibility of construction of a residence on the lot through a design consistent with the standards of this Code. Shared driveway access and private roads should be utilized where significant reduction of grading can be accomplished compared to separate driveway access for each individual lot.

**C. Conventional Subdivision.** Proposals for residential subdivision not required to satisfy the provisions of subsection B above shall meet the following requirements.

1. Lot Location.

- a. Lots which contain critical area or critical area buffers must be configured in a manner which, to the maximum extent possible, will allow a structure to be built on the least sensitive portion of the site; and
- b. Lots which contain critical area or critical area buffers must be configured in a manner which will allow a designated building pad to be located outside of any critical area or critical area buffer.

2. Site Design.

- a. Roads must be designed parallel to contours with consideration to maintaining consolidated areas of natural topography and vegetation. Access must be located in the least sensitive area feasible; and
- b. Change in grade, cleared area and volume of cut or fill on the site must be minimized; and
- c. Utilities and other facilities should be located to utilize common corridors wherever possible; and

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

- d. Critical areas, critical area buffers, and retained significant trees shall be placed in Native Growth Protection Easements (NGPE) designated on the final plat document. The final plat shall contain the following restrictions for use, development and disturbance of the NGPE in a format approved by the City Attorney:
  - i. An assurance that: the NGPE will be kept free from all development and disturbance except where allowed or required for habitat improvement projects, vegetation management, and new or expanded city parks pursuant to LUC 20.25H.070; and that native vegetation, existing topography, and other natural features will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering and protecting plants and animal habitat;
  - ii. The right of the City of Bellevue to enter the property to investigate the condition of the NGPA or NGPE upon reasonable notice;
  - iii. The right of the City of Bellevue to enforce the terms of the ~~restriction~~NGPE; and
  - iv. A management plan for the NGPE designating future management responsibility.
- e. NGPEs on individual lots within the plat shall be contiguous with NGPEs on other lots to the maximum extent feasible; and
- f. Each lot with slopes in excess of 25 percent shall demonstrate provision for feasible driveway access to a future residence not to exceed 15 percent or provide for meeting emergency access and fire protection by other means allowed by applicable codes, and shall demonstrate feasibility of construction of a residence on the lot through a design consistent with the standards of this Code. Shared driveway access and private roads should be utilized where significant reduction of grading can be accomplished compared to separate driveway access for each individual lot.

D. Additional requirements for Plats with areas of special flood hazard.

1. All lots created through subdivision shall have adequate building space outside the 100-year floodplain, the floodway, and the channel migration zone.
2. Subdivisions shall be designed to minimize or eliminate flood damage and impacts to floodplain functions and values. Public utilities and facilities that are installed as part of such subdivisions, such as sewer, gas, electrical, and water systems, shall be located and constructed to also minimize flood damage and impacts to floodplain functions and values. Subdivisions should be designed using natural features of the landscape and should not incorporate flood protection changes.

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

3. Subdivisions shall have adequate natural surface water drainage in accordance with locally adopted surface water management requirements to reduce exposure to flood hazards; and
4. Subdivisions shall show the 100-year floodplain, floodway, and channel migration zone on the preliminary and final plat and short plat maps and designate such areas as "no build," when applicable.
5. Where detailed base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain either fifty (50) lots or involve five (5) acres, regardless of the number of lots.

Section 3. Section 20.45A.130 of the Bellevue Land Use Code is hereby amended as follows:

**20.45A.130 Preliminary plat – Decision criteria.**

The City may approve or approve with modifications a preliminary plat if:

- A. The preliminary plat makes appropriate provisions for, but not limited to, the public health, safety and general welfare; for open spaces, drainage ways, streets, sidewalks, alleys, other public ways, water supplies, sanitary waste, parks, playgrounds, sites for schools and schoolgrounds; and
- B. The public use and interest is served by the platting of the subdivision; and
- C. The preliminary plat appropriately considers the physical characteristics of the proposed subdivision site; and
- D. The proposal complies with all applicable provisions of the Land Use Code, BCC Title 20, the Utility Codes, BCC Title 24, the City of Bellevue Development Standards and Chapter 58.17 RCW; and
- E. The proposal is in accord with the Comprehensive Plan, BCC Title 21; and
- F. Each lot in the proposal can reasonably be developed in conformance with current Land Use Code requirements without requiring a variance, however, requests for modifications to the requirements of Part 20.25H, where allowed under the provisions of that part, may be considered together with an application for preliminary plat so long as the resulting lots may each be developed without individually requiring a variance; and
- G. All necessary utilities, streets or access, drainage and improvements are planned to accommodate the potential use of the entire property.

Changes since September 7, 2005 Planning Comm'n Recommendation **highlighted**

Section 4. Section 20.45A.280 of the Bellevue Land Use Code is hereby deleted in its entirety as follows:

**~~20.45A.280 Special requirements for sensitive and protected areas.~~**

- ~~A. A lot which contains a sensitive area must be configured in a manner which, to the maximum extent possible, will allow a structure to be built on the least sensitive portion of the site in conformance with the performance standards of LUC 20.25H.110.~~
- ~~B. A lot which contains a protected area must be configured in a manner which will allow a designated building pad to be located outside of any protected area or protected area setback.~~
- ~~C. The City shall require as a condition of preliminary plat approval that no disturbance occur within the protected area or protected area setback unless otherwise permitted in Chapter 20.25H LUC.~~

Section 5. Section 20.45B.020 of the Bellevue Land Use Code is hereby amended as follows:

**20.45B.020 Purpose.**

Pursuant to RCW 58.17.060 it is the intent of this chapter to permit administrative processing and approval of a division of land into nine or fewer lots, tracts, parcels, or sites; to promote the public health, safety, and general welfare; to further the goals and objectives of the Comprehensive Plan; to facilitate adequate provisions for water, sewer, storm water drainage, ingress and egress, and public uses; to promote the coordinated development of vacant lands; to protect sensitive areas critical areas and critical area buffers as designated in the Sensitive Area Overlay District and the Sensitive Area Notebook Part 20.25H; and to require conveyance by accurate legal description.

Section 6. A new Section 20.45B.055 of the Bellevue Land Use Code is hereby created as follows:

**20.45B.055 Special requirements for Short Plats with critical areas or critical area buffers.**

**A. Allowed density.** Density shall be calculated pursuant to LUC 20.25H.045.

**B. Conservation Short Subdivision.**

- 1. When Required.** Proposals for residential short subdivision within the Critical Areas Overlay District shall be processed as a conservation short subdivision pursuant to this section 20.45B.055.B in the following cases:
  - a. the amount of critical area and critical area buffer on the site totals at least 1 acre; or**

Changes since September 7, 2005 Planning Comm'n Recommendation **highlighted**

- b. the site abuts a known salmon-bearing stream; or
  - c. the critical area or critical area buffer on the site abuts a critical area or critical area buffer on another site, or a site owned or managed by the City or other public agency for open space or park uses.
2. Tract required. The property owner receiving approval of a residential short subdivision pursuant to this section shall delineate the critical area and critical area buffer and set aside such areas in separate tracts, designated as Native Growth Protection Area(s) (NGPA) on the face of the final short plat. The final short plat shall contain the following restrictions for use, development and disturbance of such NGPA(s) in a format approved by the City Attorney:
- a. An assurance that: the tract will be kept free from all development and disturbance except where allowed or required for habitat improvement projects, vegetation management, or new or expanded city parks pursuant to LUC 20.25H.070; and that native vegetation, existing topography, and other natural features will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering and protecting plants and animal habitat;
  - b. The right of the City of Bellevue to enter the property to investigate the condition of the NGPA upon reasonable notice;
  - c. The right of the City of Bellevue to enforce the terms of the NGPA; and
  - d. A management plan for the NGPA designating future management responsibility.
3. Dimensional standards modification. The dimensional standards set forth in 20.20.010 are modified as follows for sites processed through the conservation short subdivision process. All other dimensional standards and requirements of 20.20.010 shall apply, including applicable footnotes:

<b>Land Use District</b>	<b><u>R-1</u></b>	<b><u>R-1.8</u></b>	<b><u>R-2.5</u></b>	<b><u>R-3.5</u></b>	<b><u>R-4</u></b>	<b><u>R-5</u></b>	<b><u>R-7.5*</u></b>	<b><u>R-10</u></b> <b>(3)</b>	<b><u>R-15</u></b> <b>(3)</b>	<b><u>R-20</u></b> <b>(3)</b>	<b><u>R-30</u></b> <b>(3)</b>
<b>Minimum Setbacks of structures (feet)</b>											
<b>Front Yard (1) (2) (7)</b>	<u>25</u>	<u>20</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
<b>Rear Yard (4) (7)</b>	<u>20</u>	<u>20</u>	<u>20</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>
<b>Side Yard (4) (7)</b>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>
<b>2 Side Yards (4) (7)</b>	<u>15</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
<b>Minimum Lot Area Acres (A) or Sq.</b>	<u>22,750</u>	<u>13,000</u>	<u>8775</u>	<u>6500</u>	<u>5525</u>	<u>4680</u>	<u>3055</u>	<u>5525</u>	<u>5525</u>	<u>5525</u>	<u>5525</u>

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

<u>Land Use District</u>	<u>R-1</u>	<u>R-1.8</u>	<u>R-2.5</u>	<u>R-3.5</u>	<u>R-4</u>	<u>R-5</u>	<u>R-7.5*</u>	<u>R-10</u> (3)	<u>R-15</u> (3)	<u>R-20</u> (3)	<u>R-30</u> (3)
<u>Ft.</u>											
<u>Maximum Lot Coverage by Structures (percent)</u>	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
<u>Impervious Surface</u>	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)

\*Not effective within the jurisdiction of the East Bellevue Community Council.

**Notes:**

- (1) Any garage or other structure shall be set back the minimum necessary to allow on-site parking on any driveway without blocking a sidewalk, for proposals without garages, there shall be sufficient area on the site to allow for required on-site parking without blocking a sidewalk.
- (2) Where the front yard setback is reduced below the minimum setback established in 20.20.010, all front yard setbacks along a public right of way shall be the same for each lot in the development, so that the minimum front yard setback is also the maximum front yard setback.
- (3) Where there is a conflict between this section B.3 and the requirements of the Transition Area Overlay District, the provisions of the Transition Area Overlay District shall prevail.
- (4) The required yard setback may not be reduced below the minimum required for the underlying land use district where the development abuts another subdivision or development with the same land use designation, where the majority of the lots in the abutting development meet or exceed the minimum dimensional requirements for the land use district.
- (5) Lot coverage. The maximum lot coverage for each lot is determined by multiplying the maximum lot coverage in the underlying land use district by the lot coverage factor. The lot coverage factor is:

$$\text{lot coverage factor} = 1 + ((\text{required minimum lot size} - \text{actual lot size}) / \text{required minimum lot size})$$

The following example illustrates this calculation:

Underlying land use district, R-3.5  
Maximum lot coverage for district is 0.35  
Required minimum lot size is 10,000  
Actual lot size in conservation short subdivision is 6800 square feet

$$\text{Lot coverage factor} = 1 + ((10,000 - 6800) / 10,000) = 1.32$$

$$\text{Allowed lot coverage} = 0.35 \times 1.32 = 0.46 \text{ (rounded to nearest hundredth)}$$

Changes since September 7, 2005 Planning Comm'n Recommendation highlighted

- (6) Impervious surface. Impervious surface for the subdivision considered on the whole shall not exceed 50%, based on the total site size. The final short plat shall designate the allowed impervious surface for each separate lot.
- (7) A required minimum setback may not be reduced below that required to maintain the minimum separation between structures required by the International Building Code, as adopted and amended by the City of Bellevue, considering the location of existing structures on abutting properties.

4. Site Design.

- a. Roads must be designed parallel to contours with consideration to maintaining consolidated areas of natural topography and vegetation. Access must be located in the least sensitive area feasible; and
- b. Change in grade, cleared area and volume of cut or fill on the site must be minimized; and
- c. Utilities and other facilities should be located to utilize common corridors wherever possible; and
- d. Each lot with slopes in excess of 25 percent shall demonstrate provision for feasible driveway access to a future residence not to exceed 15 percent or provide for meeting emergency access and fire protection by other means allowed by applicable codes, and shall demonstrate feasibility of construction of a residence on the lot through a design consistent with the standards of this Code. Shared driveway access and private roads should be utilized where significant reduction of grading can be accomplished compared to separate driveway access for each individual lot.

**C. Conventional Short Subdivision.** Proposals for residential short subdivision not required to satisfy the provisions of subsection B above shall meet the following requirements.

1. Lot Location.

- a. Lots which contain critical area or critical area buffers must be configured in a manner which, to the maximum extent possible, will allow a structure to be built on the least sensitive portion of the site; and
- b. Lots which contain critical area or critical area buffers must be configured in a manner which will allow a designated building pad to be located outside of any critical area or critical area buffer.

2. Site Design.

- a. Roads must be designed parallel to contours with consideration to maintaining consolidated areas of natural topography and vegetation. Access must be located in the least sensitive area feasible; and
- b. Change in grade, cleared area and volume of cut or fill on the site must be minimized; and

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- c. Utilities and other facilities should be located to utilize common corridors wherever possible; and
- d. Critical areas, critical area buffers, and retained significant trees shall be placed in Native Growth Protection Easements (NGPE) designated on the final short plat document. The final short plat shall contain the following restrictions for use, development and disturbance of the NGPE in a format approved by the City Attorney:
  - i. An assurance that: the NGPE will be kept free from all development and disturbance except where allowed or required for habitat improvement projects, vegetation management, and new or expanded city parks pursuant to LUC 20.25H.070; and that native vegetation, existing topography, and other natural features will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering and protecting plants and animal habitat;
  - ii. The right of the City of Bellevue to enter the property to investigate the condition of the NGPE upon reasonable notice;
  - iii. The right of the City of Bellevue to enforce the terms of the NGPE; and
  - iv. A management plan for the NGPE designating future management responsibility.
- e. NGPEs on individual lots within the short plat shall be contiguous with NGPEs on other lots to the maximum extent feasible; and
- f. Each lot with slopes in excess of 25 percent shall demonstrate provision for feasible driveway access to a future residence not to exceed 15 percent or provide for meeting emergency access and fire protection by other means allowed by applicable codes, and shall demonstrate feasibility of construction of a residence on the lot through a design consistent with the standards of this Code. Shared driveway access and private roads should be utilized where significant reduction of grading can be accomplished compared to separate driveway access for each individual lot.

**D. Additional requirements for short plats with areas of special flood hazard.**

1. All lots created through short subdivision shall have adequate building space outside the 100-year floodplain, the floodway, and the channel migration zone.
2. Short subdivisions shall be designed to minimize or eliminate flood damage and impacts to floodplain functions and values. Public utilities and facilities that are installed as part of such subdivisions, such as sewer, gas, electrical, and water systems, shall be located and constructed to also minimize flood damage and impacts to floodplain functions and values. Short subdivisions should be designed using natural features of the landscape and should not incorporate flood protection changes.

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3. Short subdivisions shall have adequate natural surface water drainage in accordance with locally adopted surface water management requirements to reduce exposure to flood hazards; and
4. Short subdivisions shall show the 100-year floodplain, floodway, and channel migration zone on the preliminary and final plat and short plat maps and designate such areas as "no build," when applicable.
5. Where detailed base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for short subdivision proposals and other proposed developments that involve five (5) acres, regardless of the number of lots.

Section 7. Section 20.45B.130 of the Bellevue Land Use Code is hereby amended as follows:

**20.45B.130 Preliminary short plat – Department Director's decision.**

**A. Decision Criteria.**

The Department Director may approve or approve with modifications if:

1. The preliminary short plat makes appropriate provisions for, but not limited to, the public health, safety and general welfare, for open spaces, drainage ways, streets, sidewalks, alleys, other public ways, water supplies, sanitary waste; and
2. The public interest is served by the short subdivision; and
3. The preliminary short plat appropriately considers the physical characteristics of the proposed short subdivision site; and
4. The proposal complies with all applicable provisions of the Land Use Code, BCC Title 20, the Utility Codes, BCC Title 24, and the City of Bellevue Development Standards; and
5. The proposal is in accord with the Comprehensive Plan, BCC Title 21; and
6. Each lot in the proposal can reasonably be developed in conformance with current Land Use Code requirements without requiring a variance, however, requests for modifications to the requirements of Part 20.25H, where allowed under the provisions of that Part, may be considered together with an application for preliminary short plat so long as the resulting lots may each be developed without individually requiring a variance; and
7. All necessary utilities, streets or access, drainage and improvements are planned to accommodate the potential use of the entire property.

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Section 8. Section 20.45B.270 of the Bellevue Land Use Code is hereby deleted in its entirety as follows:

**~~20.45B.270 Special requirements for sensitive and protected areas.~~**

- ~~A. A lot which contains a sensitive area must be configured in a manner which, to the maximum extent possible, will allow a structure to be built on the least sensitive portion of the site in conformance with the performance standards of LUC 20.25H.110.~~
- ~~B. A lot which contains a protected area must be configured in a manner which will allow a designated building pad to be located outside of any protected area or protected area setback.~~
- ~~C. The City shall require as a condition of preliminary short plat approval that no disturbance occur within the protected area or protected area setback unless otherwise permitted in Chapter 20.25H LUC.~~

Section 9. Section 20.30D.120 of the Bellevue Land Use Code is hereby amended as follows:

**20.30D.120 Purpose.**

A Planned Unit Development is a mechanism by which the City may permit a variety in type, design, and arrangement of structures; and enable the coordination of project characteristics with features of a particular site in a manner consistent with the public health, safety and welfare. A Planned Unit Development allows for innovations and special features in site development, including the location of structures, conservation of natural land features, protection of critical areas and critical area buffers, the use of low impact development techniques, conservation of energy, and efficient utilization of open space.

Section 10. Section 20.30D.150 of the Bellevue Land Use Code is hereby amended as follows:

**20.30D.150 Planned Unit Development plan – Decision criteria.**

The City may approve or approve with modifications a Planned Unit Development plan if:

- A. The Planned Unit Development is consistent with the Comprehensive Plan; and
- B. The Planned Unit Development accomplishes, by the use of permitted flexibility and variation in design, a development that is better than that resulting from traditional development. Net benefit to the City may be demonstrated by one or more of the following:
1. Placement, type or reduced bulk of structures, or

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2. Interconnected usable open space, or
  3. Recreation facilities, or
  4. Other public facilities, or
  5. Conservation of natural features, or
  6. Conservation of critical areas and critical area buffers beyond that required under Part 20.25H; or
  7. Aesthetic features and harmonious design, or
  8. Energy efficient site design or building features; or
  9. Use of low impact development techniques; and
- C. The Planned Unit Development results in no greater burden on present and projected public utilities and services than would result from traditional development and the Planned Unit Development will be served by adequate public or private facilities including streets, fire protection, and utilities; and
- D. The perimeter of the Planned Unit Development is compatible with the existing land use or property that abuts or is directly across the street from the subject property. Compatibility includes but is not limited to size, scale, mass and architectural design of proposed structures; and
- E. Landscaping within and along the perimeter of the Planned Unit Development is superior to that required by this Code, LUC 20.20.520, and enhances the visual compatibility of the development with the surrounding neighborhood; and
- F. At least one major circulation point is functionally connected to a public right-of-way; and
- G. Open space, where provided to meet the requirements of 20.30D.160.A.1, within the Planned Unit Development is an integrated part of the project rather than an isolated element of the project; and
- H. The design is compatible with and responds to the existing or intended character, appearance, quality of development and physical characteristics of the subject property and immediate vicinity; and
- I. That part of a Planned Unit Development in a Transition Area meets the intent of the Transition Area requirements, Part 20.25B LUC, or the criteria of LUC 20.25B.040. Although the specific dimensional requirements of Part 20.25B may be modified through the Planned Unit Development process; and

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- J. Roads and streets, whether public or private, within and contiguous to the site comply with Transportation Department guidelines for construction of streets; and
- K. Streets and sidewalks, existing and proposed, are suitable and adequate to carry anticipated traffic within the proposed project and in the vicinity of the proposed project; and
- L. Each phase of the proposed development, as it is planned to be completed, contains the required parking spaces, open space, recreation space, landscaping and utility area necessary for creating and sustaining a desirable and stable environment.

Section 11. Section 20.30D.160 of the Bellevue Land Use Code is hereby amended as follows:

**20.30D.160 Planned Unit Development plan – Open-Conservation feature and recreation space requirement.**

**A. General.**

Within a Planned Unit Development including residential uses:

1. Through the Conservation Design Features included in subsection B below, the proposal must earn square footage credit totaling A at least 40 percent of the gross land area, which includes any protected-critical area or critical area buffer, of the subject property must be retained or developed as open space as defined by LUC 20.50.038; and
2. At least 10 percent of the gross land area, which includes any protected-critical area or critical area buffer, of the subject property must be retained or developed as common recreation space as defined by LUC 20.50.044; provided, however, that the requirement for recreation space may be waived if the total of protected critical area and protected-critical area setback-buffer equals at least 40 percent of the gross land area; and
3. Recreation space as required by paragraph A.2 of this section may be included within non-critical area Conservation Design Features the open space required by paragraph A.1 of this section if:
  - a. The common recreation space meets the definition of open space, LUC 20.50.038 does not interfere with the purposes and functions of the Conservation Design Feature; and
  - b. At least 20 percent of the gross land area is nonrecreation open space.

Provided, however, that recreation space may not occur in a protected-critical area or a protected-critical area setback-buffer;

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4. The area of the site devoted to pedestrian trails shall not be included in the required common recreation space unless public trails are specifically required by the City;
5. An outdoor children's play area meeting the requirements of LUC 20.20.540 may be included in the above described common recreation space requirement;
6. For mixed use projects, the required open and recreation space shall be designed to meet the needs of both the residential and commercial uses.

**B. Conservation Design Features.** To satisfy the requirements of Subsection A above, a proposal shall include any combination of the following factors. The total square footage credit required in Subsection A is calculated by multiplying the square footage actually dedicated to the conservation design feature by the conservation factor set forth below. Where noted, certain Conservation Design Features are not eligible to earn square footage credit unless the minimum size requirements are met. After the minimum size requirement is met, each square foot provided may be used to calculate the square footage credit earned by the feature.

<u>Conservation Design Feature</u>	<u>Conservation Factor</u>	<u>Minimum Size of Retained Area before credit earned</u>
<u>Critical area or areas placed in a tract (connection between isolated critical areas credited as corridor below.)</u>	<u>1.0</u>	
<u>Preservation of Westside lowland conifer hardwood forest not already in critical area and/or preservation of recommended forest habitat to protect species of local importance</u>	<u>1.2</u>	<u>20,000 sq. ft.</u>
<u>Designated wildlife corridor, trail or other essential connection set aside in a tract</u>	<u>1.2</u>	
<u>Critical area buffer increased by 15 % or more and placed in tract</u>	<u>1.2</u>	
<u>Preservation of native soils and mature trees on required open space or combination of preservation with hydrologic enhancement (soil amendment and tree such that vegetative areas are connected to soil below)</u>	<u>1.1</u>	<u>10,000 sq. ft. canopy cover or amended and planted area</u>
<u>Site area set aside in separate tract to achieve bio-retention and runoff dispersion to natural areas or to soil layer below; e.g. community rain garden, downspout dispersion or similar LID techniques. Must serve more than one residence.</u>	<u>1.1</u>	<u>5,000 sq. ft. reserved for rain garden or dispersion</u>
<u>Landscaped or grass open space in separate tract for active or passive recreation but only partially connected to soil below</u>	<u>1.0</u>	<u>2,500 sq. ft. contiguous area</u>
<u>Paved but pervious open space; e.g. court yards and similar facilities</u>	<u>1.0</u>	<u>1500 sq. ft.</u>
<u>Impervious paved court yards and similar facilities that meet minimum definition of open</u>	<u>1.0</u>	<u>2500 sq. ft.</u>

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space		
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**BC. Maintenance.**

In appropriate circumstances the City may require a reasonable performance or maintenance assurance device in conformance with LUC 20.40.490 to assure the retention and continued maintenance of all open and recreation space or conservation design feature in conformance with the Land Use Code and the Planned Unit Development plan approval.

Section 12. Section 20.30D.165 of the Bellevue Land Use Code is hereby amended as follows:

**20.30D.165 Planned Unit Development plan – Request for modification of zoning requirements.**

The applicant may request a modification of the requirements and standards of the Land Use Code as follows:

**A. Density.**

1. General. The applicant may request a bonus in the number of dwelling units permitted by the underlying land use district (see LUC 20.20.010 or LUC 20.25H.045 for sites in the Critical Areas Overlay District).
2. Bonus Decision Criteria. The City may approve a bonus in the number of dwelling units allowed by no more than 10 percent over the base density for proposals complying with this subsection A.2. Base density shall be determined on sites with critical areas or critical area buffers pursuant to LUC 20.25H.045. Base density on all other sites shall be determined based on the gross land area of the property excluding either that area utilized for traffic circulation roads or 20 percent, whichever is less, if:
  - a. The design of the development offsets the impact of the increase in density; and
  - b. The increase in density is compatible with existing uses in the immediate vicinity of the subject property.
3. Senior Citizen Dwelling. An additional 10 percent density bonus may be approved for senior citizen dwellings if the criteria in paragraph A.2 of this section are met and if the average dwelling unit size does not exceed 600 square feet.

**B. Height.**

The applicant may request a modification of height from that allowed by the land use district, provided topography and arrangement of structures does not unreasonably

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impair primary scenic views (e.g., mountains, lakes, unique skylines) of the surrounding area, as compared to lot-by-lot development. Proposals earning bonus density pursuant to 20.30D.165 or 20.30D.167 may only receive an increase in height if the requirements of 20.30D.165.A.2 are met, considering the impact of increased height.

**C. Other.**

- ~~1.—The applicant may request a modification of any requirement or standard of the Land Use Code, except as provided in LUC 20.30D.170.~~
- 2.—The City may approve a modification of any provision of the Land Use Code, except as provided in LUC 20.30D.170, if the resulting site development complies with the criteria of this part.

Section 13. A new Section 20.30D.167 of the Bellevue Land Use Code is hereby added as follows:

**20.30D.167 Planned Unit Development – Additional Bonus Density for Large-Parcel Projects.**

- A. Purpose.** The city desires to offer incentives to property owners to develop multi-unit residential projects with site features and site designs that minimize impacts to critical area functions and values. Many of these techniques are new, and their effectiveness is uncertain. The City desires additional information about the impact of these design techniques and features, to determine the appropriate amount of density bonus and other incentives to offer for their use, and to determine what, if any, design features are required to offset the impact of the increased density. The projects allowed under this section are mechanisms to allow the city to gather such information prior to making additional density available to all projects.
- B. Eligible Sites.** Projects will only be authorized on sites of 5 acres or more.
- C. Applicable Procedure.** A project will be approved as part of the PUD approval for the underlying proposal.
- D. Additional Bonus.** The City may authorize additional bonus density, up to 30 percent of the base density, for proposals including additional Conservation Design Features above the amount required in Section 20.30D.160.A. Base density shall be determined on sites with critical areas or critical area buffers pursuant to LUC 20.25H.045. Base density on all other sites shall be determined based on the gross land area of the property excluding either that area utilized for traffic circulation roads or 20 percent, whichever is less. Bonus density shall be based on the square footage credit earned divided by the minimum lot size of the underlying land use district. Bonus density may be approved if the proposal meets the criteria of 20.30D.165.A.2.a and A.2.b.

Section 14. Section 20.30D.170 of the Bellevue Land Use Code is hereby amended as follows:

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**20.30D.170 Planned Unit Development plan – Limitation on authority to modify zoning.**

The following provisions of the Land Use Code may not be modified pursuant to LUC 20.30D.165:

- A. Any provision of this Part 20.30D, Planned Unit Development; or
- B. Any provision of LUC 20.10.440, Uses in Land Use Districts; or
- C. Any provision of Part 20.25E LUC, the Shoreline Overlay District, however, requests for modifications to the requirements of Part 20.25E, where allowed under the provisions of that Part, may be considered together with an application for a Planned Unit Development; or
- D. Any provision of the Land Use Code which specifically states that it is not subject to modification; or
- E. The procedural, enforcement and administrative provisions of the Land Use Code or any other applicable City Code; or
- F. Any provision of Part 20.25H LUC, the Sensitive-Critical Areas Overlay District, except as specifically provided for in that part, however, requests for modifications to the requirements of Part 20.25H, where allowed under the provisions of that Part, may be considered together with an application for a Planned Unit Development.

Section 15. Section 20.30D.200 of the Bellevue Land Use Code is hereby amended as follows:

**20.30D.200 Planned Unit Development plan – Effect of approval.**

- A. Recording Required.** The approval of the Planned Unit Development plan constitutes the City's acceptance of the general project, including its density, intensity, arrangement and design. Upon final Planned Unit Development approval that is not merged with a subdivision, the Department of Planning and Community Development will forward an approved Planned Unit Development to the King County Department of Records and Elections for recording. No administrative approval of a Planned Unit Development is deemed final until the Planned Unit Development is recorded and proof of recording is received by the Department of Planning and Community Development. See Chapter 20.45 LUC for recording requirements of Planned Unit Developments merged with subdivisions.
- B. Planned Unit Development in the Critical Area Overlay District.** Where a Planned Unit Development within the critical area overlay district is not merged with a subdivision, the Planned Unit Development recorded under this section designated on the face of the final document an Native Growth Protection Easement(s) (NGPE). The NGPE(s) shall contain all critical areas, critical area buffers, and retained significant trees. The final Planned Unit Development shall contain the following

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restrictions for use, development and disturbance of the NGPE in a format approved by the City Attorney:

1. An assurance that: the NGPE will be kept free from all development and disturbance except where allowed or required for habitat improvement projects, vegetation management, and new or expanded city parks pursuant to LUC 20.25H.070; and that native vegetation, existing topography, and other natural features will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering and protecting plants and animal habitat;
2. The right of the City of Bellevue to enter the property to investigate the condition of the NGPE upon reasonable notice;
3. The right of the City of Bellevue to enforce the terms of the NGPE; and
4. A management plan for the NGPE designating future management responsibility.

Section 16. Section 20.30D.250 of the Bellevue Land Use Code is hereby amended as follows:

**20.30D.250 Planned Unit Development plan – Phased development.**

If developed in phases, each phase of an approved Planned Unit Development must contain the required number of parking spaces, the required open space, recreation space, landscaping, and utility areas necessary to create a desirable and stable environment pending completion of the total Planned Unit Development as approved. Each phase must also contain any of the approved conservation factor project design features necessary to support bonus density constructed in that phase.

Section 17. This ordinance shall take effect on \_\_\_\_\_.

PASSED by the City Council this \_\_\_\_\_ day of \_\_\_\_\_, 2006,  
and signed in authentication of its passage this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

(SEAL)

\_\_\_\_\_  
Grant Degginger, Mayor

Approved as to form:

Lori M. Riordan, City Attorney

\_\_\_\_\_

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Attest:

\_\_\_\_\_  
Myrna L. Basich, City Clerk  
Published \_\_\_\_\_

## **APPENDIX B**

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# **Environmental Indicators Criteria Matrices**

## Geologic Hazards and Frequently Flooded Areas Criteria Matrix

Geologic Hazard	Indicators	Public Health and Safety	
		Properly Protected	Not Properly Protected
Ground Shaking	Construction Standards	Essential public facilities <sup>a</sup> are capable of withstanding earthquake loads from the peak ground acceleration. <sup>b</sup>	Construction standards do not adequately protect the function of essential public facilities from earthquake loads.
Surface Rupture	Location of Essential Public Facilities	Essential public facilities are not located on active segments of the Seattle Fault. Setbacks are required for new construction.	Some essential public facilities are located in areas subject to surface rupture of segments of the Seattle Fault.
Liquefaction	Location of Essential Public Facilities	Essential public facilities are not located in areas prone to liquefaction.	Some essential public facilities are located in areas prone to liquefaction.
Tsunami/Seiche	Setbacks and Construction Standards	Essential public facilities are located above areas of potential tsunami inundation or are capable of withstanding impacts from inundation.	Impacts to essential public facilities located in areas of potential tsunami inundation are not mitigated.
Erosion	Soil loss and sedimentation	Surface erosion from disturbed areas is controlled and contained on site.	Erosion causes rills or gullies. Eroded sediment is released to adjacent property or water body.
Landsliding	Setbacks from top and toe of steep slopes	New construction follows setback rating based on geologic conditions and slope height.	Does not meet standards for properly protected.
Volcanic Eruption	Planning for impacts of an ash-fall event	The protection of essential facilities from ash-fall hazards is addressed in an emergency response plan.	Ash-fall hazards are not addressed in an emergency response plan.
Coal Mines	Construction Standards	Construction standards required to mitigate hazards from potential ground subsidence.	Does not meet standards for properly protected.
Flooding	Construction Standards	Essential public facilities are not located in frequently flooded areas. Setbacks and elevation above base flood required for new construction.	The function of some essential public facilities located within frequently flooded areas is significantly impacted by flooding.
	Floodway Condition	Basin development does not increase the base flood elevation.	Basin development significantly increases the base flood elevation.
	Channel Migration	Setbacks include zones of potential channel migration.	Setbacks do not include zones of potential channel migration.

<sup>a</sup> RCW 36.70A.200(1) defines essential public facilities as those facilities that are typically difficult to site, such as airports, state education facilities and state or regional transportation facilities as defined in RCW 47.06.140, state and local correctional facilities, solid waste handling facilities, and in-patient facilities including substance abuse facilities, mental health facilities, group homes, and secure community transition facilities as defined in RCW 71.09.020. Hospitals, fire stations, power plants, treatment plants, hazardous material facilities, bridges, and pipelines may also require the same protection as essential public facilities.

<sup>b</sup> The peak ground acceleration, as defined by the 2003 International Building Code (IBC).

## Streams Criteria Matrix

Pathway	Indicators	Properly Functioning	At Risk	Not Properly Functioning
Water Quality:	Temperature	50-57°F <sup>a</sup>	57-60°F (spawning) 57-64°F (migration & rearing) <sup>b</sup>	> 60°F (spawning) > 64°F (migration & rearing) <sup>b</sup>
	Sediment/Turbidity	< 12% fines (<0.85mm) in gravel, <sup>c</sup> turbidity low	12-17%, <sup>c</sup> turbidity moderate	> 17% <sup>3</sup> fines at surface or depth in spawning habitat, <sup>b</sup> turbidity high
	Chemical Contamination or Excess Nutrients	Low levels of chemical contamination from agricultural, industrial and other sources, no excess nutrients, no CWA 303d designated reaches <sup>e</sup>	Moderate levels of chemical contamination from agricultural, industrial and other sources, some excess nutrients, one CWA 303d designated reach <sup>e</sup>	High levels of chemical contamination from agricultural, industrial and other sources, high levels of excess nutrients, more than one CWA 303d designated reach <sup>e</sup>
Habitat Access:	Physical Barriers	Any man-made barriers present in watershed allow upstream and downstream fish passage at all flows	Any man-made barriers present in watershed do not allow upstream and/or downstream fish passage at base/low flows	Any man-made barriers present in watershed do not allow upstream and/or downstream fish passage at a range of flows
Habitat Elements:	Substrate	Dominant substrate is gravel or cobble (interstitial spaces clear), or embeddedness <20% <sup>c</sup>	Gravel and cobble is subdominant, or if dominant, embeddedness 20-30% <sup>c</sup>	Bedrock, sand, silt or small gravel dominant, or if gravel and cobble dominant, embeddedness >30% <sup>b</sup>
	Large Woody Debris	>80 pieces/mile; <sup>d</sup> adequate sources of woody debris recruitment in riparian areas	Currently meets standards for properly functioning, but lacks potential sources from riparian areas of woody debris recruitment to maintain that standard	Does not meet standards for properly functioning and lacks potential large woody debris recruitment
	Pool Frequency: channel width # pools/mile <sup>f</sup>	Meets pool frequency standards (left) and large woody debris recruitment standards for properly functioning habitat (above)	Meets pool frequency standards but large woody debris recruitment inadequate to maintain pools over time	Does not meet pool frequency standards
	5 feet 184 10 feet 96 15 feet 70 20 feet 56 25 feet 47 50 feet 26 75 feet 23			
	Pool Quality*	Pools >1 meter deep (holding pools) with good cover and cool water, <sup>c</sup> minor reduction of pool volume by fine sediment	Few deeper pools (>1 meter) present or inadequate cover/temperature, <sup>c</sup> moderate reduction of pool volume by fine sediment	No deep pools (>1 meter) and inadequate cover/temperature, <sup>c</sup> major reduction of pool volume by fine sediment

## Streams Criteria Matrix (continued)

Pathway	Indicators	Properly Functioning	At Risk	Not Properly Functioning
Habitat Elements (continued):	Off-channel Habitat	Backwaters with cover, and low energy off-channel areas (ponds, oxbows, etc.) <sup>c</sup>	Some backwaters and high energy side channels <sup>c</sup>	Few or no backwaters, no off-channel ponds <sup>c</sup>
	Refugia (important remnant habitat for sensitive aquatic species) <sup>*</sup>	Habitat refugia exist and are adequately buffered (e.g., by intact riparian reserves); existing refugia are sufficient in size, number and connectivity to maintain viable populations or sub-populations <sup>g</sup>	Habitat refugia exist but are not adequately buffered (e.g., by intact riparian reserves); existing refugia are insufficient in size, number and connectivity to maintain viable populations or sub-populations <sup>g</sup>	Adequate habitat refugia do not exist <sup>g</sup>
Channel Condition & Dynamics:	Width/Depth Ratio	<10 <sup>b, d</sup>	10-12 (we are unaware of any criteria to reference)	>12 (we are unaware of any criteria to reference)
	Streambank Condition	>90% stable; i.e., on average, less than 10% of banks are actively eroding <sup>b</sup>	80-90% stable	<80% stable
Flow/Hydrology:	Floodplain Connectivity	Off-channel areas are frequently hydrologically linked to main channel; overbank flows occur and maintain wetland functions, riparian vegetation and succession	Reduced linkage of wetland, floodplains and riparian areas to main channel; overbank flows are reduced relative to historic frequency, as evidenced by moderate degradation of wetland function, riparian vegetation/succession	Severe reduction in hydrologic connectivity between off-channel, wetland, floodplain and riparian areas; wetland extent drastically reduced and riparian vegetation/succession altered significantly
	Change in Peak/Base Flows	Watershed hydrograph indicates peak flow, base flow and flow timing characteristics comparable to an undisturbed watershed of similar size, geology and geography	Some evidence of altered peak flow, baseflow and/or flow timing relative to an undisturbed watershed of similar size, geology and geography	Pronounced changes in peak flow, baseflow and/or flow timing relative to an undisturbed watershed of similar size, geology and geography
	Increase in Drainage Network*	Zero or minimum increases in drainage network density due to roads <sup>b, i</sup>	Moderate increases in drainage network density due to roads (e.g., 5%) <sup>b, i</sup>	Significant increases in drainage network density due to roads (e.g., 20-25%) <sup>b, i</sup>
	Road Density & Location*	<2 mi/mi <sup>2</sup> , no valley bottom roads	2-3 mi/mi <sup>2</sup> , some valley bottom roads	>3 mi/mi <sup>2</sup> , many valley bottom roads
Watershed Conditions:	Disturbance History*	<15% equivalent clearcut area (ECA) with no concentration of disturbance in unstable or potentially unstable areas, and/or refugia, and/or riparian area	<15% ECA but disturbance concentrated in unstable or potentially unstable areas, and/or refugia, and/or riparian area	>15% ECA and disturbance concentrated in unstable or potentially unstable areas, and/or refugia, and/or riparian area

## Streams Criteria Matrix (continued)

Pathway	Indicators	Properly Functioning	At Risk	Not Properly Functioning
Watershed Conditions (continued):	Riparian Reserves	The riparian reserve system provides adequate shade, large woody debris recruitment, and habitat protection and connectivity in all subwatersheds, and buffers or includes known refugia for sensitive aquatic species (>80% intact), and/or for grazing impacts: percent similarity of riparian vegetation to the potential natural community/composition >50% <sup>l</sup>	Moderate loss of connectivity or function (shade, LWD recruitment, etc.) of riparian reserve system, or incomplete protection of habitats and refugia for sensitive aquatic species (70-80% intact), and/or for grazing impacts: percent similarity of riparian vegetation to the potential natural community/composition 25-50% or better <sup>l</sup>	Riparian reserve system is fragmented, poorly connected, or provides inadequate protection of habitats and refugia for sensitive aquatic species (<70% intact), and/or for grazing impacts: percent similarity of riparian vegetation to the potential natural community/composition <25% <sup>l</sup>
	Natural Disturbances	Climatic (temperature and rainfall) and geologic processes (earthquake, soil formation, and transport processes) are allowed to occur <sup>m</sup>	Frequency and magnitude of disturbance events are altered <sup>m</sup>	Disturbance regime is non-existent due to development preventing natural events <sup>m</sup>
	Total Impervious Area (TIA)	< 10% TIA <sup>n</sup>	10 - 40% TIA <sup>n</sup>	> 40% TIA <sup>n</sup>
	Riparian Breaks	< 10% TIA within 100' <sup>n</sup>	10-40% TIA within 100' <sup>n</sup>	> 40% TIA within 100' <sup>n</sup>

\* Watershed-scale data is limited, therefore data at the reach-scale maybe used for risk analysis.

Source: Adapted from Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale (NOAA Fisheries 1996).

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## Wetlands Risk Criteria

Pathway	Indicator	Properly Functioning	At Risk	Not Properly Functioning
Water Regime	Average Water Level Fluctuation	0.1 to 1.54 ft average annual water level fluctuation <sup>a</sup>		> 1.54 ft average annual water level fluctuation <sup>a</sup>
	Watershed Impervious Area	< 10% impervious area in watershed <sup>b</sup>	10 - 30% impervious area in watershed <sup>b</sup>	> 30% impervious area in watershed <sup>b</sup>
Water Quality	Conductivity	< 100 µS/cm <sup>c</sup>		> 100 µS/cm <sup>c</sup>
	Total Phosphorus (TP)	20-50 µg/L <sup>c</sup>		> 50 µg/L <sup>c</sup>
	Total Suspended Solids (TSS)	2-5 mg/L <sup>c</sup>		> 5 mg/L <sup>c</sup>
	NH <sub>3</sub> -N	< 50 µg/L <sup>c</sup>		> 50 µg/L <sup>c</sup>
	Fecal Coliform	< 50 CFU/100ml <sup>c</sup>		> 50 CFU/100ml <sup>c</sup>
	Zinc (Zn)	< 10 µg/L <sup>c</sup>		> 10 mg/L <sup>c</sup>
Habitat	Coverage of Non-Native Species	< 15% Coverage of non-native species in wetlands. <sup>a</sup>		> 15% Coverage of non-native species in wetlands. <sup>a</sup>
	Wetland Area (acres)	Equal or greater wetland area per year.		Less wetland area per year.
Physical Modifications	Area of Upland Habitat Adjacent to a Wetland	Increased acres of buffers, Native Growth Protection Areas (NGPA), Retained Vegetation Areas (RVA) and Other City Owned Property that is undeveloped.		Decreased acres of buffers, Native Growth Protection Areas (NGPA), Retained Vegetation Areas (RVA) and Other City Owned Property that is undeveloped.
	Acres of Wetlands Filled	Decreased acres of wetlands filled per year.		Increased acres of wetlands filled per year.

<sup>a</sup> Azous, A.L., M.B. Bowles, K.O. Richter. 1998. Reference Standards and Project Performance Standards for the Establishment of Depressional Flow-Through Wetlands in the Puget Lowlands of Western Washington. King County Department of Development and Environmental Services, Renton, Washington.

<sup>b</sup> Horner, R.R., D.B. Booth, A. Azous, and C.W. May. 1996. Watersheds Determinants of Ecosystem Functioning *In Effects of Watershed Development and Management on Aquatic Ecosystems*. Proceedings of an Engineering Foundation Conference, Edited by L.A. Roesner, Pp 251-274, American Society of Civil Engineers, New York.

<sup>c</sup> Azous, A.L. and R.R. Horner (editors). 2001. *Wetlands and Urbanization: Implications for the Future*. CRC/Lewis Press, Boca Raton, Florida.

## Shoreline Criteria Matrix

Pathway	Indicators	Properly Functioning	At Risk	Not Properly Functioning
Water Quality	Temperature/Dissolved Oxygen (DO)	At least 50% of water column is <14 C and >5mg/l <sup>c</sup>	Entire water column between 14-18 C and DO between 3-5 mg/l <sup>c</sup>	No portion of water column <18 C or DO less than 3 mg/l <sup>c</sup>
	pH	6.5-8.5 <sup>a</sup>	-	Does not met standards for properly functioning
Habitat Access	Chemical Contamination	Low levels of chemical contamination from agricultural, industrial or private residences, and watercraft, no creosoted or treated wood on site, no pesticide use <sup>b</sup>	Moderate levels of chemical contamination from agricultural, industrial or private residences and watercraft, low amount treated wood on site, low amount pesticide use <sup>b</sup>	High levels of chemical contamination from agricultural, industrial or private residences and watercraft, medium to high amount creosoted or treated wood on site, medium to high pesticide use <sup>b</sup>
	Nutrients Total Phosphorous (TP)	No excess nutrients, <10 ppm TP in epilimnion <sup>b</sup>	Some excess nutrients, 10-15 TP in epilimnion <sup>b</sup>	High levels of excess nutrients, >15TP in epilimnion <sup>b</sup>
	Physical Barriers	Fish passage is unimpeded into, through or out of lake at all lake levels <sup>b</sup>	Any man-made barrier that does not allow fish passage through the lake or upstream and /or downstream at any lake level <sup>b</sup>	Any man-made barrier that does not allow fish passage through the lake or upstream and/or downstream at any lake level <sup>b</sup>
Habitat Elements	Non-Native Species (in water-plants and animals)	Diverse plant community dominated by native species/no non-native predation pressure <sup>c</sup>	Co dominance (50%) of non-native and native species/some non-native predation pressure <sup>c</sup>	Non-native plants >80%, moderate non-native predation pressure <sup>c</sup>
	Shoreline Upwelling	No reduction of shorezone upwelling <sup>c</sup>	Any reduction of shorezone upwelling <sup>c</sup>	Elimination of shorezone upwelling <sup>c</sup>
	Overhanging Vegetation	Abundant overhanging, submergent, and emergent vegetation <sup>d</sup>	Scarce overhanging, submergent, or emergent vegetation <sup>d</sup>	Absence overhanging, submergent, or emergent vegetation <sup>d</sup>
	Substrate Composition	No change from natural state, no contaminated sediments <sup>e</sup>	Altered from natural substrate, no contaminated sediments <sup>e</sup>	Significantly altered substrate and/or contaminated sediments <sup>e</sup>

## Shoreline Criteria Matrix (continued)

Pathway	Indicators	Properly Functioning	At Risk	Not Properly Functioning
Habitat Elements (continued)	Large Woody Debris	> 895 pieces/mile <sup>e,c</sup>	Currently meets standards for properly functioning, but lacks potential sources from riparian areas of woody debris recruitment to maintain that standard does not meet standards for properly functioning and lacks potential large woody debris recruitment <sup>d,e</sup>	Does not meet standards for properly functioning and lacks potential large woody debris recruitment <sup>e,e</sup>
Shoreline Conditions	Shoreline vegetation, riparian structure, and total impervious area (TIA)	1 site potential tree height of mixed native trees and shrubs (200 feet) no TIA*, no lawns, if site appropriate – emergent vegetation <sup>b,c,f</sup>	Any reduction from 1 site potential tree height of mixed native trees and shrubs, 0-4% TIA, lawns within 120 feet of lake <sup>b,c,f</sup>	<20 feet mixed native trees and shrubs, >4% TIA, lawns to shoreline <sup>2,3,6</sup>
	Shoreline profile	Natural beach elevation and substrate, no artificial armoring <sup>e,g</sup>	Any bulkhead or structure that disrupts maintenance of a natural beach <sup>c,g</sup>	Any bulkhead at or within the OHW line <sup>c,g</sup>
	Shoreline ambient light	No over-water structures present in the littoral zone <sup>e,f</sup>	One over-water structure every 300 feet	Continue occurrence of over-water structures along the shoreline <sup>e,f</sup>

Source: Adapted from the Lake Matrix of Pathways and Indicators for Lake Washington, Lake Sammamish, and the Ship Canal, including Lake Union (NOAA Fisheries Draft 3/11/03).

<sup>a</sup> Washington State Water Quality Standards.

<sup>b</sup> NMFW. 1996. Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale. National Marine Fisheries Service, Environmental and Technical Services Division, Habitat Conservation Branch, Lacey, Washington.

<sup>c</sup> NOAA Fisheries. 2003. Lake Matrix of Pathways and Indicators for Lake Washington, Lake Sammamish, and the Ship Canal, including Lake Union (Draft 3/11/03)

<sup>d</sup> Bowers, George. 1898. Bulletin of the United States Fish Commission for 1897. Washington: Government Printing Office.

<sup>e</sup> Christensen, David L., Brian R. Herwig, Daniel E. Schindler, and Stephen R. Carpenter. 1996. Impacts of lakeshore residential development on coarse woody debris in north temperate lakes. Ecological Applications 6(4):1143-1149.

<sup>f</sup> May, C.W., E.B. Welch, R.R. Horner, J.R. Karr, and B.W. Mar. 1997. Quality indices for urbanization effects in Puget Sound lowland streams, Washington Department of Ecology, Seattle, Washington. p229.

<sup>g</sup> Herrera. 2005. Marine Shoreline Sediment Survey and Assessment. Thurston County, Washington. Prepared for Thurston Regional Planning Council by Herrera

Environmental Consultants, Inc., Seattle, Washington. February 2005.

<sup>h</sup> Tabor, R. and Richard M. Piaskowski. 2002. Nearshore Habitat Use by Juvenile Chinook Salmon in Lentic Systems of The Lake Washington Basin, Annual Report, 2001.

<sup>i</sup> Piaskowski, R. and Roger A. Tabor. 2001. Nocturnal Habitat Use by Juvenile Chinook Salmon in Nearshore Areas of Southern Lake Washington, A Preliminary Investigation, 2000.

## Wildlife Habitat Conservation Areas Risk Criteria

Pathway	Indicator	Indicator Definition	Properly Functioning	Not Properly Functioning
Habitat Availability	Road Density	Miles of road/mi <sup>2</sup> <sup>a</sup>	Equal or lesser Road Density	Increased Road Density
	Area of Habitat	Acres of forested, riparian, wetland, open water, agriculture and pasture lands.	Equal or greater Area of Habitat	Decreased Area of Habitat
	Average Core Area <sup>c</sup>	Average Area of Cores	Equal or greater Average Core Area	Decreased Average Core Area
	Ratio of Core Area to Core Edge Length <sup>a, b</sup>	Total Area of Cores/Total Linear Distance Of Edge Around Cores <sup>b</sup>	Equal or greater Ratio of Core Area to Core Edge Length	Decreased Ratio of Core Area to Core Edge Length
	Landscape Connectivity <sup>a, b</sup>	Number of links (L)/ Number of possible links (L <sub>max</sub> ) = L/3(V-2) <sup>b</sup> where V is the number of cores.	Equal or greater Landscape Connectivity	Decreased Landscape Connectivity
	Priority Habitat Area	Acres of Priority Habitats	Equal or greater Acres of Priority Habitats	Decreased Acres of Priority Habitats
	Coverage of Non-native Species	Percent cover of non-native species in habitat areas	< 15% Coverage of non-native species in habitat areas. <sup>a</sup>	> 15% Coverage of non-native species in habitat areas. <sup>a</sup>

<sup>a</sup> Duerksen, C.J., N.T. Hobbs, D.L. Elliott, E. Johnson, and J.R. Miller. 2005. Managing Development for People and Wildlife, A Handbook for Habitat Protection by Local Governments. Clarion Associates of Colorado, LLC and Colorado Division of Wildlife for the Great Outdoors Colorado Trust Fund. January 2005.

<sup>b</sup> Forman, R.T. and M. Godron. 1986. Landscape Ecology. John Wiley and Sons, Inc., New York, New York.

<sup>c</sup> Cores include Wetlands, buffers, Native Growth Protection Areas (NGPA), Retained Vegetation Areas (RVA) and other City-owned property that is undeveloped.