Chapter 19.10

Definitions

19.10.150 Erosion hazard areas
– Lands underlain by soils which are subject to severe erosion when disturbed. Specialty areas with slope inclinations greater than 15 percent and either extending over a distance of 50 feet or with more than 10 feet of vertical relief that will be disturbed or stripped of vegetation, exposing existing soils.

NEW SECTION
19.10.176.5 Fish and Wildlife Habitat Conservation Area
– Those areas for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. Fish and wildlife habitat conservation areas do not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company. This does not mean maintaining all individuals of all species at all times, but it does mean not degrading or reducing populations or habitats so that they are no longer viable over the long term

19.10.190 Geologically hazardous areas
– Areas that because of their susceptibility to erosion, sliding, earthquake or other geological events, are not suited to siting development due to public health and safety concerns per WAC 365-190-120. These areas include, but are not limited to erosion hazard areas, landslide hazard areas and seismic hazard areas.

19.10.305 Landslide hazard areas
– Lands that are potentially subject to risk of mass movement due to a combination of factors, including historic failures, geologic, topographic and hydrologic features, including any of the following:

1. Any slope with a vertical relief of 10 feet or more that is steeper than 15 percent with a combination of:

   A[~~a~~]. Impermeable soils, such as silt and clay, frequently interbedded with granular soils, such as sand and gravel; and

   B[~~b~~]. Springs or ground water seepage;

2. Any slope with a vertical relief of 10 feet or more that is 40 percent or steeper, except areas composed of consolidated rock;

3. Any area designated or mapped as class U, UOS or URS by the Department of Ecology Coastal Zone Atlas;

4. Any area subject to wave erosion and bluff retreat;

5. Any area which has shown movement during the Holocene epoch, from 10,000 years ago to the present, or which is underlain by mass wastage debris from that epoch;

6. Any area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by wave action;

7. Any area located on an alluvial fan, presently subject to or potentially subject to inundation by debris flows or deposition of stream-transported sediments.

NEW SECTION
19.10.430.5 Qualified professional
- A person with experience and training in the applicable field or critical area. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or a related field, and two (2) years of related work experience.

1. A qualified professional for watercourses, wetlands, and wildlife habitat conservation areas must have a degree in biology or a related field. For wetlands the qualified professional must have at least two (2) years of full-time work experience as a wetland professional, including delineating wetlands using the state or federal manuals; preparing wetland reports; conducting function assessments; and developing and implementing mitigation plans. For Fish and Wildlife Habitat Conservations Area, the qualified professional must have professional experience related to the subject species.
2. A qualified professional for preparing geotechnical reports and geotechnical design recommendations for erosion hazard areas must be a civil engineer with geotechnical certification licensed by the state of Washington.
3. A qualified professional for preparing geotechnical reports and geotechnical design recommendations for landslide hazard areas must be both a geotechnical engineer with a professional civil engineering license and a licensed geologist, licensed by the state of Washington, or geotechnical reports and geotechnical design recommendations must be prepared jointly by a licensed geotechnical engineer with a professional civil engineering license and a licensed geologist, licensed by the state of Washington;
4. A qualified professional for preparing critical aquifer recharge reports must be a professional hydrogeologist, engineer, or geologist licensed in the state of Washington.

19.10.480 Seismic hazard areas
– Lands subject to severe risk of earthquake damage as a result of seismically induced ground shaking, slope failure, settlement, tsunamis, or soil liquefaction. These conditions occur in areas underlain by soft or loose soils.

19.10.565 Warehousing and wholesale trade
– Establishments involved in the storage and/or sale of bulk goods for resale or assembly, excluding establishments offering the sale of bulk goods to the general public which is classified as a retail use.

19.10.580 Wetlands
– 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. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands. For identifying and delineating a wetland, local government shall use the approved federal wetland delineation manual and applicable regional supplements.

NEW SECTION
19.10.598 Wetland mosaic
– An area with a concentration of multiple (three or more) small wetlands, in which each patch of wetland is less than one acre; patches are less than 100 feet from each other; and areas delineated as wetland are more than 50 percent of the total area of the entire mosaic, including uplands and open water.

Chapter 19.40

PURPOSES AND 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:

A. Frequently flooded areas per BMC 19.40.240[~~,~~];

B. Geologically hazardous areas per BMC 19.40.280[~~,~~], including:

i. Erosion hazard areas,

ii. Landslide hazard areas, and

iii. Seismic hazard areas;

C. Wetlands per BMC 19.40.300[~~,~~];

D. Streams per BMC 19.40.340[~~,~~];

E. Fish and wildlife habitat conservation areas per BMC 19.40.380; and

F. Critical aquifer recharge areas per BMC 19.40.420.

19.40.020 Purposes and Goals.

1. This chapter aims to protect critical areas in a manner that preserves their ecological functions, minimizes risks to life and property, and promotes resilience in the face of climate change. The City finds that critical areas provide beneficial functions including, but not limited to water quality protection, flood attenuation, groundwater recharge, fish and wildlife habitat, climate adaptation and mitigation, recreational and aesthetic values, and food chain support. Critical areas may also pose hazards such as landslides, flooding, and erosion.

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 requirements of the Growth Management Act (Chapter 36.70.A RCW), Washington State Environmental Policy Act, (Chapter 43.21C RCW),] and the City of Burien Comprehensive Plan including provisions supporting climate resilience.

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, per BMC 19.40.060, 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.

C. Achieve no net loss of critical area functions and values, through avoidance, minimization, and mitigation of adverse impacts.

D. Provide procedures and review criteria to evaluate impacts to critical areas and ensure adequate mitigation, monitoring, and enforcement.

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.

19.40.030 Relationship to other regulations.

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.

4. Shoreline jurisdiction. For properties located within shoreline jurisdiction, and within or adjacent to a critical area or critical area buffer, reference the Ordinance 623 § 1, 2015 version of the Critical Area Ordinance published with BMC Title 20 Shoreline Master Program. Where standards in this chapter and the SMP conflict, the SMP shall govern pursuant to RCW 36.70A.480 and WAC 173-26-221. Until further amendments to BMC Title 20 take place, this iteration of Chapter 19.40 BMC shall not be used in conjunction with review of development also within the shoreline jurisdiction.

19.40.040 Applicability.

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 approximate locations and estimated extent of critical areas in Burien are based on the referenced maps below. The Director is authorized to amend Burien's critical areas map as new information concerning critical area locations such as soils, hydrology, flooding, plants, and wildlife, become available.

i. City of Burien Critical Areas Map

ii. The National Wetland Inventory

iii. City of Burien Shoreline Master Program map

iv. King County iMap

v. Any other pertinent maps the City uses as resource material. These maps are to be used as a guide to the general location and extent of critical areas.

B. Actual site conditions. Regardless of whether a critical area is shown on the 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 prepared by a qualified professional per BMC 19.40.120(2) to determine whether critical areas actually exist on or adjacent to the applicant's site, based on the definitions of critical areas in this code.

3. Critical Area Verification. If the subject property contains or is adjacent to a critical area, the applicant may be required to have a critical area study prepared pursuant to BMC 19.40.120. The critical area verification shall be reviewed in conjunction with an associated approval such as a land use decision or the issuance of a construction permit. If the Director determines that a critical area is not present, and no impacts are proposed to the adjacent critical area, no further review under this chapter is required. If the Director determines that a critical area is present, the applicant shall comply with all relevant standards and requirements of this chapter.

4. Properties that are within the following distances from a critical area may be required to provide a critical area study per BMC 19.40.120, unless the subject site is separated by a permanently altered wetland or stream buffer. Adjacency includes the following:

A. Land within two hundred (200) feet upland from a stream or lake;

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

C. Land within three hundred (300) feet of a designated fish and wildlife habitat conservation area;

D. Land within fifty (50) feet of a geologically hazardous area;

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

F. Land within the floodway or floodplain.

19.40.050 Protection of critical areas.

Any action taken pursuant to this chapter shall result in no net loss of ecological functions (inclusive of physical, chemical or biological) and value to 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 requirements per BMC 19.40.170 to 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 to functions or value of critical areas.

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, and BMC 19.40.120. Best available science shall reflect the most current scientific understanding and, where applicable, incorporate projected impacts of climate change, including increased rainfall intensity, hydrologic changes, sea level rise, and landslide frequency.

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~~]shall give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat, such as salmon and bull trout.

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.

19.40.070 Exemptions and exceptions.

1. Purpose and applicability. This section identifies activities that are exempt or partially exempt from the provisions of this chapter. All exempt and partially exempt activities shall use best management practices (BMPs) per the 2021 King County Surface Water Design Manual (KCSWDM), as amended by BMC 13.10.020, and shall avoid or minimize impacts to critical areas and their buffers. Restoration of non-exempted alterations or damage to a critical area or its buffer may be required.

2. Applicable review and approval process shall be followed below:

A. Exempt activities. Activities identified as exempt per BMC 19.40.070.3 shall be processed in the following manner:

i. Proposal for exempt activities that are part of an associated permit shall be reviewed concurrently with the related land use or construction permit; or

ii. Proposals without an associated permit may submit a written request for exemption to the Director that describes the activity and states the exemption in this section that applies. If the exemption is approved, it shall be documented and placed on file with the department. The Director may condition an exemption to ensure consistency with this chapter.

B. Partial exemptions. Activities identified as "partially exempt" per BMC 19.40.070.4 shall be processed as an administrative decision pursuant to BMC 19.40.140. Proposals for partial exemptions may require technical studies and mitigation and may be conditioned upon approval to ensure consistency with this chapter.

i. Proposals that are part of an associated permit shall be reviewed concurrently with the related land use or construction permit; or

ii. Proposals without an associated permit shall be reviewed and approved prior to any activities begin.

3. 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 and require remedial or preventative action within too short a time frame to comply with the requirements of this chapter, provided that:

i. Any alteration undertaken as an emergency response shall be reported to the Department of Community Development as soon as practical but no later than seven (7) business days after emergency conditions emerge. 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;

ii. Applicants shall apply for the appropriate permit as determined by the Director. Restoration, rehabilitation, or replacement of the critical area shall be initiated within one (1) year of the emergency date. Emergency work shall be approved by the City; and

iii. After the emergency and/or hazard is secured, the person, agency, or authorized representative undertaking the action shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical areas report and mitigation plan. The person, agency, or authorized representative undertaking the action shall apply for review, and the alteration, critical areas report, and mitigation plan shall be reviewed by the Department in accordance with the review procedures contained herein.

B. Operation, maintenance, remodeling, repair of existing public facilities. Routine operation, maintenance, remodeling, or repair of the following existing improvements are exempt provided any such activities do not involve the expansion of improvements into previously unimproved areas.

i. Public facilities, parks, and open spaces;

ii. Public streets and City-approved private roads;

iii. Public and quasi-public utilities (water, sewer, storm, electric, natural gas, communications) when located within improved rights-of-way or previously developed easements.

C. Maintenance and repair of existing structures. Routine maintenance, repair, or structural alteration of existing public or private structures that does not expand the structure's footprint or increase its nonconformance with critical area standards.

D. Minor site investigations. Surveying, soil logs, percolation tests, or other investigative work necessary for permit submittals that do not require construction of new roads or significant vegetation removal. Disturbed areas shall be immediately restored.

E. Normal and routine maintenance, repair, renovation or structural alteration, to not include expansions of public and private structures not listed in this section, in existence on January 14, 2003.

F. Activities in non-regulated areas. Activities located within Critical Aquifer Recharge Areas that are not specifically regulated under this chapter.

G. Vegetation management and voluntary restoration within critical area buffers, provided the activity is intended to preserve or enhance ecological functions and does not involve grading, filling, or use of heavy equipment, (unless approved by the Director).

i. Selective vegetation removal is allowed where:

a. Removal is limited to non-native or noxious plant species, including species listed by the Washington State or King County Noxious Weed Board. This is limited to perennials, shrubs, or trees under 6 inches diameter at standard height using hand tools or targeted herbicide by a licensed contractor with certification as needed from the Washington Department of Ecology and the Washington Department of Agriculture applications in accordance with published best management practices;

b. The total removal area does not exceed one thousand (1,000) square feet or seven percent (7 %) of the lot area, whichever is greater, unless otherwise authorized through a vegetation management plan under BMC 19.40.180;

c. Pruning of vegetation does not exceed ten percent (10%) of the live canopy, which shall not include tree topping, and individual pruning cuts do not exceed six (6) inches in diameter;

d. All disturbed areas are stabilized and, where applicable, replanted with vegetation per BMC 19.40.180.

e. Vegetation removal may be subject to seasonal conditions per BMC 19.40.200(3), which may restrict removal between the months of October through May.

ii. Voluntary restoration or enhancement is allowed where it includes:

a. Planting native vegetation;

b. Installing habitat features such as large woody debris or native snags within the critical area buffer.

4. Partial Exemptions. The following activities require written approval from the director and may proceed without full critical area review only if the listed conditions are met. Technical studies or mitigation may be required.

A. Emergency removal of hazard trees is permitted under this subsection, provided the tree poses a high or extreme risk as documented by a certified arborist using the International Society of Arboriculture Tree Risk Assessment Qualification (TRAQ) method in its most current form. A retroactive vegetation management plan

shall be submitted within two weeks of tree removal. Snags or large woody debris shall be created where feasible, and stumps and root systems should remain in place to maintain slope stability. Replanting shall occur in accordance with BMC 19.40.180 (Vegetation Management Plan).

B. New accessory structures and additions to structures that do not exceed a cumulative impervious surface addition after January 14, 2003, of one thousand (1,000) square feet or seven percent (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.

C. 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;

D. Public and private pedestrian trails, except in streams, wetlands, fish and wildlife habitat conservation areas, or within their buffers, unless otherwise allowed under this chapter. Trails within buffers may be permitted if consistent with BMC 19.40.320 (Wetlands), BMC 19.40.360 (Streams), and BMC 19.40.400 (Fish and Wildlife Habitat Conservation Areas). The Director may require a critical area study to ensure the trail minimizes ecological impacts and avoids habitat fragmentation, 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.

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

5. Exceptions.

A. Public agency and utility exception. An 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.

i. 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 Chapter 19.65 BMC.

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

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

b. The proposal minimizes the impact on critical areas; and

c. The application of this chapter would unreasonably restrict the ability to provide utility services to the public; and

d. The proposal meets the decision criteria in BMC 19.40.100.

B. Reasonable use exception. When no reasonable use of a property can be made without violating the standards of this chapter, and strict application of the code would result in a taking of private property without just compensation, 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. The intent of this provision is to allow reasonable economic use of the property while minimizing environmental impacts to the maximum extent practicable. A reasonable use exception request is subject to the following:

i. An application for a reasonable use exception shall be processed using the Type 1 review process. If disturbance exceeds allowed thresholds in subsection BMC 19.40.070(5), the application shall be reviewed using the Type 2 review process pursuant to Chapter 19.65 BMC. An application for a reasonable use exception shall be made to the city and shall include but not limited to:

a. A critical area study, prepared by a qualified professional pursuant to BMC 19.40.120, including mitigation plan;

b. Site plans and project documents identifying the extent of disturbance, alternatives considered, and environmental impacts;

c. A narrative demonstrating how the proposal meets BMC 19.40.070(5)(C); and

d. Environmental documents required under BMC Title 14, State Environmental Policy Act.

e. If necessary to ensure compliance with this chapter, the Director may require additional information from the applicant, separate from the critical area study.

ii. A reasonable use exception shall not authorize a use or authorize an intensity not otherwise permitted by the underlying zoning per Chapter 19.15 BMC.

iii. The maximum amount of disturbance shall be limited to twenty percent (20%) of lot area, or 2,500 square feet, whichever is greater. Disturbance includes building footprints, the minimum walkways and driveways needed to access the property, associated utilities, and a ten (10) foot buffer around the building footprint. The location of allowable disturbance shall be that which will have the least impact on the critical area and the critical area buffer given the characteristics and context of the site, critical area, and critical area buffer.

iv. On sites where the approved maximum amount of developable area is not immediately adjacent to a public or private road, and an extended driveway is required by necessity which extends greater than twenty (20) feet in length to reach the developable area to the access point, may be excluded from the maximum disturbance. Extended driveways that result in critical area and/or buffer impacts are subject to mitigation sequencing.

C. Reasonable use exception review criteria. The Director's or Hearing Examiner's decision shall be based on the following criteria:

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

ii. The proposed use is the minimum necessary to allow reasonable use of the property and there is no other feasible alternative 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;

iv. The inability to derive reasonable use is not the result of an action or actions taken by the applicant or that of a previous property owner, such as by altering lot lines that result in an undevelopable condition;

v. The proposed development is on a parcel meeting the definition of Lot per Chapter 19.10 BMC; and

vi. The proposal meets the decision criteria in BMC 19.40.100.

vii. The Hearing Examiner may approve a higher disturbance limit via Type 2 review per BMC 19.40.070 in addition to the criteria established in BMC 19.40.100 and BMC 19.65.070 only if:

a. Mitigation fully addresses impacts, and the proposal employs best available science to minimize adverse effects; or

b. The higher disturbance limit is necessary to comply with other applicable state or federal regulations.

19.40.080 Nonconforming uses and structures.

1. Applicability. Uses, buildings, 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 structures and are subject to the following, superseding the provisions of Chapter 19.55 BMC, Non-Conformance.

2. Discontinuance. If a nonconforming structure is discontinued for a period of twelve (12) months with the intention of abandoning that structure, any subsequent modification shall thereafter conform to the regulations of this part. Discontinuance of a nonconforming structure for a period of twelve (12) months or greater constitutes prima facie evidence of an intention to abandon.

3. Damage or destruction. If a legal nonconforming structure is partially or fully damaged or destroyed due to accident, act of nature, or similar involuntary occurrence, the structure may be repaired or reconstructed if:

A. The casualty was not intentionally caused by the applicant or owner of the structure;

B. A complete permit application for repair or reconstruction is be submitted within one (1) year of the occurrence of damage or destruction, unless otherwise approved by the City; and

C. Areas of temporary disturbance resulting from the reconstruction shall be restored pursuant to a vegetative management plan approved by the Director under BMC 19.40.180.

4. Continuation. If no modifications to a nonconforming structure are proposed, then the structure may continue without coming into compliance with the regulations of this chapter.

5. Expansion or modification. Expansion or modification of a nonconforming structure may only be allowed if the following conditions are met:

A. The expansion is located outside of critical areas and associated buffers;

B. The expansion does not extend further into the buffer than the existing structure; or

C. The expansion is vertical (adding upper stories) or occurs within an already improved or disturbed portion of the site (such as lawn, garden, patio, or other altered area); and

D. Expansions over 500 square feet include buffer enhancement equal in area to the expansion, completed under a vegetative management plan approved in accordance with BMC 19.40.180; and

E. A critical areas study demonstrates that the expansion will result in no net loss of critical area functions or values, as determined by the Director.

19.40.085 Code enforcement.

1. Violations shall be subject to the City's code enforcement procedures and penalties under Chapter 1.15 BMC. In addition to any enforcement action or determinations pursuant to Chapter 1.15 BMC, enforcement violations shall meet the following requirements:

A. Unauthorized alteration, construction, development activity, use, land surface modification or other disturbance to a critical area or buffer shall cease immediately. All disturbances shall be rectified and restored consistent with an approved correction plan through the applicable review process;

B. A critical area study (BMC 19.40.120), prepared by a qualified critical area professional and approved by the City, shall be submitted to the City within thirty (30) calendar days of the enforcement notice from the City, in conformance with this chapter unless otherwise approved by the City;

2. The critical area review will be an administrative decision required to comply with BMC 19.40.090 and all other relevant requirements of this chapter. The Director shall review and approve the critical area study based on the regulations in this chapter and inspect the restoration after installation. The City may require the applicant to fund City peer review to inspect the restoration plan, inclusive of mitigation per BMC 19.40.170 and BMC 19.40.180 and other applicable requirements, depending on the nature and extent of disturbance.

3. The City may require a monitoring and maintenance plan for approval by the Director depending on the nature and extent of the disturbance.

4. The City may require a performance and maintenance/monitoring financial security pursuant to BMC 19.40.230 for restoration depending on the nature and scope of the disturbance. If a security is required, the security shall be on a form and in an amount determined by the Director.

5. All related corrections and improvements shall be completed within ninety (90) calendar days from the date of the enforcement notice, unless otherwise specifically approved by the Director.

6. The requirements for a critical area dedication must be met pursuant to BMC 19.40.220; and

7. For repeat violators, the City is authorized to require monitoring and maintenance to extend beyond requirements of BMC 19.40 to be funded by the violator.

8. Unpermitted impacts to trees within critical areas shall be mitigated according to BMC 19.40.170.2 and BMC 19.40.180, and fines per BMC 19.26.160(3).

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 which replicates the original vegetation in species, sizes and densities per standards and requirements of BMC 19.40.180; 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.

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 shall be reviewed and approved through a critical area review, unless exempted pursuant to BMC 19.40.070. Prior to submitting an application for critical area review, the applicant shall schedule a City of Burien pre-application memo 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 or adjacent to (as defined per BMC 19.40.040(3)) the subject property and confirm its nature and type;

C. Evaluate the critical area study;

D. Determine whether the development proposal conforms to the purposes and 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, safety and welfare concerns, consistent with the goals, purposes, objectives and requirements of this chapter.

3. Submittal requirements. The Director shall prepare written submittal requirements, including but not limited to technical studies, site plan, vegetation management plan, and mitigation requirements for an application to be complete. Applications for critical area review shall be submitted with all of the following information:

A. A written critical area study per 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. Applicable filing fees.

C. If necessary to ensure compliance with this chapter, the Director may require additional information from the applicant, separate from the critical area study.

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 per BMC 19.40.170 and the critical area study per BMC 19.40.120; and

E. The proposal protects the critical area functions and value consistent with the best available science per BMC 19.40.060 and achieves no net loss of critical area functions and values pursuant to BMC 19.40.050.

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.

CRITICAL AREA STUDY

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.

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).

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. See BMC 19.40.060 'Best available science'.

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;

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 that include past, present, and reasonably foreseeable future actions to facilitate the goal of no net loss of critical areas. Such impacts shall include those to wildlife, habitat, and migration corridors; water quality and quantity; and other geologic or watershed processes that relate to critical area condition, process, or service to critical areas, their buffers and other properties resulting from the proposal;

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

I. When impacts are unavoidable, a mitigation plan per BMC 19.40.170(3) inclusive of a vegetation mitigation plan per BMC 19.40.180, where applicable;

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.

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, including projects using the public agency and utility exemption per BMC 19.40.070(5)(A), be processed using the Type I review process and timing described in Chapter 19.65 BMC. Determinations for all other types of proposals shall be processed as an administrative decision, except for reasonable use exceptions where the maximum disturbance limit is proposed to be exceed, which results in a Type 2 decision by the Hearing Examiner. The City's goal is to issue the administrative decision within sixty (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.

19.40.150 Appeal of determination.
A critical area determination issued using the Type 1 or Type 2 review process may be appealed using their respective appeal procedures. Critical area determinations issued using a Type 2 review process may be appealed using the appeal procedures for a Type 2 decision (Chapter 19.65 BMC). 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.

GENERAL CRITICAL AREA REQUIREMENTS

19.40.170 Mitigation requirements.
1. General. 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.

A. Mitigation for hazard tree removal or other vegetation loss within critical areas or their buffers is required pursuant to BMC 19.40.180.

B. Mitigation for wetland impacts are required for wetlands that are exempt from the avoidance and minimization measures pursuant to BMC 19.40.300.

2. 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 area is proposed, applicants shall follow the 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. Mitigation plan. When current, permittee-responsible mitigation is proposed, the applicant shall submit for approval by the City a mitigation plan as part of the critical areas study per BMC 19.40.120. Together, the critical area study and mitigation plan 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, resulting in no net loss of ecological function. The mitigation plan shall be prepared by a qualified professional, include all applicable content required by BMC 19.40.120, and include the following minimum elements:

A. Name, qualifications, and contact information of the primary mitigation plan author(s);

B. Clear goals, objectives, and performance standards.

C. As needed, information including but not limited to site preparation methods, soil amendments, construction sequencing, allowed work windows, other limitations based on habitat or slope sensitivity, and timing of plant installation;

D. A monitoring and maintenance plan including recommended annual monitoring protocols as well as short- and long-term maintenance needs;

E. A vegetation management plan per BMC 19.40.180 may be required as part of a mitigation plan to achieve no net loss.

F. A contingency plan identifying potential courses of action, adaptive management, or corrective measures to be taken if a compensatory mitigation site does not meet performance standards;

G. A bond estimate covering installation, maintenance, and monitoring to ensure completion and successful implementation of proposed mitigation pursuant to BMC 19.40.230;

H. Scaled plan sheets that shall contain, at a minimum:

i. Mapped, ground-verified edges of critical areas and associated buffers, proposed areas of impacts, and location of proposed compensatory mitigation actions;

ii. Existing topography, ground-verified, at two (2) foot contour intervals in the zone of proposed compensatory mitigation actions if grading is proposed in the mitigation areas;

iii. Conditions expected from the proposed actions, including future vegetation community types (e.g., Cowardin class), hydrogeomorphic classes, and hydroperiods;

iv. Critical area fencing and signage, if required, in accordance with BMC 19.40.210; and

iv. Future critical area buffers and building setback areas for on-site critical areas, including compensatory mitigation areas. A planting plan, consisting of a native plant community appropriate for the ecoregion, including:

a. The number of each species by proposed community type and/or hydroperiod;

b. Size and type of plant material to be installed; and

c. Spacing of plants and typical clustering patterns.

4. Mitigation timing. 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. Mitigation shall be completed in advance of disturbance or immediately following disturbance and prior to use or occupancy of the activity or development causing the 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 (5) years.

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.

C. Mitigation monitoring reports shall be submitted annually to the City and due December 31 of the given calendar year.

6. Mitigation location. Mitigation actions that are on-site and in-kind and restore impacted critical area types and their functions are preferred. 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 functions than the impacted site; 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 functions have been established and strongly justify location of mitigation at another site;

ii. Credits from a state-certified mitigation bank are used as compensation, and consistent with the criteria in subsection (7)(B)(i) of this section; or

iii. Fees are paid to an approved in-lieu fee program to compensate for the impacts, and consistent with the criteria in subsection (7)(B)(ii) of this section.

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 per BMC 19.40.160 and be likewise protected pursuant to BMC 19.40.220.

7. Responsible party for mitigation site.

A. Permittee-responsible mitigation: The applicant is responsible for the implementation, monitoring, and success of the mitigation pursuant to this chapter.

i. Concurrent mitigation. Mitigation implemented at the same time permitted impacts are occurring. Permittee is responsible for the implementation, monitoring, and success of the mitigation pursuant to this chapter. Concurrent mitigation may occur at the site of the permitted impacts or at an offsite location, if approved, usually within the same watershed.

ii. Advance Mitigation Program. Advance mitigation is designed to compensate for impacts expected to occur in the future. Successfully completing compensation before impacts occur can reduce or eliminate the temporal loss of critical area function. The City does mitigation on City-owned property as mitigation credit either for City critical area projects or at the discretion of the City for other public agencies with critical area projects. The advanced mitigation program shall be implemented pursuant to a locally approved plan and shall be consistent with applicable federal and state rules, and state water quality regulations.

B. Programmatic mitigation. Programmatic mitigation is an approach in which a third-party sponsor provided compensatory mitigation. The sponsor accepts payment from the permittee for their critical area impacts. In exchange, the sponsor assumes responsibility for successful compensation.

i. Mitigation Banks. Credits from a mitigation bank certified under Chapter 173-700 WAC may be used to compensate for impacts located within the service area specified in the mitigation bank instrument if all the following are met:

a. The Director determines that it would provide appropriate compensation for the proposed impacts;

b. The proposed use of credits is consistent with the terms and conditions of the mitigation bank instrument; and

c. Mitigation ratios are consistent with ratios specified in the mitigation bank instrument.

ii. In-lieu Fee (ILF) Mitigation. Credits from an approved ILF program may be used when all the following apply:

a. The Director determines that it would provide appropriate compensation for the proposed impacts;

b. The proposed use of credits is consistent with the terms and conditions of the approved ILF program instrument;

c. Projects using ILF credits shall have debits associated with the proposed impacts calculated by the applicant's qualified professional using the credit assessment method specified in the approved instrument for the ILF program; and

d. The impacts are located within the service area specified in the approved ILF instrument.

19.40.180 Vegetation management plan.

1. Purpose. The purpose of a vegetation management plan is to ensure that any proposed clearing, pruning, or vegetation removal within a critical area or its buffer maintains or improves ecological function, avoids unnecessary impacts, and meets the mitigation sequencing requirements of BMC 19.40.170.2. A vegetation management plan is required where vegetation retention or replacement is necessary to meet the standards of this chapter, including proposals involving tree removal, hazard tree mitigation, noxious species clearing exceeding exemption thresholds, or other buffer modifications not otherwise exempt under BMC 19.40.070.

2. Critical area impacts associated with proposed development shall comply with the critical area study and mitigation plan requirements per BMC 19.40.120 and BMC 19.40.170, unless exempted per BMC19.40.070. A qualified tree professional producing a vegetation management plan for any relevant vegetation mitigation shall meet the definition of BMC 19.10.432.

3. 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. This includes, but is not limited to, proposed tree removal, pruning beyond exempt thresholds, vegetation removal, or vegetation management and voluntary restoration per BMC 19.40.070.

4. Normal nondestructive pruning and trimming of vegetation for maintenance purposes shall not be considered alteration for the purposes of this section. provided pruning of vegetation does not exceed ten (10) percent of the live canopy, does not include tree topping, and individual pruning cuts do not exceed six (6) inches in diameter. Pruning allowed without a vegetation management plan shall be performed in a manner that ensures continual survival of the vegetation and adheres to ANSI A300 pruning standards.

5. The vegetation management plan shall incorporate all City requirements relating to protection, maintenance, and planting of native vegetation unless the Director approves substitute vegetation with the same or better ecological functions or values due to site considerations. The plan shall include, at minimum:

A. A site plan showing location and extent of vegetation removal or alteration;

B. Description of existing site conditions;

C. Clear goals and objectives for the vegetation work;

D. Short- and long-term maintenance needs;

E. Allowed work windows and limitations based on habitat or slope sensitivity;

F. Tree protection measures for retained trees in accordance with ANSI A300 or BMC 19.26.090;

G. A planting plan, consisting of a native plant community appropriate for the ecoregion, including the number of each native species proposed, size and type of plant material to be installed, and plant spacing; and

H. Where appropriate, the creation of snags should be encouraged and large woody debris left in place to preserve habitat function.

6. The vegetation management plan 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. 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.

7. The vegetation management plan may be incorporated into a temporary erosion and sediment control plan (TESC), mitigation plan, or landscaping plan where either of these plans is required by other laws or regulations.

8. Vegetation within critical areas and their buffers may be altered only upon prior written approval by the Director. A report by a qualified professional shall be required to address alternatives, to ensure that the proposed alteration will not be detrimental to surrounding properties and to the functions and values of the associated critical area. Hazard tree removal proposals shall include documentation from a qualified tree professional using the International Society of Arboriculture Tree Risk Assessment Qualification (TRAQ) method in its most current form. Replanting shall result in no net loss of functions and values and result is similar area of vegetation coverage within three years.

9. 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 ecological functions or values due to site considerations or is more climate adapted to the region. If the alteration was unauthorized by the City, the Director may also impose penalties pursuant to Chapter 1.15 BMC per BMC 19.40.085.

10. A Forest Management Plan pursuant to BMC 19.26.060(7) can be approved in lieu of a vegetation management plan at the discretion of the Director provided the Forest Management Plan also complies with this chapter.

19.40.190 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 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) does not apply.

2. Building setback. Except in critical aquifer recharge areas, geologically hazardous area, and seismic hazard areas, buildings shall be set back fifteen (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. The following may be allowed in the building setback area:

A. Landscaping;

B. Uncovered decks, less than eighteen (18) inches above finished grade;

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 per Chapter 13.10 BMC.

19.40.200 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 Director may restrict construction to a construction season. If a construction season is established, it may be subsequently modified as necessary by the Director.

3. 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.

4. 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 vegetation management plan per BMC 19.40.180 to the Director for review and approval. Following approval, the applicant shall be required to implement the plan;

C. Subdivisions of land where wetlands and/or associated buffers are present are subject to the following:

i. Land that is located wholly within a wetland and/or wetland buffer shall not be subdivided.

ii. Land that is located partially within a wetland and/or wetland buffer may be subdivided provided that an accessible and contiguous portion of each new lot is:

a. Located outside of the wetland and buffer; and

b. Meets the minimum lot size requirements of Chapter 19.15 BMC.

5. 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.

19.40.210 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 Director may require the outer edge of any required critical area buffer, tract or protective easement to 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 three (3) feet and six (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.

2. Permanent barrier or fencing. Permanent split rail fencing and/or dense armored vegetation (examples include, but are not limited to, native rose and Oregon grape) shall be required at the outer edge of the critical area buffer under the following circumstances.

A. Development of a park;

B. Approval of a subdivision

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.

3. The Director may require critical area signs to be mounted on posts or trees to clearly delineate the protected area where the edge of a critical area buffer terminates within a continuous forest or natural open space, in lieu of fencing and/or dense vegetation.

4. Signs. Development proposals approved by the City 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 fifty (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.

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, the City shall require that critical areas and their buffers, except for critical aquifer recharge areas and seismic hazard areas, 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. The protected tract or easement shall include a map and legal description of the site, critical area, and buffer in forms acceptable to King County. 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.

19.40.230 Bonds.

1. Performance Bonds. If the applicant demonstrates that seasonal requirements (e.g. waiting to plant to take advantage of seasonal rain), or other circumstances beyond their control, prevent completion of the mitigation prior to final approval, the applicant may post a performance bond (or other security instrument) equal to at least one hundred fifty (150) percent of the total cost to complete the mitigation project, which guarantees all required mitigation measures will be completed no later than the time established by the City in accordance with this chapter.

2. Maintenance/Monitoring Bonds. The applicant whose development proposal is subject to a mitigation plan must post a maintenance/monitoring bond (or other security instrument) equal to at least one hundred fifty (150) percent of the estimated maintenance and monitoring cost in an amount determined sufficient to guarantee satisfactory workmanship, materials, and performance of structures and improvements allowed or required by this chapter for a minimum period of five years.

3. Bonds or other security instruments must be in a form and amount approved by the Director and must remain in effect until the Director determines in writing that performance and maintenance standards have been met.

4. State agencies and local governments are exempt from bonding requirements pursuant to RCW 35.21.470.

5. Enforcement of Bonds. Depletion or collection of bond funds does not discharge the obligation of an applicant or violator to complete the required mitigation or restoration. If additional work is required after the five (5)-year maintenance period is over, the bonding requirement may be extended per the Director. 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.

FREQUENTLY FLOODED AREAS

19.40.240 Frequently flooded areas – Designation.

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, coastal storm surge, high ground water, and chronic drainage flooding;

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, including those anticipated to be affected by sea level rise or climate-related increases in flood frequency.

2. Frequently flooded areas shall include the following:

A. Special Flood Hazard Area (100-year floodplain) as designated on current FEMA Flood Insurance Rate Maps (FIRM);

B. Flood fringe as defined in FEMA and City-adopted flood studies;

C. Zero-rise floodway and FEMA-designated floodway;

D. Federal Emergency Management Agency ("FEMA") floodway;

E. Areas subject to flooding due to high groundwater or chronic drainage issues identified in City-adopted studies; and

F. Other flood hazard areas identified through local or regional studies, including areas at risk from extreme precipitation events or coastal storm surge.

3. The City of Burien shall determine 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. Updated FEMA maps, RiskMAP products, and City-adopted climate hazard maps shall also be used where available to account for projected changes in flood frequency, magnitude, and extent due to climate change.

19.40.250 Frequently flooded areas – General Standards.

1. For the purposes of this section and BMC 19.40.260 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. All development within frequently flooded areas shall comply with the provisions of Chapter 15.55 BMC, Flood Damage Prevention, as amended, and the minimum requirements of the National Flood Insurance Program (NFIP), as amended. Development shall also be sited and designed to minimize flood damage under current and projected future flood conditions, avoid the need for new structural flood protection where feasible, and maintain or enhance natural flood storage, conveyance, and habitat functions.

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

4. 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.

5. 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.

6. Prior to approving any permit for alterations in frequently flooded area, the city of Burien shall determine that all permits required by state or federal law have been obtained.

19.40.260 Floodway – Development standards and permitted alterations.

1. Provided they comply with the NFIP minimum requirements and do not adversely affect floodplain storage, conveyance, or habitat function 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;

C. Substantial improvements of existing residential structures meeting the requirements for new residential structures in BMC 19.40.260(4); and

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

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

3. 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.

4. 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.

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

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;

B. Construction of sewage treatment facilities shall be prohibited; and

C. All utility and infrastructure design shall consider projected changes in flood frequency, magnitude, and extent due to climate change and shall be constructed to maintain function during projected future flood conditions.

6. Critical facilities shall not be allowed within the zero-rise floodway except as provided in subsection 8 of this section.

7. 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.

8. 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, designed to avoid, minimize, and mitigate impacts to floodplain and habitat functions, and consistent with NFIP standards and FEMA ESA compliance requirements. 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 King County Surface Water Design Manual per BMC 13.10.020;

E. Boat launches and related recreation structures;

F. Bridge piers and abutments; and

G. Other fisheries enhancement or stream restoration projects.

GEOLOGICALLY HAZARDOUS AREAS

19.40.290 Geologically hazardous areas – Development standards and permitted alterations.

1. 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.

2. Standards – Erosion hazard areas and landslide hazard areas. Development in an erosion hazard area or within fifty (50) feet of 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 in accordance with the standards and requirements of BMC 19.40.180, 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. A Geotechnical Engineer or Geologist, licensed in the State of Washington, confirms that 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. For a buffer of between zero (0) feet and twenty-five (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, with factors of safety of at least 1.5 and 1.1 for static (non seismic) and pseudostatic (seismic) conditions; 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.

iii. BMC 19.40.290(2)(B)(ii) does not apply to projects within the Shoreline designations and is not considered part of the SMP. Per BMC 20.30.025(2)(a)(ii), a buffer reduction of less than twenty-five (25) feet is prohibited within the Shoreline jurisdiction without a shoreline variance in BMC 20.35.040 and compliance with all requisite standards and restrictions of Ordinance 623 § 1, 2015 version of the Critical Area Ordinance published with BMC Title 20 Shoreline Master Program.

C. Erosion control. An erosion control or Temporary Erosion and Sediment Control (TESC) 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 fifty (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~~]shall 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 shall 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.

x. Applicant shall also meet the requirements established per BMC 19.40.290.2.B.ii[~~i~~].

xi. Development is not permitted within landslide or erosion hazard areas per BMC 20.30.025(2)(a)(ii) without a shoreline variance pursuant to BMC 20.35.040, and in compliance with all requisite standards and restrictions of this Chapter.

E. Landscaping. The disturbed area of a site shall be landscaped in accordance with BMC 19.40.180 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 native to the Puget Sound unless the Director approved substitute vegetation with the same or better ecological functions or values due to site considerations or is more climate adapted to the region.

3. 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, inclusive of clearing, grading, drainage, and utilities, prepared by a 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 19.40.180 inclusive of mitigation measures necessary 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. 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;

H. 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.

WETLANDS

19.40.300 Wetlands – Designation and Classification.

1. Intent. Wetlands provide functions and values including but not limited to fish and wildlife habitat, flood storage, water quality, climate adaption and mitigation, 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 pursuant to BMC 19.40.050.

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. Wetland delineations are valid for five years. However, the City may require review of delineated wetland conditions whenever physical circumstances have markedly and demonstrably changed on the site or within three hundred (300) feet. Wetland delineations will be documented on a ground-verified map using either professional surveying methods or an equivalent professional method using GPS with sub-meter accuracy. [RCW 36.70A.175, 90.58.380 (1995); WAC 173-22-035 (2011)]

B. Where vegetation has been removed or substantially altered, a wetland shall be determined by the presence or evidence of hydric or organic soil, and any other robust documentation, such as detailed aerial photography of wetland vegetation.

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

3. Wetland Rating and Classification.

A. Wetlands shall be classified into Category I, Category II, Category III and Category IV according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington, Washington State Department of Ecology publication number 23-06-009, 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.

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

B. Wetland rating categories shall not recognize illegal modifications.

C. Category III and IV wetlands less than 1,000 square feet that meet the following criteria are not subject to the avoidance and minimization requirements of the mitigation sequence and do not require buffers. These wetlands may be filled if impacts are fully mitigated based on the remaining actions in BMC 19.40.170(2)(C) through (F).

i. Are not associated with riparian areas or their buffers;

ii. Are not associated with shorelines of the state or their buffers;

iii. Are not part of a wetland mosaic;

iv. Do not score six (6) or more points for habitat function based on the wetland rating system; and

v. Do not contain a priority habitat or priority area for a priority species identified by Washington Department of Fish and Wildlife and do not contain a state or federally listed species or their critical habitat.

19.40.310 Wetlands – Development standards.

1. General Requirements.

A. Any alterations to a wetland and/or wetland buffer shall require mitigation as described in BMC 19.40.170 and 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, or allowed as an exempt activity pursuant to BMC 19.40.070;

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

D. No vegetation removal, including mowing, shall be allowed in a wetland or wetland buffer unless authorized by the Director through BMC 19.40.180, or allowed per BMC 19.40.070;

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 mitigation plan approved by the Director to protect and enhance the wetland's water quality; and

ii. Fencing located at the buffer edge, consistent with BMC 19.40.210(2) and signage consistent with BMC 19.40.210(3).

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. Wetland buffers shall be vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with noxious weeds that do not perform needed functions, the buffer shall either be planted to create the appropriate native plant community per standards and requirements of BMC 19.40.180 or be widened to ensure that the buffer provides adequate functions to protect the wetland.

C. The buffers in the following table are based on the category of wetland and sum of the habitat score as determined by a qualified wetland professional and shall be established from the wetland edge as delineated and market in the field. Standard buffers in the table below are without minimizations measures/habitat corridors, while mitigated buffers in the table below provide minimizations measures/habitat corridors.

Table 19.40.310.2.C
Wetland Buffers

Wetland Category	**Habitat Score 3-5**		**Habitat Score 6-7**		**Habitat Score 8-9**	
	Standard	Mitigated	Standard	Mitigated	Standard	Mitigated
Category I	100	75	150	110	300	225
Category I: Bogs and Wetlands of High Conservation Value	250	190	250	190	250	190
Category I: Estuarine and	200	150	200	150	200	150

Wetlands in Coastal Lagoons						
Category II	100	75	150	110	300	225
Category II: Estuarine and Wetlands in Coastal Lagoons	150	110	150	110	150	110
Category III	80	60	150	110	300	225
Category IV	50	40	50	40	50	40

D. Impact minimization measures in the following table are required for developments proposing to use the mitigated buffer widths in the previous table. The applicant shall implement as many measures as practical and applicable.

E. For wetlands that score six (6) points or more for habitat function, use of the mitigated buffers widths is allowed if a habitat corridor is provided consistent with the following criteria:

i. A relatively undisturbed, vegetated corridor at least one hundred (100) feet wide is protected between the wetland and:

a. A legally protected, relatively undisturbed and vegetated area (e.g., Priority Habitats, compensatory mitigation sites, wildlife areas/refuges, national, county, and state parks where they have management plans with identified areas designated as Natural, Natural Forest, or Natural Area Preserve), or

b. An area that is the site of a Watershed Project identified within, and fully consistent with, a Watershed Plan as defined by RCW 89-08-460, or

c. An area where development is prohibited according to the provisions of the local shoreline master program, or

d. An area with equivalent habitat quality that has conservation status in perpetuity, in consultation with WDFW.

ii. The corridor is permanently protected for the entire distance between the wetland and the shoreline or legally protected area by a conservation easement, deed restriction, or other legal site protection mechanisms.

iii. Presence or absence of the shoreline or Priority Habitat must be confirmed by a qualified professional or shoreline Administrator.

iv. The Impact Minimization Measures are implemented, as applicable, to minimize the impacts of the adjacent land uses.

v. Presence of a potential habitat corridor must be determined by a qualified professional.

F. For wetlands that score six (6) points or more for habitat function, when a habitat corridor is not present, mitigated buffer widths shall be allowed through demonstrated use of applicable measures listed in the Impact Minimization Measures table. The absence of a potential habitat corridor must be determined by a qualified professional.

Table 19.40.310.2.F
Wetland Impact Mitigation Measures

Example of disturbance	Activities and uses that cause disturbances	Examples of measure to minimize impacts
Lights	• Parking lots • Commercial/Industrial • Recreation (e.g., athletic fields) • Residential • Agricultural buildings	• Direct lights away from wetland • Only use lighting where necessary for public safety and keep lights off when not needed • Use motion-activated lights • Use full cut-off filters to cover light bulbs and direct light only where needed • Limit use of blue-white colored lights in favor of red-amber hues • Use lower-intensity LED lighting • Dim light to the lowest acceptable intensity
Noise	• Commercial/Industrial • Recreation (e.g., athletic fields, bleachers, etc.) • Residential • Agriculture	• Locate activity that generates noise away from wetland • Construct a fence to reduce noise impacts on adjacent wetland and buffer • Plant a strip of dense shrub vegetation adjacent to wetland buffer
Toxic runoff	• Parking lots • Roads • Commercial/Industrial • Residential areas • Landscaping • Agriculture	• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150 feet of wetland • Apply integrated pest management
Stormwater runoff	• Parking lots • Roads • Commercial/Industrial • Residential areas • Recreation • Landscaping/lawns • Other impermeable surfaces, compacted soil, etc.	• Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow or sheet flow from lawns that directly enters the buffer • Infiltrate or treat, detain, and disperse new runoff from impervious surfaces and lawns
Pets and human disturbance	• Residential areas • Recreation	• Use privacy fencing • Plant dense native vegetation to delineate buffer edge and to discourage disturbance • Place wetland and its buffer in a separate tract • Place signs around the wetland buffer every 50 to 200 feet, and for subdivisions place signs at the back of each residential lot • When platting new subdivisions, locate greenbelts, stormwater facilities, and other lower-intensity uses adjacent to wetland buffers
Dust	• Tilled fields • Roads	• Use best management practices to control dust

G. If an applicant does not apply the minimization measures or does not provide a protected corridor when one is available, then the standard buffers shall apply.

H. Any wetland restored, relocated, replaced or enhanced because of a wetland alteration shall retain the existing wetland category which shall apply the associated buffer of the highest habitat score pursuant to an approved compensatory mitigation plan set forth in BMC 19.40.330.

I. 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 (BMPs) and erosion-control measures will not prevent adverse impacts to the wetland.

J. Buffer Averaging. Buffer width averaging of the applicable buffer under Table 19.40.310.2 above 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 minimum buffer width is at least seventy-five (75) percent (75%) of the standard or mitigated 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.

19.40.320 Wetlands – Permitted Alterations.

1. Activities and uses shall be prohibited from wetlands and wetland buffers, except as allowed in this section or BMC 19.40.070.

2. Alterations to Wetlands.

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

B. Alterations to Category II, III, and IV wetlands may be permitted if the Director determines, based upon review of a critical area study completed by a qualified professional, 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.

3. Alterations to Wetland Buffers. No land surface alteration or improvement may occur in a wetland buffer except as listed in BMC 19.40.070 and as provided for below:

A. 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 all applicable requirements of this chapter and all applicable provisions of BMC 19.40.330.

[~~C~~]B. 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;

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 seventy-five percent (75%) 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 twelve (12) inches in diameter at breast height, when possible;

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 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 in accordance with an approved vegetation management plan per BMC 19.40.180;

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 fifteen (15) feet, the road is maintained without the use of herbicides, pesticides or other hazardous substances and the location of the road is contiguous to the utility corridor on the side away from the wetland;

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

C. 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 not33 degrade the functions and values of the wetland;

D. Public and private trails may be allowed in the outer twenty-five percent (25%) of wetland buffers only if:

i. The trail surface is no more than five (5) feet wide and 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.

19.40.330 Wetlands – Additional Mitigation Requirements.

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 is achieved.

B. Mitigation for alterations to wetlands shall achieve equivalent or greater biological functions. Concurrent, permittee-responsible mitigation plans shall be consistent with this chapter per BMC 19.40.170 and Wetland Mitigation in Washington State, Part 1: Agency Policies and Guidance (Version 2, Ecology Publication #21-06-003) or as amended, and best available science per BMC 19.40.060.

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 Compensatory Mitigation Actions. Mitigation for wetland and buffer impacts shall rely on at least one of the following methods listed:

A. Restoration. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions and environmental processes to a former or degraded wetland. Restoration is divided into two categories as follows.

i. Re-establishment. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions and environmental processes to a former wetland. Re-establishment results in rebuilding a former wetland and results in a gain in wetland area and functions. Example activities could include removing fill, plugging ditches, or breaking drain tiles to restore a wetland hydroperiod, which in turn will lead to restoring wetland biotic communities and environmental processes.

ii. Rehabilitation. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions and environmental processes to a degraded wetland. Rehabilitation results in a gain in wetland function but may not result in an increase in wetland area. The area already meets wetland criteria, but hydrological processes have been altered. Rehabilitation involves restoring historic hydrologic processes. Example activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.

B. Establishment (Creation). The manipulation of the physical, chemical, or biological characteristics of a site to develop a wetland on an upland where a wetland did not previously exist at an upland site. Establishment results in a gain in wetland area and functions. An example activity could involve excavation of upland soils to elevations that will produce a wetland hydroperiod and hydric soils by intercepting groundwater, and in turn supports the growth of hydrophytic plant species.

i. If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the Director may authorize establishment of a wetland and buffer upon demonstration by the applicant's qualified wetland professional that:

a. The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that establishment of a wetland at the site will not likely cause hydrologic problems elsewhere;

b. Adjacent land uses and site conditions do not jeopardize the viability of the proposed wetland and buffer (e.g., due to the presence of invasive plants or noxious weeds, stormwater runoff, noise, light, or other impacts);

c. The proposed wetland and buffer will eventually be self-sustaining with little or no long-term maintenance; and

d. The proposed wetland would not be established at the cost of another high-functioning habitat (i.e., ecologically important uplands).

C. Preservation. The removal of a threat to, or preventing the decline of, wetlands by an action in or near those wetlands. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms such as recording conservation easements and providing structural protection like fences and signs. Preservation does not result in a gain of aquatic resource area or functions but may result in a gain in functions over the long term. Preservation of a wetland and associated buffer can be used only if:

i. The Director determines that the proposed preservation is the best mitigation option;

ii. The proposed preservation site is under threat of undesirable ecological change due to permitted, planned, or likely actions that will not be adequately mitigated under existing regulations;

iii. The area proposed for preservation is of high quality or critical for the health and ecological sustainability of the watershed or sub-basin. Some of the following features may be indicative of high-quality sites:

a. Category I or II wetland rating;

b. Rare or irreplaceable wetland type [e.g. peatlands, mature forested wetland, estuaries] or aquatic habitat that is rare or a limited resource in the area;

c. The presence of habitat for threatened or endangered species (state, federal, or both);

d. Provides biological and/or hydrological connectivity to other habitats; or

e. Priority sites identified in an adopted watershed plan.

D. Enhancement. The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific wetland function(s). Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in the gain of selected wetland function(s) but may also lead to a decline in other wetland function(s). Enhancement does not result in a gain in wetland area. Enhancement activities could include planting vegetation, controlling non-native or invasive species, and modifying site elevations to alter hydroperiods in existing wetlands.

i. Applicants proposing to enhance wetlands and/or associated buffers shall demonstrate how the proposed enhancement will increase the wetland and/or buffer functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.

3. Mitigation Ratios.

A. Wetland mitigation. The following ratios shall apply to creation or restoration that meets all other requirements in subsections 1 through 6 of this section 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 Mitigation Ratios

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

B. Increased wetland 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.

C. Buffer mitigation. Impacts to buffers shall be mitigated at a minimum one-to-one (1:1) ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

FISH AND WILDLIFE HABITAT CONSERVATION

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 buffers and to maintain and enhance fish and wildlife habitat and species diversity.

2. Designation and Applicability.

A. 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 however; ditches and artificial drainage features with documented current fish usage are regulated as streams.

B. The ordinary high-water mark (OHWM) of streams shall be delineated in accordance with the U.S. Army Corps of Engineers National OHWM Field Delineation Manual for Rivers and Streams (report number ERDC/CRREL TR-25-1 or as amended) or Washington Department of Ecology's Determining OHWM for Shoreline Management Act Compliance in Washington State (publication 16-06-029 or as amended).

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

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 per BMC Title 20.

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.

19.40.350 Streams – 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 Director, allowed as an exempt activity pursuant to BMC 19.40.070.

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 through BMC 19.40.180, or allowed as an exempt activity pursuant to BMC 19.40.070.

E. 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 mitigation plan approved by the Director to protect and enhance the stream's water quality; and

ii. Fencing located at the buffer edge consistent with BMC 19.40.210(2) and signage consistent with BMC 19.40.210(3).

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 are established based upon stream type. The following minimum buffers for streams shall be established from the OHWM of the adjacent stream(s) or from the top of the defined stream bank if the OHWM cannot be identified:

Table 19.40.350.2
Stream Buffers

Stream Type	Standard Stream Buffer (feet)
S	See BMC Title 20, Shoreline Master Program
F	150
Np	100
Ns	100

C. The buffer widths in the table above assume the buffer is vegetated with a native plant community appropriate for the ecoregion. To be considered fully functioning, a stream buffer must contain:

i. An average of eighty percent (80%) native vegetation cover, with no more than ten percent (10%) noxious weed cover; and

ii. A native plant community that includes tree, shrub, and groundcover strata in proportions that mimic native forest for the region.

D. If the existing buffer does not meet vegetative buffer standards above, the buffer must be:

i. Densely planted to create the appropriate native plant community through the implementation of a buffer enhancement plan per BMC 19.40.170.3;

ii. Include impact minimization measures described in BMC 19.40.310(1)(F); and

iii. If applicable, a habitat corridor is provided connecting the habitats described in BMC 19.40.310(2)(F); or

iv. Be widened by thirty three percent (33%) to ensure that the buffer provides adequate functions to protect the stream.

E. 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 BMC 19.40.370.

F. Where a legally established road right-of-way or similar infrastructure is located within a stream buffer, the Director may approve a modification of the standard buffer width to the edge of the right-of-way, provided it is demonstrated that the buffer area on the opposite side of the right-of-way provides insignificant biological or hydrological functions in relation to the buffer area adjacent to the stream.

G. 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.

H. Any stream with an OHWM 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.

I. 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 pursuant to an approved mitigation or vegetation management plan;

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.

19.40.360 Streams – Permitted Alterations.

1. Alteration to Streams.

A. Relocation or piping of any Type F stream in the City of Burien shall not be permitted unless undertaken for stream enhancement as described in subsection (1)(B) of this section. Relocation or piping of Type Np 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.

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. All work within or adjacent to streams or other waters of the state is consistent with Chapter 220-660 WAC (Hydraulic Code Rules). When required by permit conditions or best management practices, habitat restoration or construction activities shall be carried out under the supervision of a qualified professional.

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 primary 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.

D. Bioengineered stabilization will be the preferred method unless demonstrated by a qualified professional that this method of stabilization will not function in the location or there is a significant possibility that such a structure will be damaged within three years because of streambank erosion in the absence of such hard armoring measures.

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 or vegetation management plan.

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 temporary erosion and sedimentation controls (TESC).

C. Utilities such as water, telephone, cable, electric, and natural gas may be allowed in Type Np or Type Ns 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 and BMC 19.40.180 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;

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 OHWM;

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;

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 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 with an approved vegetation management plan per BMC 19.40.180;

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 Np and Type Ns stream buffers only as follows:

i. Surface water discharge to a Type Np or Type 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 Np or Type Ns stream or stream 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(5);

b. The use will not alter the rating or the factors used in rating the stream; and

c. 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 stream 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 F, Np, or Ns streams if the culvert design is in accordance with the 2013 WDFW manual Water Crossing Design Guidelines, as amended;

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 OHWM;

vi. Crossings do not diminish the flood-carrying capacity of the stream;

vii. Underground utility crossings are laterally drilled and located at a preferred 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 constructed in a manner approved by the Washington State Department of Fish and Wildlife; and

viii. Crossings are minimized and serve multiple purposes and properties whenever possible.

19.40.370 Streams – Additional mitigation requirements.

General Requirements. In addition to the requirements of BMC 19.40.170, mitigation minimum requirements shall include:

1. All work shall be carried out under the direct supervision of a qualified professional;

2. Engineering analysis as described in Chapter 13.10 BMC shall be performed to determine hydrologic conditions;

3. The natural channel dimensions shall be replicated including its depth, width, length and gradient at the original location, and the original horizontal alignment (meander lengths) shall be replaced;

4. The bottom shall be restored with identical or similar materials;

5. The bank and buffer configuration shall be restored to its original condition;

6. The channel, bank and buffer areas shall be replanted with vegetation which replicates the original vegetation in species, sizes and densities pursuant to BMC 19.40.180 ; and

7. The original biologic functions of the stream shall be recreated.

19.40.380 Fish and Wildlife Habitat Conservation Areas – Designation.

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 and which are mapped or documented by the Washington Department of Fish and Wildlife Priority Habitats and Species Program, U.S. Fish and Wildlife Service, or National Marine Fisheries Service;

B. Public and private tidelands or bedlands documented as suitable for commercial, recreational, or tribal shellfish harvest by the Washington Department of Health or Washington Department of Fish and Wildlife;

C. Kelp and eel-grass beds identified by the Washington Department of Natural Resources or other state or federal agencies with jurisdiction;

D. Pacific herring, surf smelt, sand lance, and other forage fish spawning areas as mapped in WAC 220-660 (Hydraulic Code), and the most current Washington Department of Fish and Wildlife mapping resources, 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 including those artificial ponds intentionally created from upland areas for mitigation purposes. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as detention facilities, wastewater treatment facilities, temporary construction ponds, and landscape amenities. To distinguish between ponds and wetlands, refer to current State or Federal wetland definitions and guidance;

F. Bald eagle habitat protected pursuant to the Federal Bald and Golden Eagle Protection Act and associated management recommendations;

G. Heron rookeries or active nesting trees; or

H. Waters of the state, regulated under BMC 19.40.340, Streams and other surface waters regulated under Chapter 90.48 RCW and WAC 173-201A

I. Land useful or essential for preserving connections between habitat blocks and open spaces including:

i. Riparian areas and stream buffers; or

ii. Biodiversity corridors as determined by WDFW PHS maps.

2. The approximate location and extent of known fish and wildlife habitat conservation areas are shown on the Critical Area 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:

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;

C. Washington State Digital Coastal Atlas, Coastal Zone Management Program (CZMP), and other authoritative mapping resources from state or federal agencies, as updated; and

D. Local habitat inventories and climate-related vulnerability assessments completed by the City and partner agencies.

19.40.390 Fish and Wildlife Habitat Conservation Areas – 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. Where applicable, buffers shall also be consistent with habitat corridor provisions established for wetland protection in BMC 19.40.310 and with habitat assessment requirements for development in floodplains under BMC 19.40.250.

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 be required by the Director when the critical area review of a development proposal determines that the proposed activity will have an effect 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 and, where applicable, other state or federal agencies with habitat jurisdiction.

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), OHWM 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 two hundred (200) feet of the subject property as shown on the City's adopted Critical Area Maps; and

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 by providing an analysis of the mitigation sequencing described in BMC 19.40.170;

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. 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;

d. Establishment of a buffer around the fish and wildlife habitat conservation areas per BMC 19.40.390(1);

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

f. 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 area unless authorized by a state or federal permit or approval.

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.

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 no net loss of ecological 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.

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 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 per BMC 19.40.390 and approved by the City.

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 shall not adversely impact salmonids or their habitat or shall mitigate any unavoidable impacts, and shall only be allowed for a water-dependent activity.

CRITICAL AQUIFER RECHARGE AREAS

19.40.430 Critical aquifer recharge areas – 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 chapter. If it is determined that the applicant is a regulated facility that processes, handles, treats, and/or stores hazardous substances as defined by this chapter, the applicant facility must submit a Critical Areas Report pursuant to this Section to the City. The questionnaire shall identify any potential contaminant sources, including emerging contaminants of concern (e.g., PFAS) consistent with Department of Health and Department of Ecology guidance.

3. Critical area review for critical aquifer recharge areas.

A. After reviewing the hazardous materials questionnaire, the Director may require a critical area review pursuant to BMC 19.40.090 through 19.40.130.

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.

C. Hydrogeologic assessments shall evaluate the effects of the proposed project on groundwater resources including potential climate-related impacts on groundwater recharge patterns, aquifer levels and water quality (e.g., increased storm intensity, drought periods, saltwater intrusion) as well as an evaluation of site suitability for infiltration. The evaluation shall address the potential for groundwater contamination, and compliance with applicable state and local design standards, including the 2021 King County Stormwater Manual, as amended.

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 per BMC 19.40.120.

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 including potential impacts from projected climate change on recharge patterns, aquifer levels, and water quality;

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.

5. 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, will maintain or improve recharge functions under current and projected future climate conditions, and will not adversely affect 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, and the provisions of Chapter 90.48 RCW.

C. Storage tank permits. The City of Burien specifically regulates and authorizes permits for underground storage tanks, pursuant to the International Fire Code and this chapter. The Washington Department of Ecology also regulates and authorizes permits for underground storage tanks (Chapter 173-360A WAC). The local Fire District regulates and authorizes permits for the removal of underground storage tanks.

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

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 groundwater recharge criteria given in RCW 90.46.080 and 90.46.010(10).

ii. Direct injection must be in accordance with the standards developed by authority of RCW 90.46.042.

F. Infiltration BMPs shall be designed and sited consistent with Ecology’s Stormwater Management Manual for Western Washington and shall account for changes in precipitation intensity and duration identified in regional climate projections.

G. Maintain or restore vegetated open space and native plant cover pursuant to a vegetative management plan per BMC 19.40.180 in critical aquifer recharge areas to enhance infiltration and pollutant filtration.

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).

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

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.

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 173-360A 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 a 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 shall have approval from the Fire Marshal and comply with the International Fire Code (IFC).

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. New or expanded on-site sewage systems within critical area recharge areas shall incorporate enhanced treatment or nitrogen-reducing technology, where identified as necessary to protect groundwater quality per Chapter 246-272 WAC.

I. All regulated facilities shall implement spill prevention and emergency response plans addressing extreme weather events and potential flooding.

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

K. 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 Groundwater Impacting Activities

Activity	**Statute – Regulation – Guidance**
Above Ground Storage Tanks	Chapter 173-303-640 WAC
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and Disposal Facilities	WAC 173-303-182
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 173-303 WAC
Injection wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	WAC 332-12-450, Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	WAC 332-18-015
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture