

## Chapter 19.40 Critical Areas

Purposes and ~~General Administrative~~ Provisions

**Comment [TB1]:** To be distinguished from general requirements/standards, 19.40.160 etc.

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19.40.380 Fish and Wildlife Habitat Conservation Areas – Designation.

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**PURPOSES AND GENERAL ADMINISTRATIVE PROVISIONS**

**19.40.010 User guide.**

This chapter establishes regulations pertaining to the development within or adjacent to critical areas. Many areas of Burien have been or may become classified as critical areas by the City or other public agencies. The following critical areas are found in the City of Burien and regulated under this Chapter: [Ord. 376 § 1, 2003]

A. Frequently flooded areas (19.40.240);

B. Geologically hazardous areas (19.40.280), including:

i. Erosion hazard areas.

ii. Landslide hazard areas, and

iii. Seismic hazard areas;

C. Wetlands (19.40.300);

D. Streams (19.40.340);

E. Fish and wildlife habitat conservation areas (19.40.380); and

F. Critical aquifer recharge areas (19.40.420). [Ord. 376 § 1, 2003]

**Comment [TB2]:** Per conversation with DJ 4/2; to enhance usability.

#### 19.40.020 Purposes and Goals.

1. The City finds that critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the City and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and values of critical areas include, but are not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation of storm runoff, ground water recharge and discharge, wave attenuation, aesthetic value protection, and recreation. Hazards include landslides, flooding and excessive erosion.

Comment [TB3]: In general, we recommend avoiding unnumbered "preambles" to regulation sections – their applicability is not always clear.

2. This chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner reasonable use of the property.

3. Purposes. The purposes of this chapter are to:

A. Implement the goals, policies, guidelines and requirements of the Washington State Environmental Policy Act, Chapter 43.21C RCW, Growth Management Act, Chapter 36.70A RCW and the City of Burien comprehensive plan which call for protection of the natural environment and the public health, safety and welfare, and allowing for appropriate urban development within the region's urban growth area.

B. Designate, classify, and regulate the use of critical areas in accordance with the Growth Management Act and through the application of best available science, as determined according to WAC 365-195-900 through 365-195-925, as amended, and in consultation with state and federal agencies and other qualified professionals.

Comment [TB4]: GMA requires that cities designate and protect critical areas regulations – this more closely/explicitly matches purpose

4. Goals. By regulating development and alteration of critical areas and their buffers, this chapter seeks to:

A. Preserve and enhance the ecological value of critical areas to **maintain the functional integrity of the natural environment**.

B. Protect public health, safety and welfare by **minimizing adverse impacts and risks** associated with development in critical areas.

C. **Preserve the quality of life** in Burien.

D. **Minimize public and private expenditures** to correct future misuses of critical areas.

E. Provide City officials with **sufficient information, direction and authority** to identify and if necessary, regulate development of [critical areas](#); mitigate impacts on [critical areas](#) and enforce [critical area](#) regulations and permit conditions.

F. **Encourage flexibility and creativity** in the development of property containing or adjacent to [critical areas](#), to meet the requirements and goals of this chapter while **preserving property rights**; and

G. **Educate** the community about the hazards, risks, functions, and value of Burien's [critical areas](#) and the responsibility of the City to protect and preserve the natural environment for future generations. [Ord. 376 § 1, 2003]

#### **19.40.030 Relationship to other regulations.**

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1. Greater restrictions. When any provision of this code conflicts with this chapter or when the provisions of this chapter are in conflict, the provision that provides more protection to [critical areas](#) shall apply, unless specifically provided otherwise in this chapter or unless such provision conflicts with federal or state laws or regulations.

2. Multiple buffers. When more than one [critical area](#) affects a [site](#) and multiple [buffers](#) are required, all required [buffers](#) must be provided, unless specifically provided otherwise in this chapter. Where [buffers](#) overlap, the most restrictive [buffer](#) applies.

3. Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required. The [applicant](#) is responsible for complying with these requirements, apart from the process established in this chapter. [Ord. 376 § 1, 2003]

#### **19.40.040 Applicability.**

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1. Compliance required. [Alteration](#), development, [use](#), and/or activities proposed within or adjacent to [critical areas](#) and their required [buffers](#) shall comply with the provisions of this chapter. Critical areas and their required [buffers](#) shall not be altered except as allowed by this chapter.

2. Identification and classification of critical areas. The [Director](#) shall identify and classify [critical areas](#) as follows:

A. Critical Areas Map. The locations of many [critical areas](#) in Burien are displayed on the City of Burien's Critical Areas Map, which is hereby adopted by reference. This map is used to alert the

public of the potential location of critical areas in Burien. As new environmental information related to critical areas becomes available, the Director is hereby designated to periodically make such changes as necessary to the Critical Areas Map.

B. Actual site conditions. Regardless of whether a critical area is shown on the critical areas map Critical Areas Map, the actual presence or absence of the features defined in this code as critical areas shall govern. The Director may require the applicant to submit technical information to indicate whether critical areas actually exist on or adjacent to the applicant's site, based on the definitions of critical areas in this code.

Comment [TB5]: Internal consistency

3. Adjacency. For the purposes of this Chapter, land is "adjacent" to a critical area if it is:

Comment [TB6]: Under the GMA, critical areas code should state that review is required whenever an impact is likely. Throughout the code, this is accomplished by regulating development not just within, but adjacent to critical areas. This section defines what "adjacent" means for that purpose.

A. Land that contains the required critical area buffer width and building setback;

B. Land within one hundred (100) feet upland from a stream, wetland or lake;

C. Land within three hundred (300) feet of a wetland;

Comment [TB7]: Changes reflect updated buffer schemes. Distance should reflect highest buffer width (which, regardless of which option the City chooses, will be 300' for wetlands).

DC. Land within 800-660 feet of a bald eagle nest;

Comment [NL8]: Current USFWS recommendations would reduce this to 660 feet for activity visible from a nest and 330 feet for activity not visible from a nest.

ED. Land within two hundred (200) feet from of a designated critical aquifer recharge area; or

Comment [TB9]: For purposes of adjacency, default to larger buffer.

FE. Land within the floodway or floodplain. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

Comment [TB10]: Edited for consistency with other bullets

#### 19.40.050 Protection of critical areas.

Any action taken pursuant to this Chapter shall result in equivalent or greater functions and value of the critical areas associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with mitigation sequencing (BMC 19.40.170) to avoid, minimize and restore all adverse impacts achieve no net loss of critical area functions and values. Applicants must first demonstrate an inability to avoid or reduce impacts, before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or value of critical areas. [Ord. 376 § 1, 2003]

Comment [TB11]: Internal reference for usability

Comment [TB12]: Edited to better align with updated code and to clearly reflect no net loss requirements of WAC 365-193-830.

#### 19.40.060 Best available science.

1. Criteria for best available science. The best available science is that scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, a qualified scientific professional or

team of qualified scientific professionals, that is consistent with criteria established in WAC [365-195-900](#) through WAC [365-195-925](#), as amended.

2. Protection for functions and value and anadromous fish. Critical area studies and decisions to alter [critical areas](#) shall rely on the [best available science](#) to protect the functions and value of [critical areas](#) and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat, such as salmon and bull trout. [Ord. 376 § 1, 2003]

[3. Absence of valid scientific information. Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the Director shall take a "precautionary approach," that strictly limits development and land use activities until the uncertainty is sufficiently resolved.](#)

**Comment [TB13]:** Recommended per Commerce guidance; not required.

#### 19.40.070 Exemptions and exceptions.

[1. Exemption request and review process. Exemptions shall be reviewed in conjunction with an associated approval such as a land use decision or the issuance of a construction permit. Absent associated permits or approvals, the proponent of the activity may submit a written request for exemption to the Director that describes the activity and states the exemption in this Section that applies. The request shall be processed as an administrative decision. If the exemption is approved, it shall be placed on file with the department. If the exemption is denied, the proponent may continue in the review process and shall be subject to the requirements of this Chapter. The Director may add conditions for exemption to ensure the level of activity remains consistent with the provisions of this Chapter.](#)

**Comment [TB14]:** Recommended per Commerce guidance to clarify exemption process and ensure exempt activities are consistent with CAO. Reviewed for alignment with City admin processes.

[24. Avoid or limit impacts. All exempt activities shall use city-approved \[best management practices\]\(#\) and other reasonable methods to reasonably minimize impact to \[critical areas\]\(#\) and their required \[buffers\]\(#\). To be exempt from this Chapter does not give permission to degrade a \[critical area\]\(#\) or ignore risk from natural hazards. The \[Director\]\(#\) may require submittal of a critical area study pursuant to BMC \[19.40.110\]\(#\) through BMC \[19.40.130\]\(#\) if needed to assess public safety risks associated with the proposal. Restoration of non-exempted \[alterations\]\(#\) or damage to a \[critical area\]\(#\) or its \[buffer\]\(#\) may be required.](#)

[32. Exempt activities. The following shall be exempt from the provisions of this Chapter; however, the activities listed below may not be exempted from other city, state or federal permit requirements or regulations:](#)

A. Emergencies. [Alterations](#) in response to emergencies which pose an immediate threat to the public health, safety and welfare or which pose an imminent risk of damage to property. Any

[alteration](#) undertaken as an emergency shall be reported within one (1) business day to the Department of Community Development. The [Director](#) shall confirm that an emergency exists and determine what, if any, [mitigation](#) and conditions shall be required to protect the health, safety, welfare and environment and to repair any damage to the [critical area](#) and its required [buffers](#). Emergency work must be approved by the City. 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 enforcement provisions of Chapter [1.15](#) BMC shall apply.

B. Normal and routine operation, maintenance, remodeling, repair and revegetation of existing public facilities, parks and open spaces as long as any such activities do not involve the expansion of improvements into previously unimproved areas.

C. Normal and routine operation, maintenance, remodeling, replacement and repair of existing public [streets](#) and city-approved private roads. Such activities shall not involve the expansion of roadways or related improvements into previously unimproved portions of [rights-of-way](#) or vehicular access easements or tracts.

D. Except in [streams](#) and [wetlands](#) or their [buffers](#), normal and routine operation, maintenance, remodeling, and repair of existing public and quasi-public utilities (including water, sanitary sewer, storm drainage, electric, natural gas, cable communications, telephone utility and related activities), including:

- i. Relocation of electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less, only when required by a local governmental agency which approves the new location of the facilities;
- ii. Replacement, modification, installation or construction in an improved city road [right-of-way](#) or city authorized private road of all electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less;
- iii. Relocation of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances, only when required by a local governmental agency which approves the new location of the facilities; and

iv. Replacement, modification, installation or construction of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances when such facilities are located within an improved public [right-of-way](#) or city authorized private roadway;

E. Normal and routine maintenance, repair, renovation or structural alteration of public and private [structures](#) not listed in this section, in existence on January 14, 2003.

F. New [accessory structures](#) and additions to [structures](#) that do not exceed a cumulative [impervious surface](#) addition after January 14, 2003 of 1,000 square feet or 7% of [lot area](#), whichever is greater; provided that:

- i. Construction is not within a [stream](#), [wetland](#) or lake or in their required [buffers](#); and
- ii. The proposal does not increase non-conformance to [critical area](#) standards related to [streams](#), [wetlands](#) or lakes.

G. Public and private pedestrian trails, except in [streams](#), [wetlands](#), fish and wildlife habitat conservation areas, or their [buffers](#), subject to the following:

- i. [Critical area](#) and/or [buffer](#) widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and
- ii. Trails proposed to be located in [landslide](#) or [erosion hazard areas](#) shall be constructed in a manner that does not increase the risk of [landslide](#) or [erosion](#) and in accordance with an approved geotechnical report;

H. Forest practices. [Forest practices](#) regulated and conducted in accordance with the provisions of Chapter [76.09](#) RCW and [forest practices](#) regulations, Title [222](#) WAC, and those that are exempt from city's jurisdiction, provided that [forest practice](#) conversions are not exempt.

I. Minor site investigative work. Work necessary for permit submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads, significant amounts of excavation or removal of [significant trees](#). In every case, impacts to the [critical area](#) shall be minimized and disturbed areas shall be immediately *restored*.

J. Slope exemptions: The following slopes are exempt, unless the slope is part of another critical area or required buffer:

i. Slopes resulting from street, alley, sidewalk and other typical rights-of-way improvements, including rockeries or retaining walls. This exemption shall not extend beyond the cut or fill created by the street, alley, sidewalk or other rights-of-way improvement.

ii. Slopes with a vertical elevation change of up to ten feet (10) and not part of a larger steep slope system.

iii. Slopes which have been created through previous verifiable, legal grading activities, may be exempted by the Director based on a geotechnical report demonstrating that no adverse impact will result from the exemption.

K. Stabilization of Landslide-hazard Area. Certain landslide hazard areas may be exempt if the Director determines based on geotechnical expertise, that application of the regulations would prevent necessary stabilization of a landslide-prone area.

JL. Non-regulated activities in the critical aquifer recharge areas.

Comment [TB15]: Moved under geologically hazardous areas – designation.

#### 43. Public agency and utility exception.

A. If the application of this chapter would prohibit a development proposal by a public agency or public utility, the agency or utility may apply for a Public Agency and Utility Exception. All requirements of this chapter apply, except as specifically waived as part of the decision on the exception.

B. Exception request and review process. An application for a public agency and utility exception shall be made to the city and shall include a critical area study, including mitigation plan, if necessary; other related project documents, and any applicable environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW). The application shall be processed using the Type 1 review process pursuant to BMC 19.65.

C. Public agency and utility exception review criteria. The Director's decision shall be based on the following criteria:

- i. There is no other practical or feasible alternative to the proposed development with less impact on the [critical area](#); and
- ii. The proposal minimizes the impact on [critical areas](#); and
- iii. The application of this chapter would unreasonably restrict the ability to provide utility services to the public, and
- iv. The proposal meets the decision criteria in BMC [19.40.100](#).

[54](#). Reasonable use exception.

A. If the application of this chapter would deny all [reasonable use](#) of the property, the [applicant](#) may apply for a Reasonable Use Exception. All requirements of this chapter apply, except as specifically waived as part of the decision on the exception.

B. Limitations. Reasonable use exceptions are not authorized for changes in density limitations, permitted [uses](#) or activities in [critical areas](#) or their required [buffers](#), expanding a use otherwise prohibited, and shall not be used to achieve the maximum density allowed without the existence of [critical areas](#).

C. Exception request and review process. An application for a reasonable use exception shall be made to the city and shall include a [critical area](#) study, including mitigation plan, if necessary; and any other related project documents, such as special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter [43.21C](#) RCW). The application shall be processed using the Type 1 review process pursuant to BMC [19.65](#).

D. Reasonable use exception review criteria. The [Director's](#) decision shall be based on the following criteria:

- i. The application of this chapter would deny all [reasonable use](#) of the property;
- ii. There is no other [reasonable use](#) with less impact on the [critical area](#);
- iii. The proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal [site](#) and is consistent with the general purposes of this chapter and the public interest; and

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

v. The proposal meets the decision criteria in BMC [19.40.100](#). [Ord. 560 § 1 (Exh. A), 2012; Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

**19.40.080 ~~Reserved~~Nonconforming uses and structures. [~~Ord. 394 § 1, 2003~~]**

~~Uses or structures lawfully established in a critical area or its buffer prior to the adoption of this Chapter that no longer conform to the provisions of this Chapter shall be considered nonconforming to this Chapter and shall be subject to the provisions of BMC 19.55. Nonconformance.]~~

**Comment [TB16]:** Similar to the treatment for other general requirements, nonconformance language has been pulled out of the sections for wetlands and streams and moved into a location in the code that clearly applies these requirements to all critical areas. Language has also been edited per examples from other jurisdictions to better align with BMC 19.55.

**CRITICAL AREA REVIEW**

**19.40.090 Critical area review.**

1. Required review. *Alteration*, construction, development or activity within a *critical area* (except a *seismic hazard*) or its required *buffer* must be approved through a critical area review, unless exempted pursuant to BMC [19.40.070](#) or BMC [19.40.320](#). Prior to submitting an application for critical area review, the *applicant* shall schedule and attend a City of Burien pre-application meeting to obtain information relating to overall project feasibility, scope of critical area studies, standards and possible *mitigation* required for *alterations* on or near *critical areas*.

2. As part of its review of a critical area review, the City shall:

- A. Verify the information submitted by the *applicant*;
- B. Determine whether any *critical area* exists on the property and confirm its nature and type;
- C. Evaluate the critical area study;
- D. Determine whether the development proposal conforms to the purposes and *performance standards provisions* of this Chapter, including the criteria in BMC [19.40.100](#);
- E. Determine if the proposed project adequately addresses impacts on the *functions or value* of *critical areas* and whether such impacts are necessary and unavoidable;
- F. Determine if the *mitigation* and *monitoring* plans and bonding measures proposed by the *applicant* are sufficient to protect the *functions and value* of the *critical area*, and public health,

**Comment [TB17]:** The term "provisions" covers all regulatory measures in this Chapter. For the purpose of critical area review criteria, this broader term is appropriate.

safety and welfare concerns, consistent with the goals, purposes, objectives and requirements of this chapter.

3. Submittal requirements. Applications for critical area review shall be submitted with all of the following information:

A. A written critical area study (BMC [19.40.120](#)) that adequately evaluates the proposal, all probable impacts and risks related to the [critical area](#) and recommends appropriate [mitigation](#) measures to comply with the provisions of this chapter.

B. In addition to indicating the location of the proposal, the site and development plans shall include:

- i. The accurate location of those [critical areas](#) and their required [buffers](#) that could be affected by the proposal.
- ii. The approximate location of all mapped or identifiable [critical areas](#) and their [buffers](#) that are within the distances identified in BMC [19.40.040.3](#).
- iii. Accurate topography drawn to scale with a minimum 2-foot contour interval.

C. Applicable filing fees.

D. If necessary to insure compliance with this chapter, the [Director](#) may require additional information from the [applicant](#), separate from the critical area study. [Ord. 376 § 1, 2003]

#### **19.40.100 Review criteria.**

1. Any [alteration](#) to a [critical area](#) or its required [buffer](#), unless otherwise provided for in this Chapter, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:

- A. The proposal limits the impact on [critical areas](#);
- B. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the [site](#);
- C. The proposal is consistent with the general purposes of this Chapter and the public interest;

D. Any alterations permitted to the critical area or its required buffer are mitigated in accordance with the mitigation requirements of this chapter (BMC 19.40.170) and the critical area study (BMC 19.40.120); and

Comment [TB18]: Internal reference for usability

E. The proposal protects the critical area functions and value consistent with the best available science.

2. The city may condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by this Chapter. [Ord. 376 § 1, 2003]

### CRITICAL AREA STUDY

#### 19.40.110 Critical area study – waiver.

The Director shall waive the requirement for a critical area study if:

1. There will be no alteration of the critical area or buffer; and
2. The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this Chapter; and
3. The proposal is consistent with other City of Burien applicable regulations and standards. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

#### 19.40.120 Critical area study requirements.

1. General. The critical area study shall be funded by the applicant and shall be prepared in accordance with procedures established by the Director. If appropriate professional expertise does not exist on City staff, the Director may retain experts at the applicant's expense to review critical area studies submitted by the applicant. Expense to the applicant shall be determined at the pre-application meeting.

2. Prepared by qualified professional. A required critical area study shall be prepared by a person with experience and training in the scientific discipline appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4). A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or related field, and two years of related work experience. The City maintains a roster of qualified professionals.

Comment [TB19]: Applicants will know to approach City for roster.

A. A qualified professional for wetlands must be a Professional Wetland Scientist with at least two years of full-time work experience as a wetlands professional, including delineating

wetlands using the state or federal manuals; preparing wetland reports; conducting function assessments; and developing and implementing mitigation plans.

B. A qualified professional for Fish and Wildlife Habitat Conservation Areas or wetlands must have a degree in biology and professional experience related to the subject species.

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

DC. A qualified professional for critical aquifer recharge areas means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.

3. Incorporating best available science. The critical area study shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance and reference the source of science used. The critical area study shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this Chapter.

4. Minimum study contents. The critical area study shall contain, at a minimum, the following information, as applicable:

A. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested.

B. A copy of the site plan for the development proposal showing:

- i. Identified critical areas, buffers, and the development proposal with dimensions;
- ii. Limits of any areas to be cleared; and
- iii. A description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations;

C. The dates, names, and qualifications of the persons preparing the study and documentation of any fieldwork performed on the site;

D. Identification and characterization of all critical areas, water bodies, and buffers adjacent to the proposed project area or potentially impacted by the proposed project;

Comment [TB20]: Per Ecology comment from Donna Buntten, 3/10/15

E. A statement specifying the accuracy of the study, and assumptions used in the study;

F. Determination of the degree of hazard and risk from the proposal both on the [site](#) and on surrounding properties;

G. An assessment of the probable cumulative impacts to [critical areas](#), their [buffers](#) and other properties resulting from the proposal;

H. A description of reasonable efforts made to apply [mitigation](#) sequencing ([BMC 19.40.170\(2\)](#)) to avoid, minimize, and mitigate impacts to [critical areas](#);

Comment [TB21]: Internal reference for usability

I. [When impacts are unavoidable, a mitigation plan \(BMC 19.40.170\(3\)\) Plans for adequate mitigation to offset any impacts;](#)

Comment [TB22]: Refer/direct to specific requirements for clarity and usability

J. Recommendations for maintenance, short-term and long-term [monitoring](#), contingency plans and bonding measures; and

K. Any other technical information required by the [Director](#) to assist in determining compliance with this Chapter. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

#### 19.40.130 Critical area study – modifications to requirements.

1. Limitations to study area. The [Director](#) may limit the required geographic area of the critical area study as appropriate if:

A. The [applicant](#), with assistance from the city, cannot obtain permission to access properties adjacent to the project area; or

B. The proposed activity will affect only a limited part of the [site](#).

2. Modifications to required contents of study. The [Director](#) may allow modifications to the required contents of the study 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](#). [Ord. 376 § 1, 2003]

### CRITICAL AREA DETERMINATION

#### 19.40.140 Determination.

1. General. The [Director](#) shall issue a written critical area determination as to whether the proposed activity and [mitigation](#), if any, is consistent with the provisions of this Chapter. The [Director](#)'s determination shall be based on the criteria of BMC [19.40.100](#). The [Director](#) may require increased [buffer](#) widths, increased [setbacks](#) or other protective measures not required in this chapter if required in the critical area study.

2. Review process and timing. The determination for proposed development on an undeveloped [lot](#) in a [landslide hazard area](#) shall be processed using the Type I review process and timing described in BMC [19.65](#). Determinations for all other types of proposals shall be processed as an administrative decision. The City's goal is to issue the administrative decision within 60 days of submittal of a complete application containing the materials required in BMC [19.40.090.3](#).

3. Favorable determination. If the [Director](#) determines that the proposed activity meets the criteria in BMC [19.40.100](#) and complies with the applicable provisions of this Chapter, the [Director](#) shall prepare a written notice of determination and identify any required conditions of approval. If a Type I review is required, the critical area notice of determination shall be combined with the Type I review notice of decision. The notice of determination and conditions of approval shall be included in the project file and be considered in future phases of the city's review of the proposed activity in accordance with any other applicable codes or regulations.

Any conditions of approval included in a notice of determination shall be attached to the underlying permit or approval. Any subsequent changes to the conditions of approval shall void the previous determination pending re-review of the proposal and conditions of approval by the [Director](#).

A favorable determination should not be construed as endorsement or approval of any underlying permit or approval.

4. Unfavorable determination. If the [Director](#) determines that a proposed activity does not adequately mitigate its impacts on the [critical areas](#) and/or does not comply with the criteria in BMC [19.40.100](#) and the provisions of this Chapter, the [Director](#) shall prepare written notice of the determination that includes findings of noncompliance. If a Type I review is required, the critical area notice of determination shall be combined with the Type I review notice of decision.

No proposed activity or permit shall be approved or issued if it is determined that the proposed activity does not adequately mitigate its impacts on the [critical areas](#) and/or does not comply with the provisions of this Chapter. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

#### **19.40.150 Appeal of determination.**

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A critical area determination issued using the Type 1 review process may be appealed using the appeal procedures for a Type 1 decision (BMC 19.65). A critical area determination issued as an administrative decision may be appealed according to, and as part of the appeal procedure for the underlying permit or approval involved. [Ord. 376 § 1, 2003]

## GENERAL CRITICAL AREA DEVELOPMENT STANDARDS REQUIREMENTS

### 19.40.210-160 Notice on title.

1. The owner of any property containing critical areas or buffers on which a critical area review application is submitted, except a public right-of-way, shall record a notice approved by the Director with the King County Records and Elections Division. The notice shall inform the public of the presence of critical areas or buffers on the site, of the application of this chapter to the property, of the requirement for engineered structure design (if applicable), and that limitations on actions in or affecting such critical areas or buffers may exist. The notice shall run with the land.

2. The applicant shall submit proof that the notice has been filed for public record before the Director shall approve any permits or alteration for the site, in the case of subdivisions, short subdivisions and binding site plans, at or before recording. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

### 19.40.170 Mitigation, maintenance, and monitoring requirements.

1. ~~The Director may require the applicant to provide, at the applicant's expense, mitigation, maintenance and monitoring measures to protect critical areas and buffers. A written report describing the results of any mitigation, maintenance or monitoring measures shall be submitted to the Director for review and further action, if needed. The applicant shall avoid all impacts that degrade the functions and values of critical areas and buffers. Unless otherwise provided in this Chapter, if impacts to critical areas or buffers are unavoidable, all adverse impacts resulting from the proposed alteration, construction, development, or activity shall be mitigated, at the applicant's expense, using the best available science in accordance with an approved critical area study.~~

2. ~~Where monitoring reveals a significant deviation from predicted impacts or a failure of mitigation or maintenance measures, the applicant shall be responsible for appropriate corrective action which, when approved, shall be subject to further monitoring. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003] Mitigation sequencing. Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas. When an alteration to a critical areas is proposed, applicants shall follow the~~

**Comment [TB23]:** Most of these are not development standards. Several sections are permit requirements and/or types of conditions for approval that may be applied.

**Comment [TB24]:**  
Recommend reordering:  
.210 Notice on Title  
.170 Mitigation, maintenance, and monitoring (change to Mitigation requirements)  
.190 Vegetation management plan  
.230 General development standards  
.160 Construction requirements  
.200 Critical area markers and signs  
.220 Permanent protection of critical areas and buffers  
.180 Bonds

sequential order of preference below. Mitigation for individual actions may include a combination of these measures.

A. Avoiding the impact altogether by not taking a certain action or parts of an action;

B. Minimizing the impact 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. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

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

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

F. Monitoring the impact area or the required mitigation area and taking remedial action when necessary.

3. When mitigation is required, the applicant shall submit for approval by the City a mitigation plan as part of the critical areas study (BMC 19.40.120). The mitigation plan:

A. shall be prepared by a qualified professional;

B. shall demonstrate that the proposed mitigation will adequately offset all adverse impacts to critical areas that may result from the proposed alteration, construction, development, or activity; and

C. shall include a monitoring, maintenance, and contingency plan, including measurable performance standards that evaluate whether or not the mitigation project has fulfilled the requirements of this Chapter.

4. Mitigation shall not be implemented until after the City approval of a critical area study that includes a mitigation plan, and mitigation shall be in accordance with the provisions of the approved critical areas study.

5. Impacts to significant trees within critical areas shall be mitigated according to BMC 19.25 Tree Retention and Landscaping.

**Comment [TB25]:** To fully protect critical areas functions and values per GMA, code needs to ensure that impacts are mitigated. Both Commerce and Ecology recommend use of a mitigation sequence. Proposed edits to this section make that sequence more explicitly defined, and also make it clear that mitigation will be required when there are adverse impacts. Specifying mitigation plan (including monitoring) requirements here necessarily fills the gaps for those critical areas w/o specific requirements sections (FWHCAs, FFAs, CARAs), and lays out the requirements in a way that shows the user what will be asked of him/her, but still allows plenty of flexibility for the City.

**Comment [TB26]:** Per discussion with DJ – to avoid conflicting requirements for impacts to significant trees

#### 19.40.490-180 Vegetation management plan.

1. For all proposals where preservation of existing vegetation is required by this chapter, a vegetation management plan shall be submitted and approved prior to issuance of the permit or other request for permission to proceed with an [alteration](#).

~~2. Normal nondestructive pruning and trimming of vegetation for maintenance purposes shall not be considered alteration for the purposes of this section. Pruning allowed without a vegetation management plan shall be performed in a manner that ensures continual survival of the vegetation.~~

~~32.~~ The vegetation management plan shall incorporate all City requirements relating to protection, maintenance and planting of vegetation and shall identify the proposed clearing limits for the project and any areas where vegetation in a [critical area](#) or its [buffer](#) is proposed to be disturbed.

~~43.~~ Clearing limits as shown on the plan shall be marked in the field in a prominent and durable manner. Proposed methods of field marking shall be reviewed and approved by the [Director](#) prior to any [site alteration](#). Field marking shall remain in place until the certificate of occupancy or final project approval is granted.

~~54.~~ The vegetation management plan may be incorporated into a temporary erosion and sediment control plan or landscaping plan where either of these plans is required by other laws or regulations.

~~65.~~ Vegetation within [critical areas](#) and their [buffers](#) may be ~~trimmed, pruned or removed~~ altered only upon prior written approval by the [Director](#). A report by a qualified professional or certified arborist may be required to address alternatives, to ensure that the proposed [activity alteration](#) will not be detrimental to surrounding properties and to the [functions and values](#) of the associated [critical area](#).

~~76.~~ Where [alteration](#) of the [critical area](#) or [buffer](#) has occurred during construction, revegetation with [native vegetation](#) will be required unless the [Director](#) approves a substitute vegetation with the same or better functions than the original [buffer](#) area. If the [alteration](#) was unauthorized by the City, the [Director](#) may also impose penalties pursuant to Chapter [1.15](#) BMC. [Ord. 560 § 1 (Exh. A), 2012; Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

#### 19.40.230-190 General development standards.

1. Clustering. Clustering of [structures](#) in areas of a [site](#) that are not located within [critical areas](#) or their [buffers](#) is encouraged. For purposes of this section, "clustering" means a form of development that allows a reduction in [lot area](#), provided that the number of proposed [dwelling units](#) does not exceed the total number of [dwelling](#)

**Comment [TB27]:** Normal maintenance activities (e.g. pruning and trimming) should be allowed without Director approval or the submittal of a vegetation management plan. Per City staff guidance in response to public feedback at the 04/22/15 Planning Commission meeting.

**Comment [TB28]:** See above comment.

units that could be allowed if clustering was not used. For the purposes of this section, the limitation on lot averaging in BMC 19.15.005.2 and 19.15.010.4 does not apply.

2. Building setback. Except in critical aquifer recharge areas and seismic hazard areas, buildings shall be set back 15 feet from the edges of all critical area buffers or from the edges of all other critical areas, if no buffers are required, as required in the critical area study. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003] The following may be allowed in the building setback area:

A. Landscaping;

B. Uncovered decks;

C. Building overhangs which do not extend more than eighteen (18) inches into the area;

D. Pervious unroofed stairways and steps; and

E. Impervious ground surfaces, such as driveways and patios, provided that such improvements may be subject to water quality regulations as adopted in the City's stormwater management regulations (BMC 13.10).

**Comment [TB29]:** Specific setback widths and allowed uses/alterations taken from existing code sections 19.40.310(2) – Wetland buffers and 19.40.350(2) – Stream buffers. Added here to clarify requirement for all critical areas.

#### **19.40.460-200 Construction requirements.**

1. The Director may require that the applicant retain the expert(s) that prepared the critical area study, or another expert approved by the City, to monitor construction for compliance with the professional's recommendations and related requirements imposed by the City. The Director may require that the expert submit field reports to the City on a regular basis during construction, a final report and following construction if needed to ensure compliance with this code and the recommendations of the critical area study.

2. If required by the critical area study, City of Burien Construction Code, or King County Surface Water Design Manual, the applicant shall submit a temporary erosion and sedimentation control plan and/or a permanent and complete stormwater control plan for the proposal. The plan shall include but not be limited to the following items as appropriate: curbs, gutters, inlets, catch basins, tightlines, retention and detention facilities, stabilized outfalls, and subterranean water. Maximum flows of runoff from the property shall not be increased by the construction activity or resultant improvements. The Director shall provide specific requirements for such plans.

3. If required by the critical area study, City of Burien [Construction Code](#), or King County Surface Water Design Manual, the [Director](#) may restrict construction to a construction season. If a construction season is established, it may be subsequently modified as necessary by the [Director](#).

4. If required by the critical area study or City of Burien [Construction Code](#), the [Director](#) may require the use of alternate foundation systems that limit the amount of excavation, for example, pilings, caissons, footings with grade beams, or other appropriate systems. The [Director](#) may limit or prohibit the use of conventional spread footings at [building](#) perimeters. The [Director](#) may require excavations to be dug by hand or using hand-held machinery.

5. All subdivisions, short subdivisions or binding site plans shall comply with the following additional requirements:

A. Except as provided in this section, existing vegetation shall be retained on all [lots](#) until building permits are approved for development on individual [lots](#); and

B. If any vegetation on the [lots](#) is damaged or removed during construction of the subdivision infrastructure, the [applicant](#) shall be required to submit a [restoration](#) plan to the [Director](#) for review and approval. Following approval, the [applicant](#) shall be required to implement the plan;

6. Indemnification. An indemnification or hold harmless agreement shall be required for all clearing, [grading](#) or construction on [lots](#) containing [critical areas](#), except for non-regulated [uses](#) in [critical aquifer recharge areas](#). The form of the agreement shall be approved by the City Attorney and executed prior to issuance of any permits for development of the [site](#). [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

#### **19.40.200-210 Critical area markers and signs.**

The section below does not pertain to [critical aquifer recharge areas](#) or [seismic hazard areas](#).

1. Boundary delineation and construction fencing. The outer edge of any required [critical area buffer](#), tract or protective easement shall be clearly staked using permanent survey markers installed by a licensed surveyor. The survey markers and a temporary construction [fence](#) shall be installed at [applicant](#) expense and accepted by the [Director](#) prior to issuance of any permits for [site](#) clearing or construction, or, if permits are not required, prior to any [alteration](#) of the [site](#). The temporary construction [fence](#) shall be a sturdy wire, chain link or wood [fence](#) between 3 feet and 6 feet high as required by the [Director](#). The [Director](#) may require signs to be installed on the [fence](#) indicating that no disturbance of the [critical area](#) and its [buffer](#) is allowed.

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2. Permanent barrier or fencing. ~~The Director may require installation of a permanent barrier such as a fence or berm, if needed to protect the critical area and/or its buffer from damage or encroachment after construction. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]. Permanent fencing shall be required at the outer edge of the critical area buffer under the following circumstances. Fencing installed in accordance with this section shall be designed to not interfere with fish and wildlife migration and shall be constructed in a manner that minimizes critical areas impacts.:~~

~~A. As part of any development proposal for:~~

~~i. Plats;~~

~~ii. Short plats;~~

~~iii. Parks;~~

~~iv. Other development proposals, including but not limited to multifamily, mixed use, and commercial development where the director determines that such fencing is necessary to protect the functions of the critical area;~~

~~B. When buffer reductions are employed as part of a development proposal;~~

~~C. When buffer averaging is employed as part of a development proposal; and~~

~~D. At the director's discretion to protect the values and functions of a critical area.~~

~~Fencing installed in accordance with this section shall be designed to not interfere with fish and wildlife migration and shall be constructed in a manner that minimizes critical areas impacts.~~

**Comment [TB30]:** Moved above to main body of bullet, for clarity per City staff feedback.

~~3. Signs. Development proposals approved by the City shall require that the boundary between a critical area buffer and contiguous land shall be identified with permanent signs. Permanent signs shall be a City-approved type designed for high durability. Signs must be posted at an interval of one per lot or every 50 feet, whichever is less, and must be maintained by the property owner or homeowners' association in perpetuity. The wording, number and placement of the signs may be modified by the director based on specific site conditions.~~

**Comment [TB31]:** From gap analysis: Permanent critical area signs should be required; sign spacing and language is recommended. 50' spacing is commonly used.

Language taken from Sammamish Municipal Code 21A.50.170.

**Comment [TB32]:** Edited for readability/clarity

#### **19.40.220 Permanent protection of critical areas and buffers.**

As a condition of approval of a proposed activity within a critical area or its buffer-critical area review, the City shall may require that critical areas and their buffers, except for critical aquifer recharge areas and seismic

hazard areas, shall be permanently protected from alteration by tracts or easements. A property owner may also voluntarily propose permanent protection of critical areas and their buffers on the owner's property by use of tracts, easements, or gifting of the property to the City, or by transfer of development rights. Any required forms or documents related to protective tracts or, easements or transfer of development rights shall be approved by the City Attorney. Any area permanently protected under this section shall impose upon all present and future owners and occupiers of the protected area the obligation to leave the protective area permanently undisturbed, unless otherwise allowed by this chapter. Such obligation shall be enforceable by the City on behalf of the public. The rules for transfer of development rights will be prepared as part of Phase 2 of this Code. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

**Comment [TB33]:** Removal of references to TDR per staff guidance. TDR process may be developed in the future, but it is not appropriate for code to mention.

#### 19.40.180-230 Bonds.

The Director may require a bond or other security in a form and amount deemed acceptable by the Director to ensure compliance with any aspect of this chapter or any decision or determination made under this chapter.

The Director shall administratively prepare and maintain applicable bonding forms and procedures. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

**Comment [TB34]:** Recommended to acknowledge this process so that applicants know where to go.

### FREQUENTLY FLOODED AREAS

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#### 19.40.240 ~~Flood hazard areas – Components~~ Frequently flooded areas - Designation.

**Comment [TB35]:** Revised terminology to be consistent with the WAC. City's existing definition of Flood Hazard Areas aligns with WAC definition of Frequently Flooded Areas.

1. The purpose of designation and protection of frequently flooded areas shall be to:

A. Reduce the risk to life and safety, public facilities, and public and private property that result from floods.

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B. Avoid and minimize impacts to fish and wildlife habitats that occur within frequently flooded areas.

C. Assure that flood loss reduction measures protect and are consistent with retaining natural floodplain functions related to protecting riparian habitat and the natural processes that create and maintain habitat for fish.

D. Assure maintenance of hydraulic, geomorphic, and ecological functions of floodplains.

E. Control filling, grading, dredging, and other development activities which may increase flood damage and alter beneficial natural stream processes; and

F. Prevent or regulate the construction of flood barriers that may unnaturally divert floodwaters in such a way as to block natural channel migration, or may increase flood hazards in other areas.

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**Comment [TB36]:** Inserted from model ordinance (City of Bellingham) to illustrate that the purpose of this section is not just to protect against flood hazards, but to protect the functions and values of frequently flooded areas.

2. A flood hazard area~~Frequently flooded areas shall include~~ consists of the following components:

- A. 100-year Floodplain;
- B. Flood fringe;
- C. Zero-rise floodway; and
- D. Federal Emergency Management Agency ("FEMA") floodway.

32. The City of Burien shall determine ~~the flood hazard area~~ frequently flooded area boundaries after obtaining, reviewing and utilizing base flood elevations and available floodway data for a flood having a one percent chance of being equaled or exceeded in any given year, often referred to as the "100-year flood." The base flood is determined for existing conditions, unless a basin plan including projected flows under future developed conditions has been completed and adopted by the city of Burien, in which case these future flow projections shall be used. In areas where the Flood insurance study for King County includes detailed base flood calculations, those calculations may be used until projections of future flows are completed and approved by the city of Burien. [Ord. 394 § 1, 2003; Ord. 28 § 1(469), 1993]

#### 19.40.250 Flood hazard areas~~Frequently flooded areas~~ – General Standards

1. For the purposes of sections 19.40.250, 19.40.260, and 19.40.270, development in frequently flooded areas includes any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, storage of equipment or materials, subdivision of land, removal of substantial amounts of vegetation, or alteration of natural site characteristics.

2. Development within frequently flooded areas shall be subject to the provisions of Chapter 15.55 BMC, Flood Damage Prevention, as amended.

3. Application requirements. In addition to the requirements of Section 19.40.120.4, a critical area study for a frequently flooded area shall contain an assessment of the following site- and proposal-related information that describes the effects of proposed development on floodplain functions including, but not limited to:

- A. Storing and conveying floodwater;
- B. Reducing peak flows and flow velocities;

**Comment [NL37]:** By requiring a habitat assessment, the text below fulfills "door 3" option (default option) for compliance with FEMA BiOp decision. Other options are described in the addendum to the Gap Analysis.

**Comment [TB38]:** General standards should provide additional "critical area study" components specific to frequently flooded areas (shown).

In general, the habitat assessment must address potential impacts to: stormwater, water quality, floodplain capacity, vegetative habitat, spawning substrate, and/or floodplain refugia for listed salmonids.

**Comment [TB39]:** Important to note: By not addressing any of the "doors" in their current code, the City does already follow "door 3" (habitat assessment). Although the City has done some work on their building code toward adopting a "door 2" approach, this will likely be a lengthy, involved process, and we recommend that in the interim, the code reflects the City's de facto requirements/process.

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**Comment [TB40]:** Language added to support requirements for new development, as suggested by Nell above.

**Comment [TB41]:** Rather than repeat sections of code from the City's building code here and risk inconsistencies and redundancies, refer to that code. We have gone through and suggested deletions where the existing critical areas code clearly duplicates provisions in Chapter 15.55 BMC, but the City may wish to perform further review.

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C. Reducing redd scour and displacing rearing juvenile fish at the project site and downstream;

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D. Maintaining sediment quality in streams;

E. Improving water quality;

F. Maintaining and improving fish access; and

G. Mitigation for any adverse effects on floodplain functions, pursuant to section 19.40.170 of this Chapter.

4. The Director shall have the authority to require consultation with the Washington Department of Fish and Wildlife or other appropriate agencies.

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**19.40.250 Flood fringe – Development standards and permitted alterations.**

Comment [TB42]: These requirements apply to zero-rise floodway and FEMA floodway (i.e. entire floodplain), so no need for a separate section.

54. Development proposals shall not reduce the effective base flood storage volume of the floodplain. Grading or other activity which would reduce the effective storage volume shall be mitigated by creating compensatory storage on the site or off the site if legal arrangements can be made to assure that the effective compensatory storage volume will be preserved over time. Grading for construction of livestock manure storage facilities to control non-point source water pollution designed to the standards of and approved by the King County Conservation District is exempt from this compensatory storage requirement.

62. No structure shall be allowed which would be at risk due to stream bank destabilization including, but not limited to, that associated with channel relocation or meandering.

~~3. All elevated construction shall be designed and certified by a professional structural engineer licensed by the state of Washington and shall be approved by the city of Burien prior to construction.~~

Comment [TB43]: Covered under 15.55.120(2) Flood Damage Prevention

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

A. New building lots shall contain 5,000 square feet or more of buildable land outside the zero-rise floodway, and building setback areas shall be shown on the face of the plat to restrict permanent structures to this buildable area;

B. All utilities and facilities such as sewer, gas, electrical and water systems shall be located and constructed consistent with subsections 5, 6 and 9;

C. Base flood data and flood hazard notes shall be shown on the face of the recorded subdivision, short subdivision or binding site plan including, but not limited to, the base flood elevation, required flood protection elevations and the boundaries of the floodplain and the zero-rise floodway, if determined; and

D. The following notice shall also be shown on the face of the recorded subdivision, short subdivision or binding site plan for all affected lots:

NOTICE: Lots and structures located within flood hazard areas may be inaccessible by emergency vehicles during flood events. Residents and property owners should take appropriate advance precautions.

Comment [TB44]: Covered under 15.55.170(4), per staff guidance

5. New residential structures and substantial improvements of existing residential structures shall meet the following requirements:

A. The lowest floor shall be elevated to the flood protection elevation;

B. Portions of a structure which are below the lowest floor area shall not be fully enclosed. The areas and rooms below the lowest floor shall be designed to automatically equalize hydrostatic and hydrodynamic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for satisfying this requirement shall meet or exceed the following requirements:

i. A minimum of two openings on opposite walls having a total open area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;

ii. The bottom of all openings shall be no higher than one foot above grade; and

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

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

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

Comment [TB45]: Covered under 15.55.180(1), per staff guidance

6. New non-residential structures and substantial improvements of existing non-residential structures shall meet the following requirements:

A. The elevation requirement for residential structures contained in subsection 5.A. shall be met; or

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

i. The applicant shall provide certification by a professional civil or structural engineer licensed by the state of Washington that the floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impacts, uplift forces and other factors associated with the base flood. After construction, the engineer shall certify that the permitted work conforms with the approved plans and specifications; and

ii. Approved building permits for floodproofed nonresidential structures shall contain a statement notifying applicants that flood insurance premiums shall be based upon rates for structures which are one foot below the floodproofed level;

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

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

7. All new construction shall be anchored to prevent flotation, collapse or lateral movement of the structure.

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

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

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

i. A new mobile home park;

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

iii. Any repair or reconstruction of streets, utilities or pads in an existing mobile home park which equals or exceeds 50 percent of the value of such streets, utilities or pads.

Comment [TB46]: Covered under 15.55.180(2), per staff guidance

Comment [TB47]: Covered under 15.55.170(1), per staff guidance

Comment [TB48]: Covered under 15.55.180(4), per staff guidance

9. Utilities shall meet the following requirements:

A. New and replacement utilities including, but not limited to, sewage treatment facilities shall be floodproofed to or elevated above the flood protection elevation;

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

C. Sewage and agricultural waste storage facilities shall be flood-proofed to the flood protection elevation;

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

E. Buried utility transmission lines transporting hazardous substances shall be buried at a minimum depth of four feet below the maximum depth of scour for the base flood, as predicted by a professional civil engineer licensed by the state of Washington, and shall achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated.

Comment [TB49]: Covered under 15.55.170(3), per staff guidance

10. Critical facilities may be allowed within the flood fringe of the floodplain, but only when no feasible alternative site is available. Critical facilities shall be evaluated through the conditional or special use permit process. Critical facilities constructed within the flood fringe shall have the lowest floor elevated to three or more feet above the base flood elevation. Floodproofing and sealing measures shall be taken to ensure that hazardous substances will not be displaced by or released into floodwaters. Access routes elevated to or above the base flood elevation shall be provided to all critical facilities from the nearest maintained public street or roadway.

Comment [TB50]: Covered under 15.55.180(3), per staff guidance

11.7. Prior to approving any permit for alterations in the flood fringe a frequently flooded area, the city of Burien shall determine that all permits required by state or federal law have been obtained. [Ord. 394 § 1, 2003; Ord. 28 § 1(470), 1993]

**19.40.260 Zero-rise Floodway Floodway – Development standards and permitted alterations.**

Comment [TB51]: Only one additional provision for FEMA floodways; incorporated into bullet 1 below.

1. The requirements which apply to the flood fringe shall also apply to the zero rise floodway. The more restrictive requirements shall apply where there is a conflict.

Comment [TB52]: Per logic above, flood fringe standards moved to general standards

2. A development proposal including, but not limited to, new or reconstructed structures shall not cause any increase in the base flood elevation unless the following requirements are met:

A. Amendments to the Flood insurance rate map are adopted by FEMA, in accordance with 44 CFR 70, to incorporate the increase in the base flood elevation; and

B. Appropriate legal documents are prepared in which all property owners affected by the increased flood elevations consent to the impacts on their property. These documents shall be filed with the title of record for the affected properties.

Comment [TB53]: Covered under 15.55.190(1)

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

A. New residential structures outside the FEMA floodway on lots in existence before November 27, 1990, which contain less than 5,000 square feet of buildable land outside the zero-rise floodway and which have a total building footprint of all proposed structures on the lot of less than 2,000 square feet;

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

C. Substantial improvements of existing residential structures meeting the requirements for new residential structures in BMC 19.40.250; and

D. Substantial improvements of existing residential structures in the FEMA floodway, meeting the requirements of WAC 173-158-070, as amended.

Comment [TB54]: Taken from existing 19.40.270(4) FEMA floodway; incorporated here for streamlining and clarity.

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

35. All temporary structures or substances hazardous to public health, safety and welfare, except for hazardous household substances or consumer products containing hazardous substances, shall be removed from the zero-rise floodway during the flood season from September 30th to May 1st.

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

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

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

57. Utilities may be allowed within the zero-rise floodway-floodway if the city of Burien determines that no feasible alternative site is available, subject to the following requirements:

Comment [TB55]: Per new combined section

A. Installation of new on-site sewage disposal systems shall be prohibited unless a waiver is granted by the Seattle/King County department of public health; and

B. Construction of sewage treatment facilities shall be prohibited.

68. Critical facilities shall not be allowed within the zero-rise floodway-floodway except as provided in subsection 840.

Comment [TB56]: Per new combined section

79. Livestock manure storage facilities and associated nonpoint source water pollution facilities designed, constructed and maintained to the standards of and approved in a conservation plan by the King County Conservation District may be allowed if the city of Burien reviews and approves the location and design of the facilities.

840. Structures and installations which are dependent upon the floodway may be located in the floodway if the development proposal is approved by all agencies with jurisdiction. Such structures include, but are not limited to:

A. Dams or diversions for water supply, flood control, hydroelectric production, irrigation or fisheries enhancement;

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

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

D. Storm water conveyance facilities subject to the development standards for streams and wetlands and the Surface Water Design Manual;

E. Boat launches and related recreation structures;

F. Bridge piers and abutments; and

G. Other fisheries *enhancement* or *stream* restoration projects. [Ord. 394 § 1, 2003; Ord. 28 § 1(471), 1993]

#### 19.40.270 FEMA floodway—Development standards and permitted alterations.

1. The requirements which apply to the *zero-rise floodway* shall also apply to the *FEMA floodway*. The more restrictive requirements shall apply where there is a conflict.

**Comment [TB57]:** FEMA floodway is a subset of zero-rise floodway; provisions have been incorporated into generic floodway section above and called out using terms “zero-rise” vs. “FEMA” to make distinctions when necessary.

2. A development proposal including, but not limited to, new or reconstructed *structures* shall not cause any increase in the *base flood elevation*.

**Comment [TB58]:** Covered under 15.55.190(1) Flood Damage prevention

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

**Comment [TB59]:** Covered under 19.40.260(6)(A) (old numbering)

4. *Substantial improvements* of existing residential *structures* in the *FEMA floodway*, meeting the requirements of WAC 173-158-070, as amended, are presumed to produce no increase in *base flood elevation* and shall not require a special study to establish this fact. [Ord. 394 § 1, 2003; Ord. 28 § 1(472), 1993]

**Comment [TB60]:** Incorporated under 19.40.260(3) (old numbering)

#### 19.40.280 Flood hazard areas—Certification by engineer or surveyor.

1. For all new *structures* or *substantial improvements* in a *flood hazard area*, the *applicant* shall provide certification by a professional civil engineer or land surveyor licensed by the state of Washington of:

A. The actual as-built elevation of the lowest floor, including basement; and

B. The actual as-built elevation to which the *structure* is floodproofed, if applicable.

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

3. The city of Burien shall maintain the certifications required by this section for public inspection. [Ord. 394 § 1, 2003; Ord. 28 § 1(473), 1993]

**Comment [TB61]:** Covered under 15.55.120(2) Flood Damage Prevention

### GEOLOGICALLY HAZARDOUS AREAS

#### 19.40.280 Geologically hazardous areas – Designation.

**Comment [TB62]:** Note: 19.40.270 no longer exists due to reorganization and revisions (skips from .260 to .280).

1. Intent. *Geologically hazardous areas* are a potential threat to public health, safety and welfare when construction of geotechnically incompatible uses is allowed. Some potential risk due to construction in *geologically hazardous areas* can be reduced through engineering design. *Alteration* of and construction in *geologically hazardous areas* should be avoided when the potential risk to public health and safety cannot be reduced to a level comparable to the undeveloped *site*.

**Comment [TB63]:** Moved here from below – consistent with approach used for other critical areas

2. Geologically hazardous areas include areas susceptible to erosion, landslide, rock fall, subsidence, earthquake, or other geological events. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

A. Erosion hazard;

B. Landslide hazard; or

C. Seismic hazard.

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Comment [TB64]: Per Deputy Mayor request to clearly define/classify geologically hazardous areas @ beginning of section.

3. The approximate location and extent of known landslide hazard areas and seismic hazard areas are shown on the Critical Areas Map adopted by the City, as described in BMC 19.40.040 and as most recently updated. For landslide hazard areas and seismic hazard areas depicted on the Critical Areas Map, the King County Census Areas Mapfolio from December 1990 was used as a base map. The City amends this map as new site-specific information becomes available from professional critical area studies completed as part of critical area review.

Comment [TB65]: Acknowledgement of mapping sources, consistent with approach for other critical areas. Good idea to give the applicant an idea of where this information is coming from.

4. The following areas are exempt from designation as geologically hazardous areas:

A. Slope exemptions: The following *slopes* are exempt, unless the *slope* is part of another *critical area* or required *buffer*:

i. *Slopes* resulting from *street, alley, sidewalk* and other typical *rights-of-way* improvements, including rockeries or retaining walls. This exemption shall not extend beyond the cut or fill created by the *street, alley, sidewalk* or other *rights-of-way* improvement.

ii. *Slopes* with a vertical elevation change of up to ten feet (10) and not part of a larger steep-*slope* system.

iii. *Slopes* which have been created through previous verifiable, legal *grading* activities, may be exempted by the *Director* based on a geotechnical report demonstrating that no adverse impact will result from the exemption.

B. Stabilization of landslide hazard Area. Certain *landslide hazard areas* may be exempt if the *Director* determines based on geotechnical expertise, that application of the regulations would prevent necessary stabilization of a *landslide-prone area*.

**Comment [TB66]:** Taken from the “exemptions and exceptions” section. These are not exempt activities, but rather areas exempt from critical area designation.

#### 19.40.290 Geologically hazardous areas – Development standards and permitted alterations.

1. Intent. *Geologically hazardous areas* are a potential threat to public health, safety and welfare when construction of geotechnically incompatible uses is allowed. Some potential risk due to construction in *geologically hazardous areas* can be reduced through engineering design. *Alteration* of and construction in *geologically hazardous areas* should be avoided when the potential risk to public health and safety cannot be reduced to a level comparable to the undeveloped *site*.

**Comment [TB67]:** Moved up to 19.40.285 Designation section, consistent with approach for other critical areas.

2. Standards- Seismic hazard areas. Development in *seismic hazard areas* shall be in accordance with the standards for earthquake design and seismic motion of the City of Burien *Construction Code*.

3. Standards-- Erosion hazard areas and landslide hazard areas. Development on or within 50 feet of areas designated *erosion hazard areas* or *landslide hazard areas* shall comply with the following requirements:

A. Buffer. A minimum 50 foot wide *buffer* shall be established from all edges of a *landslide hazard area*. The *buffer* shall be extended as required to mitigate hazards identified in the critical area study or as otherwise necessary to protect the public health, safety and welfare. The *buffer* shall be maintained in *native vegetation* to provide additional soil stability and *erosion* control. If the *buffer* area has been previously cleared, it shall be replanted with *native vegetation* pursuant to a landscape plan submitted by the *applicant* and approved by the *Director*.

B. Buffer reduction. As part of critical area review, the *Director* may reduce or waive the *landslide hazard area buffer* if the *applicant* shows that the following criteria are met:

- i. The proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal *site* and is consistent with the general purposes of this chapter and the public interest; and
- ii. There is no feasible alternative with less impact on the *critical area*.

iii. For a buffer of between 0 feet and 25 feet, in addition to the items required in BMC 19.40.120, the critical area study must specifically discuss and support the requested buffer reduction, including:

- a. The ability to maintain long-term stability of the landslide hazard area; and
- b. Any appropriate mitigating measures needed to mitigate impacts of the buffer reduction; and
- c. An assessment of any increased risk that could result from the buffer reduction.

C. Erosion control. An erosion control plan shall be submitted to the Director for approval prior to any clearing, grading, construction or other alteration. The Director may limit clearing, grading or filling to the period between April 1st and October 1st.

D. Disturbance and alterations. Any alterations permitted in or within 50 feet of an erosion hazard area or landslide hazard area, or in a required landslide hazard area buffer, shall comply with the following criteria:

- i. All proposed alterations shall be limited to the minimum necessary to accomplish the applicant's objectives and engineering design.
- ii. The face of cuts and fills shall be prepared and maintained to control against erosion and instability. Bluffs shall be protected from surface erosion.
- iii. The proposal shall not increase the rate of surface water runoff, erosion or sedimentation, shall not increase geologic hazards for any property, and shall reduce ponding and infiltration of storm drainage.
- iv. Development must be located and designed to minimize slope disturbance, minimize removal of vegetation, and retain open space.
- v. Shared access drives and utility corridors are required where feasible. Vehicular access shall be in the least sensitive area of the site.

vi. Foundations should be tiered where possible to conform to the existing topography of the [site](#). Roads, walkways, driveways and parking areas should be designed to parallel the natural contours.

vii. All development shall be designed to minimize [impervious surface coverage](#) and where feasible should incorporate under-structure parking and multi-level structures.

viii. Construction techniques must minimize disruption of existing topography and existing vegetation. Any disturbed vegetation shall be restored as soon as feasible.

ix. The [applicant](#) shall submit a detailed site plan prepared by a licensed engineer showing all proposed [clearing](#), [grading](#), drainage and utilities. The [Director](#) may require that all proposed [clearing](#), [grading](#), drainage and utility locations be marked in the field by a licensed land surveyor, based on the engineer-prepared site plan.

E. Landscaping. The disturbed area of a [site](#) shall be landscaped to provide [erosion](#) control and to enhance [wildlife habitat](#). Landscape plantings should include trees and shrubs with a mix of shade, flowering, and coniferous and broad-leaf [evergreens](#) that are either native to the Puget Sound area or are valuable to western Washington birds and wildlife as listed by the Department of Fish and Wildlife. [Ord. 523 § 1, 2009]

F. Vegetation maintenance. Limited trimming and pruning of vegetation for the creation and maintenance of views is allowed in accordance with the pruning standards of the International Society of Arboriculture; provided, that the soils are not disturbed and the activity will not increase the risk of [landslide](#) or [erosion](#).

34. Application requirements. In addition to the requirements of Section [19.40.090.3](#), an application for critical area review involving a [landslide hazard area](#) shall include at least the following additional items, submitted by the [applicant](#) and prepared at the [applicant's](#) expense. The [Director](#) may waive any of the following submittal requirements if not applicable to the proposal:

A. Plans and specifications prepared by a licensed architect or licensed professional engineer, in accordance with the City of Burien [Construction Code](#);

B. A footing and foundation plan prepared by a licensed professional engineer incorporating the recommendations contained in the critical area study;

C. A Level 1 drainage analysis prepared by a licensed professional engineer in accordance with the Surface Water Design Manual as adopted by the City of Burien;

D. A storm water management plan prepared by a licensed professional engineer incorporating the recommendations contained in the Level 1 drainage analysis;

E. A vegetation management plan pursuant to BMC [19.40.190-19.40.180](#) showing all existing vegetation and which vegetation is proposed for removal. The location, size and [species](#) of all [significant trees](#) on the [site](#) shall be indicated by survey. [Significant trees](#) shall be retained, protected, or replaced in accordance with BMC [19.40.190-19.40.180](#). The plan shall propose [mitigation](#) measures to prevent [erosion](#) and protect the [geologically hazardous area](#), its [buffer](#) and other properties from hazards and adverse impacts.

F. A [landslide hazard area](#) affidavit in a form approved by the City attorney, submitted by the [applicant](#), which waives any claims against the City, releases the City from all liability, holds the City harmless, and agrees to indemnify the City for all costs, claims, and demands of any kind, including but not limited to attorney and expert witness fees associated with litigation, arbitration, or any other adversary proceeding arising in any manner from the owner's or the owner's agents' acts or omissions relating in any manner to the development. The affidavit shall be recorded with the King County assessor's office prior to, and as an express condition of, the issuance of any grading or building permit;

G. All other applicable codes of the City are met including but not limited to the [setback](#), [height](#), [impervious surface coverage](#), and other requirements of the this code and the requirements of the shoreline master program and the City of Burien [Construction Code](#);

H. The applicant's geotechnical engineer or geologist shall review the project plans and specifications prior to issuance of any permits and provide written confirmation to the City that the recommendations and design criteria have been fully incorporated into the project documents;

I. The [applicant's geotechnical engineer](#) or [geologist](#) shall monitor project construction and provide written confirmation that the project has been constructed in accordance with their recommendations and design criteria. Changes to the recommended designs for excavation and construction which are based on new information shall be reviewed and approved by the City prior to proceeding with the development activity. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

## WETLANDS

### 19.40.300 Wetlands – Designation and Classification.

1. ~~General Requirements~~Intent. Wetlands provide fish and wildlife habitat, flood storage, water quality, recreation, educational opportunities, and aesthetics. The goal of wetland regulations in the City of Burien is to achieve no net loss of wetland functions and values.

#### 2. Designation and Applicability.

A. Wetlands are those areas in the City of Burien, designated in accordance with the approved federal wetland delineation manual and applicable regional supplements. All areas within the City of Burien meeting the wetland designation criteria in that procedure, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter. [RCW 36.70A.175, RCW 90.58.380 (1995); WAC 173-22-035 (2011)]

A. All ~~wetlands~~ meeting the federal definition of ~~wetlands~~ that lie within the City limits of Burien are regulated by this section.

B. ~~Where the vegetation has been removed or substantially altered, a wetland shall be determined by the presence or evidence of hydric or organic soil, as well as by other documentation, such as aerial photographs, of the previous existence of wetland vegetation.~~

C. Puget Sound and Lake Burien are shorelines of the state and shall be regulated under the Burien Shoreline Management Master Program.

#### 3. Designation of Wetlands.

A. ~~Wetlands are those areas in the City of Burien, designated in accordance with the Washington State Wetland Identification and Delineation Manual, as required by RCW 36.70A.175 (Ecology Publication #96-94). Wetlands are defined as those areas that are inundated or saturated, by ground or surface water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.~~

**Comment [TB68]:** Text insertions and deletions based on new Ecology guidance re: wetland delineation (required).

Definition of wetlands also updated per Ecology guidance – please see accompanying definitions document.

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**Comment [TB69]:** Moved – original code text.

B. The designation of wetlands through application of the protocols outlined in the Washington State Wetland Identification and Delineation Manual, regardless of any other formal identification, shall designate those wetland areas as critical areas and shall be subject to the provisions of BMC 19.40.

Where the vegetation has been removed or substantially altered, a wetland shall be determined by the presence or evidence of hydric or organic soil, as well as by other documentation, such as aerial photographs, of the previous existence of wetland vegetation.

#### 34. Wetland Rating and Classification.

A. Wetlands are shall be classified into category I, category II, category III and category IV according to the Washington Department of Ecology wetland rating system, based on the adopted as set forth in the, Washington State Wetland Rating System for Western Washington, Washington State Department of Ecology publication number 14-06-029, or as amended, which contains the definitions and methods for determining whether the criteria below are met.

i. Category I. 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 relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or 4) provide a high level of functions. In Western Washington these include large undisturbed estuarine wetlands; wetlands of high conservation value; bogs; wetlands with mature and old-growth forests; wetlands in coastal lagoons; interdunal wetlands larger than one (1) acre with a high habitat score; and wetlands that provide a high level of functions.

ii. Category II. Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. In Western Washington, these include smaller estuarine wetlands; interdunal wetlands larger than one (1) acre or interdunal wetlands that are part of a wetland mosaic; and wetlands with a moderately high level of functions.

iii. Category III. Category III wetlands include wetlands with a moderate level of functions, and interdunal wetlands between 0.1 and one (1) acre in size. Category III wetlands generally have been disturbed in some way; are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands; and can often be adequately replaced with a well-planned mitigation project.

**Comment [TB70]:** Text changes in this subsection are a result of the new wetland classification system released by Ecology in 2014.

**Comment [NL71]:** Note this is a more recent classification system (methodology) than the one used by the SMP; however, it results in the same actual assignment of wetland class. For consideration upon review and update to SMP.

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**Comment [TB72]:** Revised following 04/22/15 PC meeting to introduce and provide summary descriptions of four wetland categories.

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iv. Category IV. Category IV wetlands have the lowest levels of functions and are often heavily disturbed. These are wetlands that we should be able to replace, and in some cases be able to improve.

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B. Wetland rating categories shall not recognize illegal modifications.

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Wetlands shall be designated Category 1, 2, 3, or 4 according to the criteria in this section:

i. Category 1: Wetlands that meet any of the following criteria:

- a. Documented presence of fish, wildlife, or plant species listed by the federal or state government as endangered or threatened or outstanding actual habitat for those species;
- b. Equal to or greater than 10 acres in size and have three or more wetland classes as defined in BMC 19.10;
- c. Association with a Type 1 stream;
- d. Presence of plant associations of infrequent occurrence or High Quality Native Wetland Communities. Examples include: bogs and fens, estuarine wetlands, mature forested wetlands, or kelp and eelgrass beds; or
- e. Documented as regionally significant waterfowl or shorebird concentration areas.

ii. Category 2: Wetlands that do not meet any of the criteria for Category 1, but meet any of the following criteria:

- a. Greater than one acre in size;
- b. Equal to or less than one acre in size and have three or more wetland classes as defined in BMC 19.10;
- c. Forested wetlands equal to or less than one acre;
- d. Documented presence of heron rookeries or raptor nesting trees;

e. Documented occurrences of sensitive species of plant, animal or fish recognized by federal or state agencies;

f. Associated with Type 2 or 3 streams; or

g. Wetlands with significant habitat value (Greater than or equal to 22 points on the Wetlands Rating Form).

iii. Category 3: A wetland that does not meet any of the criteria for Category 1 or 2, but meets either of the following criteria:

a. Of a size between 1,000 square feet and one acre, with two or fewer wetland classes as defined in BMC 19.10;

b. Wetlands where the habitat score for significant habitat value is less than or equal to 21 points;

iv. Category 4: Wetlands associated with Lake Burien.

vC. The following types of wetlands are not regulated by the City of Burien:

a. Category 3 All hydrologically isolated Category III and IV wetlands less than 1,000 square feet and hydrologically isolated that:

ai. Are not associated with riparian areas or buffers.

bii. Are not part of a wetland mosaic, and

ciii. Do not contain habitat identified as essential by Washington Department of Fish and Wildlife.

b. Man-made ponds smaller than one acre and excavated from uplands without a surface water connection to streams, lakes, rivers, or other wetlands. [Ord. 394 § 1, 2003]

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Comment [TB73]: Expands City's existing definition of non-regulated wetlands per Ecology guidance.

Comment [NL74]: The current wetland definition already excludes farm ponds and landscape amenities.

Comment [TB75]: Performance standards are used to measure the success of a mitigation project, e.g. (like a restored wetland) – this term is not appropriate for use in describing protective measures for existing wetlands.

#### 19.40.310 Wetlands – Performance Development standards.

##### 1. General Requirements.

A. Any alterations to a wetland and/or wetland buffer shall require mitigation as described in BMC 19.40.330.

B. The use of hazardous substances, pesticides and fertilizers in the wetland and its buffer are prohibited by the City of Burien unless approved by the Director;

C. Plantings in a wetland or buffer ~~should~~ shall be native to Western Washington ~~or be a native~~ plant community appropriate for the ecoregion.

~~or increase the functions of the wetland or wildlife habitat~~

D. No vegetation removal, including mowing, shall be allowed in a wetland or wetland buffer unless authorized by the Director. Removal of noxious weeds is permitted if done manually;

~~E. Non-Conformance. Activities occurring in a wetland or wetland buffer prior to October 20, 2003 shall be considered a non-conforming use as described in BMC 19.55.~~

E. Unless otherwise provided, the following restrictions shall apply to all development proposals in Category I, II, or III wetlands that include the introduction of livestock:

i. Implementation of a plan approved by the Director to protect and enhance the wetland's water quality; and

ii. Fencing located at the buffer edge. [Ord. 394 § 1, 2003]

**Comment [TB76]:** Consistent with regulatory language in the rest of the section.

**Comment [TB77]:** Per Ecology comment from Donna Buntin 3/10/15. Not required.

**Comment [TB78]:** Now addressed in general development standards

**Comment [TB79]:** Moved under 19.40.080 to apply to all critical areas.

**Comment [TB80]:** Moved from subsection (2), which refers to buffers. This regulation applies more generally (not just to buffers).

## 2. Buffers.

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

B. The following standard buffers, based on the category of wetland and the habitat score as determined by a qualified wetland professional, shall be established from the wetland edge. Additional buffer widths are added to the standard buffer widths. For example, a Category I

wetland scoring eight (8) points for habitat function would require a buffer of 225 feet (75 + 150).:

Wetland Category	Standard Wetland Buffer (feet)
Category 1*	200
Category 2	100
Category 3	50
Category 4	30

Wetland Category	Buffer width if wetland scores 3-4 habitat points	Additional buffer width if wetland scores 5 habitat points	Additional buffer width if wetland scores 6-7 habitat points	Additional buffer width if wetland scores 8-9 habitat points
Category I	75 ft	add 30 ft	add 90 ft	add 150 ft
Category II	75 ft	add 30 ft	add 90 ft	add 150 ft
Category III	60 ft	add 45 ft	add 105 ft	add 165 ft
Category IV	40 ft			

\* As of October 20, 2003 the date of adoption of this Chapter, no Category 4 wetlands are known to exist in Burien.

C. The use of the standard buffer widths requires the implementation of the measures in the following table, where applicable, to minimize the impacts of the adjacent land uses. If an applicant chooses not to apply these measures, then a thirty-three (33) percent increase in the width of all buffers is required. For example, a 75-foot buffer accompanied by the mitigation measures would be a 100-foot buffer without them.

Disturbance	Required Measures to Minimize Impacts
Lights	<ul style="list-style-type: none"> <li>Direct lights away from wetland</li> </ul>
Noise	<ul style="list-style-type: none"> <li>Locate activity that generates noise away from wetland</li> <li>If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source</li> <li>For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily</li> </ul>

**Comment [TB81]:** Ecology recommends revising buffer regulations per the table on page A-6 of Wetlands and CAO Updates: Guidance for Small Cities (Western Washington Version) (Ecology Publication #10-06-002, January 2010) (as updated in 2012).

**Based on this feedback from Ecology City staff and consultants considered four buffer schemes. Following feedback from the Planning Commission at the 04/22/15 meeting, the City is proceeding with the preferred option, incorporating it into the code for consideration.**

**Comment [TB82]:** Updated to be current

**Comment [NL83]:** Additional text added for clarity

**Comment [TB84]:** The preferred option features overall smaller buffer widths with required accompanying impact-minimization measures. This allows developers to get credit for such measures and considers the constraints of protecting wetlands and their buffers in an urban, largely developed setting.

<u>Disturbance</u>	<u>Required Measures to Minimize Impacts</u>
	<u>vegetated buffer strip immediately adjacent to the outer wetland buffer</u>
<u>Toxic runoff</u>	<ul style="list-style-type: none"> <li>• <u>Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered</u></li> <li>• <u>Establish covenants limiting use of pesticides within 150 feet of wetland</u></li> <li>• <u>Apply integrated pest management</u></li> </ul>
<u>Stormwater runoff</u>	<ul style="list-style-type: none"> <li>• <u>Retrofit stormwater detention and treatment for roads and existing adjacent development</u></li> <li>• <u>Prevent channelized flow from lawns that directly enters the buffer</u></li> <li>• <u>Use Low Intensity Development techniques (per PSAT publication on LID techniques)</u></li> </ul>
<u>Change in water regime</u>	<ul style="list-style-type: none"> <li>• <u>Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns</u></li> </ul>
<u>Pets and human disturbance</u>	<ul style="list-style-type: none"> <li>• <u>Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion</u></li> <li>• <u>Place wetland and its buffer in a separate tract or protect with a conservation easement</u></li> </ul>
<u>Dust</u>	<ul style="list-style-type: none"> <li>• <u>Use best management practices to control dust</u></li> </ul>
<u>Disruption of corridors or connections</u>	<ul style="list-style-type: none"> <li>• <u>Maintain connections to offsite areas that are undisturbed</u></li> <li>• <u>Restore corridors or connections to offsite habitats by replanting</u></li> </ul>

D. Buffer widths as defined in subsection B above assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer shall either be planted to create the appropriate plant community or the buffer shall be widened to ensure that adequate functions of the buffer are provided.

**Comment [TB85]:** Taken from model ordinance provided in Guidance for Small Cities (Ecology 2012), and recommended by Ecology staff in comment received 3/10/15.

EG. Wetland buffers shall be measured from the wetland edge as delineated and marked in the field.

FD. Any wetland restored, relocated, replaced or enhanced because of a wetland alteration shall have the minimum buffer required for the highest wetland class involved pursuant to an approved compensatory mitigation plan set forth in Section 19.40.330.

E. No structures are allowed within of fifteen (15) feet of the edge of a designated or modified wetland buffer. This area serves to protect the wetland during development activities, use, and routine maintenance occurring adjacent to these resources. The following may be allowed within fifteen (15) feet of the buffer edge: landscaping, uncovered decks, building overhangs which do

not extend more than eighteen (18) inches into the area, and driveways and patios subject to water quality regulations as adopted in the City's stormwater management regulations (BMC 13.10).

**Comment [TB86]:** Moved to 19.40.230 General development standards

**FG.** Increased buffer widths may be required by the City of Burien when:

- i. The buffer is within twenty-five (25) feet of the toe of a slope that is greater than thirty percent (30%); or
- ii. The slope is susceptible to erosion and standard best management practices (BMP's) and erosion-control measures will not prevent adverse impacts to the wetland.

**GH.** Standard buffer width averaging may be allowed by the Director (in accordance with an approved critical area review) if:

- i. Additional protection to wetlands will be provided through the implementation of a buffer enhancement plan;
- ii. Minimum buffer width is the greater of ~~forty-seventy-five~~ percent (50/75%) of the standard buffer width or twenty-five (25) feet;
- iii. Wetland functions or values will not be reduced; and
- iv. As long as the total area contained in the buffer on the development proposal site does not decrease.

**Comment [DB87]:** We recommend 75% of the standard buffer.

**Comment [NL88]:** This recommendation is also in our Gap Analysis. Reduction beyond 75% significantly reduces the function (and purpose) of the buffer and can lead to wetland impacts.

**HI.** Buffer reduction with enhancement may be allowed by the Director (in accordance with an approved critical area review) if:

- i. Additional protection to wetlands will be provided through the implementation of a buffer enhancement plan;
- ii. The existing condition of the buffer is degraded;
- iii. Buffer enhancement includes, but is not limited to the following:

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

**Comment [TB89]:** Clarification added following PC discussion 04/22/15. Native vegetation is required to provide buffer functions w/in the context of these buffer regulations.

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

c. Removing non-native plant species and noxious weeds from the buffer area and replanting the area subject to BMC 19.40.310.2.H.iii (a).

iv. Buffer reductions under this Section shall be limited to twenty five (25)% of the standard buffer width or a minimum of twenty-five (25) feet, whichever is greater.

v. If the buffer reduction results in a buffer of less than twenty-five (25) feet, the applicant shall be responsible for attending an environmental stewardship Class Acceptable to the City.

~~i. Unless otherwise provided, the following restrictions shall apply to all development proposals in Category 1, 2, or 3 wetlands that include the introduction of livestock:~~

~~i. Implementation of a plan approved by the Director to protect and enhance the wetland's water quality; and~~

~~ii. Fencing located at the buffer edge. [Ord. 394 § 1, 2003]~~

Comment [TB90]: Buffers below 25 feet should not be allowed – per BAS, such buffers do not provide any buffer functions. Similar approach taken for streams.

Comment [TB91]: Moved above, outside of subsection (2) (buffers)

#### **19.40.320 Wetlands – Permitted Alterations.**

1. Activities and uses shall be prohibited from wetlands and wetland buffers, except as allowed in this section.

2. The following activities are allowed outright without completion of a critical area review as described in BMC 19.40.090:

A. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing wetland.

B. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, or alteration of the wetland by changing existing topography, water conditions or water sources.

C. Site-specific biological studies with the purpose of collecting data for critical area studies.

D. Removal of noxious weeds if done manually.

3. Alterations to Wetlands.

A. Activities and uses shall be prohibited from Category 14 wetlands.

B. Alterations to Category 112, 1113, and 144 wetlands may be permitted if the Director determines, based upon review of special studies completed by qualified professionals, that:

- i. It will not adversely affect water quality;
- ii. It will not adversely affect fish, wildlife, or their habitat;
- iii. It will not have an adverse effect on drainage and/or storm water detention capabilities;
- iv. It will not lead to unstable earth conditions or create an erosion hazard or contribute to scouring actions;
- v. It will not be materially detrimental to any other property or the City as a whole; and
- vi. It will not have adverse effects on any other critical areas.

4. Alterations to Wetland Buffers. No land surface alteration or improvement may occur in a wetland buffer except as provided for below:

A. Buffer enhancements may be allowed pursuant to an approved mitigation plan.

B. Utilities such as water, telephone, cable, electric, and natural gas may be allowed in wetland buffers if:

- i. The Director determines that no practical alternative location is available; and
- ii. The utility corridor meets any additional requirements set forth by the Director and BMC 19.40.070(3) including, but not limited to, requirements for installation, replacement of vegetation and maintenance pursuant to an approved mitigation plan as set forth in 19.40.330.

C. Sewer utility corridors may be allowed in wetland buffers only if all of the following criteria are met:

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

Comment [TB92]: Mapped to new classification system

- ii. The corridor is not located in a wetland or buffer used by species listed as endangered or threatened by the state or federal government or containing critical or outstanding actual habitat for those species or heron rookeries or raptor nesting trees;
- iii. The corridor alignment including, but not limited to, any allowed maintenance roads, follows a path beyond a distance equal to 75 percent of the buffer width from the wetland edge;
- iv. Corridor construction and maintenance protects the wetland and buffer and is aligned to avoid cutting trees greater than 12 inches in diameter at breast height, when possible, and pesticides, herbicides and other hazardous substances are not used;
- v. An additional, contiguous and undisturbed buffer, equal in width to the proposed corridor including any allowed maintenance roads, is provided to protect the wetland;
- vi. The corridor is revegetated with appropriate vegetation native to the City at preconstruction densities or greater immediately upon completion of construction or as soon thereafter as possible, and the sewer utility ensures that such vegetation survives;
- vii. Any additional corridor access for maintenance is provided, to the extent possible, at specific points rather than by a parallel road;
- viii. The width of any necessary parallel road providing access for maintenance is as small as possible, but not greater than 15 feet, the road is maintained without the use of herbicides, pesticides or other hazardous substances and the location of the road is contiguous to the utility corridor on the side away from the wetland;
- ix. Joint use of an approved sewer utility corridor by other utilities may be allowed.

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

- i. Surface water discharge to a wetland buffer from a detention facility, pre-settlement pond or other surface water management activity or facility may be allowed if the discharge does not increase the rate of flow, change the plant composition in a forested wetland or decrease the water quality of the wetland;

ii. Stormwater management facilities are limited to stormwater dispersion outfalls and bioswales. They are not allowed in buffers of Category I or II wetlands, but may be allowed within the outer twenty-five percent (25%) of the buffer of Category III or IV wetlands, provided that:

a. No other location is feasible; and

b. The location of such facilities will not degrade the functions and values of the wetland; and

c. All requirements of the King County Surface Water Design Manual, as adopted in BMC 13.10, are met.

ii. A Category 2 wetland or buffer may be used for a regional retention/detention facility if:

a. A public agency and utility exception is granted pursuant to BMC 19.40.070.3;

b. All requirements of the Surface Water Design Manual are met; and

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

iii. A Category 3 wetland buffer which has as its major function the storage of water may be used as a regional retention/detention facility if a pre-settlement pond is required and all requirements of the Surface Water Design Manual are met; and

iv. Use of a wetland buffer for a surface water management activity or facility, other than a retention/detention facility, such as an energy dissipater and associated pipes, may be allowed only if the applicant demonstrates, to the satisfaction of the City, that:

a. No practicable alternative exists; and

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

E. Public and private trails may be allowed in the outer 25% of wetland buffers only if:

i. The trail surface is no more than 5 feet wide and shall not be made of impervious materials, except that public multipurpose trails may be made of impervious materials if:

a.) they meet all other requirements including water quality; and

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**Comment [TB93]:** Bullet ii comes from Ecology guidance for small cities. Requirements/references to public agency and utility exceptions in *old* (deleted) bullet ii is not necessary – the nature of an exception is that it applies wholesale to the code. Implications of this change are that stormwater management facilities outside of dispersion outfalls and bioswales are no longer allowed in wetlands w/o an exception, and no stormwater management facilities are allowed in Cat I or II wetlands without an exception.

**Comment [TB94]:** Per Ecology guidance. Placement farther from wetland minimizes potential impacts.

**Comment [TB95]:** Per Ecology guidance. Flexible – many jurisdictions use 6' here. Idea is to minimize impacts to vegetation, upon which buffer function relies.

b.) an impervious trail has less of an impact on the wetland and its buffer.

ii. The use of elevated boardwalks for trails is encouraged. [Ord. 394 § 1, 2003]

### 19.40.330 Wetlands – **Additional Mitigation Requirements.**

**Comment [TB96]:** On top of requirements in 19.40.170

#### 1. General Requirements.

A. All approved activities that affect regulated wetlands or their buffers require compensatory mitigation so that the goal of no net loss of wetland function or value may be achieved.

B. Mitigation for alterations to wetlands shall achieve equivalent or greater biological functions. Mitigation plans shall be consistent with this Chapter (BMC 19.40.170) and *Wetland Mitigation in Washington State, Part 1: Agency Policies and Guidance* (Version 1, Ecology Publication #06-06-011a) or as amended, and the *Department of Ecology Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposal* (Ecology, 1994) or other best available science.

**Comment [TB97]:** Ecology has specific requirements for wetland mitigation; best/easiest way to ensure mitigation aligns with those requirements as they relate to plan contents.

C. Wetland mitigation shall provide for in-kind lost functions and values. Mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement, and shall provide similar wetland functions as those lost except when:

- i. The altered wetland provides minimal functions as determined by a site-specific function assessment; and
- ii. The proposed mitigation action(s) will provide equal or greater functions or will provide functions that are limited in the watershed; or
- iii. Out of kind replacement will best meet formally identified regional goals, such as replacement of historically diminished wetland types.

2. Types of Mitigation. Impacts to wetlands shall be mitigated according to the mitigation sequence defined in BMC 19.40.170, Mitigation Requirements. Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to wetlands and wetland buffers. When an alteration to a wetland or its required buffer is proposed, such alteration shall be avoided, minimized, or compensated for in the following order of preference: Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:

AA. Avoidance of *wetland* and *wetland buffer* impacts, whether by finding another *site* or changing the location of the proposed activity on-site.

B. Minimizing *wetland* and *wetland buffer* impacts by limiting the degree of impact on-site.

C. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:

i. *Restoring wetlands* on upland *sites* that were formerly *wetlands*.

ii. *Creating wetlands* on disturbed upland *sites* such as those with vegetative cover consisting primarily of exotic introduced *species* or *noxious weeds*.

iii. *Enhancing* significantly degraded *wetlands*.

3. Mitigation Location. Mitigation actions shall be conducted within the same *sub-drainage basin* and on the *site* as the alteration except when all of the following apply:

A. There are no reasonable on-*site* or in *sub-drainage basin* opportunities or on-*site* and in *sub-drainage basin* opportunities do not have a high likelihood of success due to development pressures, adjacent land uses, or on-site *buffers* or connectivity are inadequate;

B. Off-*site* mitigation has a greater likelihood of providing equal or improved *wetland* functions than the impacted *wetland*; and

C. Off-*site* locations shall be in the same *sub-drainage basin* and the same Water Resource Inventory Area (WRIA) unless:

i. Regional or 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*; or

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

iii. Fees are paid to an approved in-lieu fee program to compensate for the impacts.

Comment [TB98]: Now covered by BMC 19.40.170

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Comment [TB99]: Language regarding mitigation banks and ILF programs inserted per Ecology recommendation. Not required. Note that existing code within this subsection already allows for off-site mitigation outside of the city (off-site locations in the same sub-drainage basin and WRIA) when justified; this just expands these options to more explicitly align with watershed approach.

D. If compensatory [wetland](#) or [wetland buffer](#) mitigation is proposed off-[site](#), a signed statement of consent is required from owners of all affected properties. This statement shall be submitted to the [Director](#) and a Notice on Title recorded with King County Department of Assessments prior to approval of a [compensatory mitigation](#) plan.

4. Mitigation Timing. Mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development causing the [wetland alteration](#). Construction of mitigation projects shall be timed to reduce impacts to existing wildlife and flora.

5. Mitigation Schedule.

A. A mitigation [monitoring](#) schedule shall be established for a period of **a minimum of five years**.

**Comment [DB100]:** We recommend ten years where a scrub-shrub or forested vegetation community is proposed.

B. An “as-built” mitigation report shall be submitted to the City within one month of mitigation installation. Acceptance of the as-built report by the City will be made after a site investigation is performed by the City, and all changes requested by the City are completed.

**Comment [NL101]:** It is atypical for small residential projects to require more than a 5 year monitoring & maintenance period. Planting density and/or area may be increased to compensate for loss of significant trees. The mitigation plan should justify how critical area functions and values are maintained. Forested versus non-forested wetland impacts could be addressed in section on mitigation ratios (bullet 7 below) per Ecology guidance.

C. Mitigation [monitoring](#) reports shall be submitted annually to the City.

6. Financial Surety. A performance bond, or other approved financial surety, is required before building and clearing and grading permits are issued. The purpose of the financial surety is to hold an [applicant](#) accountable for implementing the mitigation, [monitoring](#), and contingency plans. The release of financial surety is contingent on satisfactory completion by the [applicant](#) of the proposed construction, mitigation, [monitoring](#), and contingency plans as determined by the Director.

7. Mitigation Ratios.

A. The following ratios shall apply to [creation](#) or [restoration](#) that meets all other requirements in Section [19.40.330.1](#) to .6 and is the same category of [wetland](#), and has a high probability of success. The first number in the following table specifies the acreage of replacement [wetlands](#) and the second specifies the acreage of [wetlands](#) altered.

Wetland Category	Creation or Restoration Ratio
Category 1 and 2	3 to 4
Category 3 and 4	2 to 4

**Comment [DB102]:** We recommend the table on page A-19 of the Small Cities Guidance. It's consistent with the joint agency guidance mentioned above.

**Comment [TB103]:** We've inserted the table mentioned by Ecology above. This is required for consistency with BAS.

**Wetland Category**

**Creation or Restoration Ratio**

<u>Category of Impact Wetland</u>	<u>Creation or Re-establishment</u>	<u>Rehabilitation</u>	<u>Enhancement</u>
<u>Category I: based on total score</u>	<u>4:1</u>	<u>8:1</u>	<u>16:1</u>
<u>Category I: Mature Forested</u>	<u>6:1</u>	<u>12:1</u>	<u>24:1</u>
<u>Category II</u>	<u>3:1</u>	<u>6:1</u>	<u>12:1</u>
<u>Category III</u>	<u>2:1</u>	<u>4:1</u>	<u>8:1</u>
<u>Category IV</u>	<u>1.5:1</u>	<u>3:1</u>	<u>6:1</u>

B. Increased creation or restoration ratios. The City of Burien may increase the ratios under the following circumstances:

- i. Uncertainty exists as to the probable success of the proposed restoration or creation;
- ii. A significant period of time will elapse between impact and replication of wetland functions;
- iii. Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or
- iv. The impact or alteration requiring mitigation was not authorized by the City.

8. Wetlands Enhancement as Mitigation.

A. Impacts to wetlands may be mitigated by enhancement of existing significantly degraded wetlands. Applicants proposing to enhance wetlands must produce a critical area study 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.

B. At a minimum, enhancement acreage shall be ~~double~~ according to the ratios in Section 19.40.330.7 above, the acreage required for creation or restoration under Subsection A.

**Comment [DB104]:** See the table on page A-19 of the Small Cities Guidance. We recommend that enhancement not be used alone.

**Comment [NL105]:** To meet the federal mandate of 'no-net-loss' of wetland area, Ecology does discourage 'wetland enhancement only' to mitigate for wetland area loss. It is an option under the guidance, but the ratio varies by wetland category and is much higher than double (see inserted tables above)

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

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

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

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

D. The wetland edge and buffer shall be replanted with vegetation native to Burien which replicates the original vegetation in species, sizes and densities; and

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

F. Violators may be imposed penalties pursuant to Chapter 1.15 BMC.

G. At the discretion of the Director, the violator may be required to enhance the wetland or wetland buffer to provide higher functions and values than the original wetland or wetland buffer.

[Ord. 560 § 1 (Exh. A), 2012; Ord. 394 § 1, 2003]

### STREAMS

#### 19.40.340 Streams – Designation and Classification.

1. General Requirements. The goal of stream regulations in the City of Burien is to preserve and enhance stream channels, banks, and stream channels and buffers to their natural condition and to maintain and enhance existing fish and wildlife habitat and species and habitat diversity.

2. Applicability. All water bodies meeting the definition of streams that lie within the City of Burien are regulated by this section. Ditches are excluded from regulation as streams under this section; ditches and artificial drainage features with documented current fish usage are regulated as streams.

**Comment [NL106]:** The gap analysis indicated a change may be needed to protect ditched non-fish bearing streams. However, per BMC 19.10.111, ditches are limited to artificial drainages created from uplands. Therefore, no edits are recommended here.

3. Stream Classifications. Streams shall be classified as Type 1S, Type 2F, Type 3Np, or Type 4Ns according to the criteria in this section permanent water typing system (WAC 222-16-030). Water types are described generally below:

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**Comment [TB107]:** Recommend adding full definitions for Type S, Type F, Type Np, and Type Ns streams (found in WAC 222-16-030) to definitions section, and linking appropriate text in this section.

A. Type S waters are all waters inventoried as "shorelines of the state" under Chapter 90.58 RCW. Type S waters are not regulated under this Chapter and are subject to the Shoreline Master Program (Title 20 BMC).

B. Type F waters are segments of natural watercourses, or natural watercourses which have been altered by humans, other than Type S waters, which contain fish habitat.

C. Type Np waters include segments of natural watercourses, or natural watercourses which have been altered by humans, which are perennial during a period of normal rainfall and do not have the potential to be used by fish and are typically formed by geomorphic processes.

D. Type Ns waters include segments of natural watercourses, or natural watercourses which have been altered by humans, which are seasonal or ephemeral during a year of normal rainfall and do not have the potential to be used by fish and were generally formed by geomorphic processes.

A. Type 1: ~~Streams inventoried as "Shorelines of the State" under Chapter 90.58 (RCW).~~

B. Type 2: ~~Streams that are natural streams that have perennial (year round) or intermittent flow and have documented use by salmonids.~~

C. Type 3: ~~Streams that are natural streams that have perennial flow and are not used by salmonids.~~

D. Type 4: ~~Streams that are natural streams with perennial or intermittent flows that are not used by fish. [Ord. 394 § 1, 2003]~~

**Comment [TB108]:** Adoption of permanent water-typing system per WAC/Commerce guidance.

**Comment [TB109]:** See .310 Wetlands

#### 19.40.350 Streams – Performance Development Standards.

1. General Requirements.

A. Any alterations to a stream may require state and federal approvals that may require mitigation and conditions of approval beyond those required by the City.

B. The use of hazardous substances, pesticides and fertilizers in the stream corridor and its buffer are prohibited by the City of Burien unless approved by the City.

C. Plantings in a stream or buffer should be native to Western Washington or increase the functions of the stream or buffer.

D. No vegetation removal, including mowing, shall be allowed in a stream buffer unless authorized by the Director. Removal of noxious weeds is permitted if done manually.

~~E. Non-Conformance. Activities occurring in a stream or stream buffer prior to October 20, 2003 shall be considered a non-conforming use as described in BMC 19.55.~~

Comment [TB110]: Now addressed in general development standards

~~F. Unless otherwise provided, the following restrictions shall apply to all development proposals within the vicinity of all City of Burien streams and stream buffers that include the introduction of livestock:~~

Comment [TB111]: Moved under 19.40.080 to apply to all critical areas.

~~i. Implementation of a plan approved by the Director to protect and enhance the stream's water quality; and~~

~~ii. Fencing located at the stream buffer edge. [Ord. 560 § 1 (Exh. A), 2012; Ord. 394 § 1, 2003]~~

Comment [TB112]: Moved from below

## 2. Buffers.

A. A stream buffer area shall be established as required in this section. The purpose of the buffer shall be to protect the integrity, functions, and values of the stream.

B. Required buffer widths shall reflect the sensitivity of the particular stream. The following minimum buffers for streams shall be established from the ordinary high water mark of the adjacent stream(s) or from the top of the defined stream bank if the ordinary high water mark cannot be identified:

Stream Type	Standard Stream Buffer (feet)
Type 1*	125
Type 2	400
Type 3	50
Type 4	25

Stream Type	Standard Stream Buffer (feet)
S	See Title 20 BMC, Shoreline Master Program
E	100
Np	50
Ns	50

**Comment [TB113]:** Recommendation from the Gap Analysis. City will need to adopt for consistency with BAS. Note that for the purposes of buffers, Type 2 streams will become Type F; Type 3 and 4 will become Np and Ns, respectively.

**Comment [TB114]:** BAS-based ranges for the recommended water typing system:  
 Type F: 100-165 ft  
 Type Np: 50-65 ft  
 Type Ns: 50-65 ft

Note that buffers may be reduced to 25 feet – see bullet H (old numbering) below.

**Comment [TB115]:** Updated to be current

\* as of ~~October 20, 2003~~ date of adoption of this Chapter, no Type 1-S streams exist in Burien

C. Any stream restored or enhanced because of a stream alteration shall have the minimum buffer required for the highest stream class involved pursuant to an approved mitigation plan and stream study set forth in Section 19.40.370.

~~D. No impervious surfaces are allowed within fifteen (15) feet of the edge of a designated or modified stream buffer. This area serves to protect the stream during development activities, use, and routine maintenance occurring adjacent to these resources. The following impervious surfaces may be allowed within fifteen (15) feet of the buffer edge: building overhangs which do not extend more than eighteen (18) inches into the area, and residential driveways and patios subject to water quality regulations as adopted in the City's stormwater management regulations (BMC 13.10).~~

**Comment [TB116]:** Moved to 19.40.230 General development standards

~~DE.~~ Increased stream buffer widths may be required by the City of Burien when the slope is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the stream.

EF. Any stream with an ordinary high water mark within twenty-five (25) feet of the toe of a slope thirty percent (30%) or steeper, shall have the minimum buffer required for the stream class involved or a twenty-five (25) foot buffer beyond the top of the slope, whichever is greater.

FG. Standard buffer width averaging may be allowed by the Director (in accordance with an approved critical area review) if:

- i. Additional protection to the stream and riparian habitat area will be provided through the implementation of a buffer enhancement plan as described in BMC 19.40.350.2(H);
- ii. Minimum buffer width is the greater of fifty percent (50%) of the standard buffer width or twenty-five (25) feet;
- iii. Stream and riparian functions or values will not be reduced; and
- iv. As long as the total area contained in the buffer on the development proposal site does not decrease.

GH. Buffer reduction with enhancement may be allowed by the Director (in accordance with an approved critical area study) if:

- i. Additional protection to streams will be provided through the implementation of a buffer enhancement plan.
- ii. The existing condition of the buffer is degraded.
- iii. Buffer enhancement includes, but is not limited to, the following:
  - a. Planting vegetation that would increase value for fish and wildlife habitat, improve water quality, or provide aesthetic/recreational value.
  - b. Enhancement of wildlife habitat by incorporating structures that are likely to be used by wildlife, including wood duck boxes, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.
  - c. Removing non-native plant species from the buffer area.

iv. For Type F and Type Np streams, Buffer reductions under this Section shall be limited to twenty-five (25)% of the standard buffer width, ~~or a minimum of twenty-five (25) feet, whichever is greater.~~ For Type Ns streams, buffer reductions shall result in a buffer of no less than twenty-five (25) feet.

**Comment [TB117]:** BAS indicates that buffers do not provide any buffering functions when smaller than 25 feet. This clarification allows reduction of Type F and Type Np streams consistent with the City's existing code, and allows greater reduction of Type Ns stream buffers to accommodate existing conditions in the City while still ensuring functional buffers.

v. If the buffer reduction results in a buffer of less than twenty-five (25) feet, the applicant shall be responsible for attending an environmental stewardship Class Acceptable to the City.

**Comment [TB118]:** Buffers smaller than 25 feet no longer possible given revised reduction regulations above.

~~i. Unless otherwise provided, the following restrictions shall apply to all development proposals within the vicinity of all City of Burien streams and stream buffers that include the introduction of livestock:~~

~~i. Implementation of a plan approved by the Director to protect and enhance the stream's water quality; and~~

~~ii. Fencing located at the stream buffer edge. [Ord. 560 § 1 (Exh. A), 2012; Ord. 394 § 1, 2003]~~

**Comment [TB119]:** Moved above

### 19.40.360 Streams – Permitted Alterations.

#### 1. Alteration to Streams.

A. Relocation or piping of any Type ~~1 or F2~~ stream in the City of Burien shall not be permitted unless undertaken for stream enhancement as described in BMC 19.40.360.1 (B). Relocation or piping of Type ~~3 or 4Np or Ns~~ streams may take place only when it is part of an approved mitigation or restoration plan, and will result in equal or better habitat and water quality, and will not diminish the flow capacity of the stream.

**Comment [TB120]:** Mapped to new water typing; also, Type S waters not regulated by this Chapter.

B. Stream enhancement not associated with any other development proposal may be allowed if:

- i. An approved design, implementation, maintenance, and monitoring plan prepared by a civil engineer and a qualified professional is approved by the Director;
- ii. The plan is carried out under the direct supervision of a qualified professional pursuant to provisions contained in administrative rules;
- iii. The enhancement is accomplished by a public agency with a mandate to do such work;

iv. The [enhancement](#) is limited to placement of rock weirs, log controls, spawning gravel, other specific [salmonid](#) improvements, and involves only light equipment or hand labor; and

v. Water quality in the [stream](#) is protected during construction.

C. A [stream](#) channel may be stabilized if:

i. Movement of the [stream](#) channel threatens existing residential or commercial [structures](#), public facilities or improvements, unique natural resources or the only existing access to property; and

ii. The stabilization is done in compliance with the requirements of BMC [19.40.240](#) through [19.40.280](#).

2. Alterations to Stream Buffers. No [alteration](#) may occur in a [stream buffer](#) except as permitted below:

A. [Buffer enhancements](#) may be allowed pursuant to an approved [mitigation](#) plan as described in BMC [19.40.370](#).

B. [Buffers](#) and vegetation within the [buffer](#) shall be protected during construction by placement of a temporary fencing, on-site notice for construction crews of the presence of the [stream](#), and implementation of appropriate erosion and sedimentation controls.

C. Utilities such as water, telephone, cable, electric, and natural gas may be allowed in Type [Np3](#) or Type [Ns4](#) [stream buffers](#) if:

i. The [Director](#) determines that no practical alternative location is available; and

ii. The utility corridor meets any additional requirements set forth by the [Director](#) and BMC [19.40.070](#)(3) including, but not limited to, requirements for installation, replacement of vegetation and maintenance.

D. Sewer utility corridors may be allowed in [stream buffers](#) only if all of the following criteria are met:

i. The [applicant](#) demonstrates that sewer lines are necessary for gravity flow;

Comment [TB121]: Mapping to new stream typing

- ii. The corridor is not located in a stream or stream buffer used by species listed as endangered or threatened by the state or federal government or containing critical or outstanding actual habitat for those species or heron rookeries or raptor nesting trees;
- iii. The corridor alignment including, but not limited to, any allowed maintenance roads, follows a path beyond a distance equal to seventy-five percent (75%) of the stream buffer width from the ordinary high water mark;
- iv. Corridor construction and maintenance protects the stream and stream buffer and is aligned to avoid cutting trees greater than twelve (12) inches in diameter at breast height, when possible, and pesticides, herbicides, and other hazardous substances are not used;
- v. An additional, contiguous and undisturbed buffer, equal in width to the proposed corridor including any allowed maintenance roads, is provided to protect the stream;
- vi. The corridor is revegetated with appropriate vegetation native to the City at preconstruction densities or greater immediately upon completion of construction or as soon thereafter as possible, and the sewer utility ensures that such vegetation survives;
- vii. Any additional corridor access for maintenance is provided, to the extent possible, at specific points rather than by a parallel road; and
- viii. The width of any necessary parallel road providing access for maintenance is as small as possible, but not greater than fifteen (15) feet, the road is maintained without the use of herbicides, pesticides or other hazardous substances and the location of the road is contiguous to the utility corridor on the side away from the stream.
- ix. Joint use of an approved sewer utility corridor by other utilities may be allowed.

E. The following surface water management activities and facilities may be allowed in Type 3 Np and Type 4-Ns stream buffers only as follows:

- i. Surface water discharge to a Type 3-Np or Type 4-Ns stream from a detention facility, pre-settlement pond or other surface water management activity or facility may be allowed if discharge does not increase the rate of flow, change the fish habitat or decrease the water quality of the stream;

ii. A Type 3-Np or Type 4-Ns stream or stream buffer may be used for a regional retention/detention facility if:

Comment [TB122]: Mapped to new stream types

- a. A public agency and utility exception is granted pursuant to BMC 19.40.070.3;
- b. All requirements of the King County Surface Water Design Manual, as adopted in BMC 13.10, are met;
- c. The use will not alter the rating or the factors used in rating the stream; and
- d. There are no significant adverse impacts to the stream.

F. Public and private trails may be allowed in stream buffers only if:

i. The trail surface shall not be made of impervious materials, except that public multipurpose trails may be made of impervious materials if:

- a.) they meet all other requirements including water quality, and
- b.) an impervious trail has less of an impact on the wetland and its buffer.

ii. The use of elevated boardwalks for trails is encouraged.

G. Stream crossings may be allowed and may encroach on the required stream buffer if the following conditions are met. Stream crossings include those for streets, trails, or private vehicular access easements.

- i. There is no other feasible access to the property;
- ii. All crossings use bridges or other construction techniques which do not disturb the stream bed or bank, except that bottomless culverts, fish friendly culverts or other appropriate methods demonstrated to provide fisheries protection may be used for Type 2F, 3Np, or Ns4 streams if the culvert design is in accordance with the WDFW manual *Fish Passage Design at Road Culverts*;

Comment [TB123]: Mapped to new stream types

iii. All crossings are constructed during low stream flow periods and are timed to avoid stream disturbance during periods when use is critical to salmonids, construction timing must coincide with the WDFW in-water work windows;

- iv. Crossings do not occur over salmonid spawning areas;
- v. Bridge piers or abutments are not placed within the FEMA floodway or the ordinary high water mark;
- vi. Crossings do not diminish the flood-carrying capacity of the stream;
- vii. Underground utility crossings are laterally drilled and located at a depth of four (4) feet below the maximum depth of scour for the base flood predicted by a civil engineer licensed by the State of Washington; and
- viii. Crossings are minimized and serve multiple purposes and properties whenever possible. [Ord. 394 § 1, 2003]

**19.40.370 Streams – Additional mMitigation requirements.**

**Comment [TB124]:** In addition to 19.40.170

1. General Requirements.

~~A. All impacts to streams that degrade the functions and values of the stream shall be avoided. If alteration to the stream is unavoidable, all adverse impacts to the stream and its buffer resulting from a development proposal or alteration shall be mitigated in accordance with an approved mitigation plan as described below.~~

**Comment [TB125]:** Covered under new 19.40.170

~~AB. Restoration or mitigation shall be required when a stream or its buffer is altered in violation of law or without any specific permission or approval by the Director. In addition to the requirements of BMC 19.40.170, a mitigation plan for stream impacts shall demonstrate that:~~

**Comment [TB126]:** Internal reference for usability

- i. The stream has been degraded and will not be further degraded by the mitigation activity;
- ii. The mitigation will improve the water quality and fish and wildlife habitat of the stream;
- iii. The mitigation will have no lasting significant adverse impact on any stream functions; and
- iv. The mitigation will assist in stabilizing the stream channel.

~~BC. Mitigation In addition to the requirements of BMC 19.40.170, mMitigation minimum requirements shall include:~~

**Comment [TB127]:** Internal reference for usability

- i. All work shall be carried out under the direct supervision of a *qualified professional*;
- ii. *Engineering* analysis as described in BMC [13.10](#) shall be performed to determine hydrologic conditions;
- iii. The natural channel dimensions shall be replicated including its depth, width, length and gradient at the original location, and the original horizontal alignment (meander lengths) shall be replaced;
- iv. The bottom shall be restored with identical or similar materials;
- v. The bank and [buffer](#) configuration shall be restored to its original condition;
- vi. The channel, bank and [buffer](#) areas shall be replanted with vegetation [native](#) to Western Washington which replicates the original vegetation in [species](#), sizes and densities; and
- vii. The original biologic functions of the [stream](#) shall be recreated.

2. Mitigation Location. [Mitigation](#) of adverse impacts to [riparian habitat](#) areas or [streams](#) shall result in equivalent [functions and values](#) on a per function basis, be located as near the [alteration](#) as feasible, and be located in the same sub drainage basin as the habitat impacted.

3. Mitigation Schedule.

- A. A [mitigation monitoring](#) schedule shall be established for a period of five (5) years.
- B. An “as-built” [mitigation](#) report shall be submitted to the City within one (1) month of [mitigation](#) installation. Acceptance of the as-built report by the City will be made after a site investigation is performed by the City, and all changes requested by the City are completed.
- C. [Mitigation](#) monitoring reports shall be submitted annually to the City and shall show that the mitigated area is meeting [performance standards and goals](#) set forth in the [mitigation](#) plan.

**Comment [TB128]:** Here is an example of an appropriate use of the term

4. Financial Surety. A performance bond, or other approved financial surety, is required before building and *clearing* and grading permits are issued. The purpose of the financial surety is to hold an applicant accountable for implementing the mitigation, monitoring, and contingency plans. The release of financial surety is contingent

on satisfactory completion by the applicant of the proposed construction, *mitigation, monitoring*, and contingency plans as determined by the Director. [Ord. 394 § 1, 2003]

### FISH AND WILDLIFE HABITAT CONSERVATION AREAS

#### 19.40.380 Fish and Wildlife Habitat Conservation Areas - Designation and Classification.

1. Fish and wildlife habitat conservation areas are those habitat areas that meet any of the following criteria:

- A. Areas with which endangered, threatened, and sensitive *species* listed by the federal government or the State of Washington have a primary association;
- B. All public and private tidelands or bedlands suitable for commercial or recreational shellfish harvest;
- C. Kelp and eel-grass beds identified by the Washington Department of Natural Resources;
- D. Herring and smelt spawning areas as outlined in Chapter 220-110 WAC and the Puget Sound Environmental Atlas as presently constituted or as may be subsequently amended;
- E. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or *wildlife habitat*;

F. Bald eagle habitat protected pursuant to the ~~Washington State~~ Federal Bald and Golden Eagle Protection Act-Rules (WAC 232-12-292); ~~or~~

**Comment [TB129]:** Per City staff recommendation, modified to be grammatically consistent with this list.

G. Heron rookeries or active nesting trees; ~~or~~

H. Waters of the state, regulated under Section 19.40.340, Streams, of this Chapter.

**Comment [TB130]:** This helps to explain the separate stream section in the code. It also serves to highlight why it sometimes makes more sense to incorporate stream regulations under FWHCAs, to avoid overlaps. In the case of overlaps, however, the code is clear that the more protective regulations would apply (19.40.030(1)). And there are examples of other jurisdictions with overlaps.

2. The approximate location and extent of known fish and wildlife habitat conservation areas are shown on the Critical Areas Maps adopted by the City, as described in BMC 19.40.040(2)(A) and as most recently updated. The following maps are to be used as a guide for the City, but do not provide a final critical area designation:

**Comment [TB131]:** Clarity and consistency with other sections

- A. Washington State Department of Fish and Wildlife Priority Habitat and Species Maps;

B. Anadromous and resident [salmonid](#) distribution maps contained in the Habitat Limiting Factors Reports published by the Washington Conservation Commission; and

C. Washington State Digital Coastal Atlas and Coastal Zone Management Program. [Ord. 394 § 1, 2003]

#### 19.40.390 Fish and Wildlife Habitat Conservation Areas ~~Performance~~– Development Standards.

1. The [Director](#) shall require the establishment of [buffer](#) areas for activities in, or adjacent to, fish and wildlife habitat conservation areas, when needed to protect fish and wildlife habitat conservation areas. [Buffers](#) shall:

A. Consist of an undisturbed area of [native vegetation](#), or areas identified for restoration, established to protect the integrity, [functions and values](#) of the affected habitat;

B. Reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted on the [site](#) and on adjacent [sites](#); and

C. Be consistent with the management recommendations issued by the state Department of Fish and Wildlife.

2. When a [species](#) is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger [buffers](#) may be required and activities may be further restricted during the specified season.

3. A Habitat Management Plan may be required by the [Director](#) when the critical area review of a development proposal determines that the proposed activity will have an affect on habitat conservation areas.

A. All Habitat Management Plans shall be prepared by a qualified professional in consultation with the state Department of Fish and Wildlife. Habitat Management Plans for critical [species](#) listed as endangered or threatened shall be approved by the City following review and approval by the Department of Fish and Wildlife.

B. Habitat Management Plan Content Requirements. Based on the characteristics of the site and information submitted by the applicant, the Director may require that all or a portion of the following be included in a Habitat Management Plan:

i. A map drawn to scale or survey showing the following information:

a. All lakes, ponds, streams, and wetlands on, or adjacent to the subject property, including the name (if named), ordinary high water mark of each, and the stream type or wetland class;

b. The location and description of the fish and wildlife habitat conservation areas on the subject property, as well as any potential fish and wildlife habitat conservation areas within 200 feet of the subject property as shown on the City's adopted Critical Areas Maps; and

Comment [TB132]: Consistency with other sections

c. The location of any observed evidence of use by a listed species.

ii. An analysis of how the proposed development activities will affect the fish and wildlife habitat conservation areas and listed species;

iii. The Habitat Management Plan should also address the following mitigation measures:

a. Reduction or limitation of development activities within the fish and wildlife habitat conservation areas;

b. Use of low impact development techniques or clustering of development on the subject property to locate structures in a manner that preserves and minimizes adverse effects to habitat areas;

c. Seasonal restrictions on construction activities on the subject property;

d. Preservation or retention of habitat and vegetation on the subject property in contiguous blocks or with connection to other habitats that have a primary association with listed species;

e. Establishment of a buffer around the fish and wildlife habitat conservation areas;

f. Limitation of access to the fish and wildlife habitat conservation areas and buffer; and

g. The creation or restoration of habitat area for the listed species.

4. Non-indigenous species shall not be introduced. No plant, wildlife, or fish [species](#) not indigenous to the Puget Sound region shall be introduced into a fish and wildlife habitat conservation areas unless authorized by a state or federal permit or approval. [Ord. 394 § 1, 2003]

#### **19.40.400 Fish and Wildlife Habitat Conservation Areas – Permitted Alterations.**

1. Fish and wildlife habitat conservation areas or their [buffers](#) may be [altered](#) only if the proposed [alteration](#) of the habitat or the mitigation proposed does not degrade the [functions and values](#) of the habitat. All new [structures](#) and land [alterations](#) shall be prohibited from habitat conservation areas except in accordance with this Chapter.

2. Approvals of activities may be conditioned. The [Director](#) may condition approvals of activities allowed adjacent to fish and wildlife habitat conservation areas as necessary, to minimize or mitigate any potential adverse effects. Conditions may include, but are not limited to, the following:

- A. Establishment of [buffer](#) zones;
- B. Preservation of vegetation with which listed [species](#) have a primary association;
- C. Limitation of access to the habitat area, including fencing to deter unauthorized access;
- D. Seasonal restriction of construction activities;
- E. Requirement of mitigation for activities having an effect on fish and wildlife habitat conservation areas; and
- F. Requirement of a performance bond, when necessary, to ensure completion and successful implementation of proposed mitigation (BMC [19.40.180](#)).

3. Low impact [uses](#) and activities which are consistent with the purpose and function of the habitat [buffer](#) and do not detract from its integrity may be permitted within the [buffer](#) depending on the sensitivity of the habitat area. Any impacts from these uses and activities shall be mitigated. Examples of [uses](#) and activities which may be permitted by the [Director](#) include:

- A. Pervious trails;
- B. Viewing platforms;
- C. Storm water management features such as grass-lined swales, and

D. Utilities and utility easements.

4. Mitigation shall result in contiguous habitat. Mitigation sites shall be located to achieve contiguous wildlife habitat in accordance with a mitigation plan that is part of an approved habitat Management Plan to minimize the isolating effects of development on habitat areas. Mitigation of aquatic habitat must be located within the same aquatic ecosystem or watershed as the area disturbed.

5. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic functions, and in the case of streams shall include mitigation for adverse impacts upstream and/or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis. [Ord. 394 § 1, 2003]

**19.40.410 Fish and Wildlife Habitat Conservation Areas – Specific Habitats**

1. Endangered, threatened, and sensitive species habitat.

A. No alteration shall be allowed within a fish and wildlife habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association without Federal and State approval.

B. Whenever activities are proposed adjacent to a fish and wildlife habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a Habitat Management Plan prepared by a qualified professional (BMP 19.40.390) and approved by the City.

C. Bald eagle habitat shall be protected pursuant to the Federal Washington State Bald Eagle Protection Rules Act (WAC 232-12-292). Whenever activities are proposed within 660 feet of adjacent to a verified nest territory or communal roost, a Habitat Management Plan shall be developed by a qualified professional. Activities are adjacent to bald eagle sites when they are within eight hundred (800) feet of an eagle nest, or within a quarter mile (1,320 feet) if in a shoreline foraging area. The applicant shall verify the location of eagle management areas for each proposed activity consult with the U.S. Fish and Wildlife Service to determine if a permit is required. Prior to issuance of the building permit by the City, the applicant shall provide written approval of the Habitat Management Plan by the Department of Fish and Wildlife.

Comment [TB133]: Internal reference for usability

Comment [TB134]: Per City staff recommendation

2. Aquatic Habitats.

A. All activities, uses, and alterations proposed to be located in water bodies used by salmonid fish species or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of salmonid habitat.

B. Filling of aquatic habitats when authorized by the City of Burien's Shoreline Management Master Program, shall not adversely impact salmonids or their habitat or shall mitigate any unavoidable impacts, and shall only be allowed for a water-dependent activity. [Ord. 394 § 1, 2003]

**Comment [TB135]:** Aquatic habitats under the jurisdiction of the SMP would be under the jurisdiction of that SMP's CAO (even if it refers to this CAO). This statement is not necessary.

Field Code Changed

### CRITICAL AQUIFER RECHARGE AREAS

#### 19.40.420 Critical aquifer recharge areas – Designation and Classification.

1. Purpose and Intent. The purpose of this section is to protect critical aquifer recharge areas from degradation or depletion resulting from new and redeveloping land use activities. Due to the potential vulnerability of groundwater underlying certain aquifer recharge areas to contamination and the importance of such groundwater as sources of public water supply, it is the intent of this section to safeguard groundwater resources by mitigating or precluding future discharges of contaminants from new development activities and redevelopment activities.

2. Applicability.

A. General. The provisions of this section shall apply to regulated facilities as defined in this ordinance within or adjacent to those portions of the City of Burien designated as critical aquifer recharge areas on the City of Burien Critical Areas Map. Regulated facilities are those commercial, industrial and home occupation uses that:

- i. Process or handle hazardous materials in regulated quantities; and
- ii. Treat and store regulated quantities of hazardous materials.

B. The City of Burien shall administer the provisions of this Chapter and shall determine appropriate mitigation measures.

3. Classification.

A. Criteria. Any [site](#) located within the City of Burien and within or adjacent to the boundaries of any [critical aquifer recharge area](#) is subject to the provisions of this Chapter.

B. Sources. The following sources were used to identify the [aquifer](#) recharge areas that are depicted on the Critical Areas Map.

- i. Guidance Document for the Establishment of Critical aquifer recharge area Ordinances, December 1998, Washington State Department of Ecology, Publication No. 97-30, Version 3.0, 47p.
- ii. Geologic Map of the Des Moines 7.5 Minute Quadrangle, D.B. Booth and H.H. Waldron, (2000), United States Geological Survey, Open File Report in press.
- iii. Occurrence and Quality of Ground Water in Southwestern King County, Washington, (1995), United States Geological Survey, Water Resources Investigations Report 92-4098, 69p. [Ord. 394 § 1, 2003]

#### **19.40.430 Critical aquifer recharge areas – ~~Performance-Development~~ Standards.**

1. Prohibited activities and land uses – critical aquifer recharge areas. The following land [uses](#) and activities for new development or redevelopment shall be prohibited within or adjacent to [critical aquifer recharge areas](#):

- A. Solid waste landfills;
- B. Disposal of hazardous or dangerous wastes;
- C. All underground [injection wells](#) as defined in Chapter [173-218](#) WAC;
- D. Mining
  - i. Metals and hard rock mining.
  - ii. Sand and gravel mining is prohibited from [critical aquifer recharge areas](#) determined to be highly susceptible or vulnerable.
- E. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);

F. Storage, processing, or disposal of radioactive substances. Facilities that store, process, or dispose of radioactive substances;

G. Dry cleaning establishments using the solvent perchloroethylene; and

H. Other.

i. Activities that would significantly reduce the recharge to [aquifers](#) currently or potentially used as a potable water source;

ii. Activities that would significantly reduce the recharge to [aquifers](#) that are a source of significant baseflow to a regulated [stream](#);

iii. Activities that are not connected to an available sanitary sewer system are prohibited from [critical aquifer recharge areas](#) associated with sole source [aquifers](#).

2. Hazardous materials questionnaire required. Applications for development or redevelopment of [regulated facilities](#) within the boundaries of [critical aquifer recharge areas](#) shall be accompanied by a completed [hazardous materials questionnaire](#) to determine the regulatory status of the [applicant](#) facility. The [Director](#) shall review the [hazardous materials questionnaire](#) to determine whether the facility is regulated under this ordinance. If it is determined that the [applicant](#) is a [regulated facility](#) that processes, handles, treats, and/or stores [hazardous substances](#) as defined by this ordinance, the applicant facility must submit a Critical Areas Report pursuant to this Section to the City.

3. Critical area review for critical aquifer recharge areas required.

A. After reviewing the [hazardous materials questionnaire](#), the [Director](#) may require a critical area review pursuant to BMC [19.40.090](#) through [19.40.150](#).

B. Notification to adjacent water supply systems. The City of Burien shall provide written notice to the operators of neighboring water supply systems in whose [wellhead protection area](#) the proposed [regulated activity](#) is located. The City of Burien shall consider comments received from the water system when reviewing the hydrogeologic assessment.

4. Appeal of determination.

A. The Director's determination that the facility is a regulated facility or within a critical aquifer recharge area may be appealed according to, and as part of the appeal procedure for the underlying permit or approval involved. The appeal must be accompanied with a hydrogeologic assessment to assess the facility's potential impact on the aquifer.

B. Prepared by a qualified professional. The hydrogeologic assessment should be prepared by a licensed engineer, engineering geologist, geologist, or hydrogeologist registered in the State of Washington and approved by the City of Burien.

C. Hydrogeologic assessment report. A hydrogeologic assessment shall include, but is not limited to, the following:

- i. Information sources;
- ii. Geologic setting--include well logs or borings used to characterize the area;
- iii. Background water quality;
- iv. Groundwater elevations;
- v. Location/depth to perched water tables;
- vi. Recharge potential of the proposed development site (permeability/transmissivity);
- vii. Groundwater flow direction and gradient;
- viii. Currently available data on wells located within 1,000 feet of site;
- ix. Currently available data on any spring within 1,000 feet of site;
- x. Surface water location and recharge potential;
- xi. Water source supply to site;
- xii. Any sampling schedules necessary;
- xiii. Discussion of the effects of the proposed project on the groundwater resource;

xiv. Description of potential mitigation measures, should it be determined that the proposed project may have an adverse impact on [groundwater](#) resources; and

xv. Other information as required by the City of Burien.

D. If the hydrogeologic assessment determines that the facility will have no effect on [groundwater](#), the facility is exempt from the [performance development](#) standards requirements in Sections [19.40.350.6](#).

E. If the hydrogeologic assessment determines that the facility could have an effect on the [groundwater](#) resource, the City shall require implementation of [applicable](#) development standards ~~and applicable performance standards~~ in 19.40.350.5 and 19.40.350.6.

5. [Performance-Development](#) standards – General requirements

A. Activities may only be permitted in a [critical aquifer recharge area](#) if the [applicant](#) can show that the proposed activity will not cause contaminants to enter the [aquifer](#) and that the proposed activity will not adversely effect the recharging of the [aquifer](#).

B. The proposed activity must comply with the water source protection requirements and recommendations of the federal Environmental Protection Agency, and state Department of Health, and the King County Health District.

C. Storage tank permits. The City of Burien specifically regulates and authorizes permits for underground storage tanks, pursuant to the ~~Uniform Fire Code (Article 79) International Fire Code~~ and this Chapter. The Washington Department of Ecology also regulates and authorizes permits for underground storage tanks (WAC [173-360](#)). The local Fire District regulates and authorizes permits for the removal of underground storage tanks (~~UFC 7902~~).

Comment [TB136]: Per City staff recommendation.

D. Owners and operators of facilities with existing underground storage tanks that are located within an [critical aquifer recharge area](#) shall comply with all release detection requirements as specified in WAC [173-360](#).

E. Spreading or injection of reclaimed water. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the departments of Ecology and Health.

i. Surface spreading must meet the ground water recharge criteria given in Chapter [90.46.080](#) RCW and Chapter 90.46.010(10).

ii. Direct injection must be in accordance with the standards developed by authority of Chapter [90.46.042](#) RCW.

F. Storm water treatment and control as per the King County Surface Water Design Manual.

6. Development standards for regulated facilities within critical aquifer recharge areas. The following mitigation measures, as applicable, are required for development of [regulated facilities](#) within a [critical aquifer recharge area](#):

A. Floor drains shall not be allowed to drain to the storm water system and must be designed and installed to meet the Uniform Plumbing Code (UPC) Section 303.

B. If any roof venting carries contaminants, then the portion of the roof draining this area must go through pretreatment pursuant to UPC Section 304(b).

C. All nonresidential vehicle washing must be self contained or be discharged to a sanitary sewer system, if approved by the sewer utility, and is subject to UPC Sections 708 and 711.

D. Utilize Integrated Pest Management (IPM) practices for pest control and [Best Management Practices](#) (BMPs) for the use of fertilizers as described by the King County Local Hazardous Waste Management Program.

E. Facilities installing new underground tanks. All new underground storage facilities used or to be used for the underground storage of [hazardous substances](#) or [hazardous wastes](#) shall meet the requirements of WAC [173-360](#) and be designed and constructed so as to:

- i. Prevent releases due to corrosion or structural failure for the operational life of the tank;
- ii. Be protected against corrosion, constructed of non-corrosive material, steel clad with a non-corrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substance; and
- iii. Use material in the construction or lining of the tank which is compatible with the substance to be stored.

F. Aboveground tanks

- i. No new aboveground storage facility or part thereof shall be fabricated, constructed, installed, used, or maintained in any manner which may allow the release of a [hazardous substance](#) to the ground, or [groundwater](#) of the City of Burien within an [critical aquifer recharge area](#).
- ii. For a tank that will contain a [hazardous substance](#), no new aboveground tank or part thereof shall be fabricated, constructed, installed, used, or maintained without having constructed around and under it an impervious containment area enclosing or underlying the tank or part thereof.
- iii. A new aboveground tank that will contain a [hazardous substance](#) will require a secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks located within a [critical aquifer recharge area](#). The secondary containment system or dike system must be designed and constructed to contain the material stored in the tank(s), have a capacity of at least 110 percent of the primary tank and conform to the requirements of UFC Chapter 7902.2.

G. Vehicle repair and servicing

- i. Commercial vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.
- ii. No dry wells shall be allowed in [critical aquifer recharge areas](#) on [sites](#) used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the state Department of Ecology prior to commencement of the proposed activity.

H. Additional protective measures may be required if deemed necessary by the City of Burien.

I. State and federal regulations--The [uses](#) listed below shall be conditioned as necessary to protect [critical aquifer recharge areas](#) in accordance with the applicable state and federal regulations.

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

Activity	Statute – Regulation – Guidance
Above Ground Storage Tanks	Chapter 173-303 -640 WAC
Animal Feedlots	Chapter <a href="#">173-216</a> WAC, Chapter <a href="#">173-220</a> WAC
Automobile Washers	Chapter <a href="#">173-216</a> WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Below Ground Storage Tanks	Chapter <a href="#">173-360</a> WAC
Chemical Treatment Storage and Disposal Facilities	Chapter <a href="#">173-303-182</a> WAC
Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)	Chapter <a href="#">173-303</a> WAC
Injection wells	Federal 40 CFR Parts 144 and 146, Chapter <a href="#">173-218</a> WAC
Junk Yards and Salvage Yards	Chapter <a href="#">173-304</a> WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	Chapter <a href="#">332-12-450</a> WAC, WAC, Chapter <a href="#">173-218</a> WAC
On-Site Sewage Systems (Large Scale)	Chapter <a href="#">173-240</a> WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter <a href="#">246-272</a> WAC, Local Health Ordinances

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

Activity	Statute – Regulation – Guidance
Pesticide Storage and Use	Chapter <a href="#">15.54</a> RCW, Chapter <a href="#">17.21</a> RCW
Sawmills	Chapter <a href="#">173-303</a> WAC, <a href="#">173-304</a> WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter <a href="#">173-304</a> WAC
Surface Mining	Chapter <a href="#">332-18-015</a> WAC
Waste Water Application to Land Surface	Chapter <a href="#">173-216</a> WAC, Chapter <a href="#">173-200</a> WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

[Ord. 394 § 1, 2003]