Chapter 15.88 CRITICAL AREAS

Part I. Administration

15.88.110 Authority.

A. This chapter is adopted under the authority of the Revised Code of Washington (RCW) Chapter 36.70A (the Growth Management Act).

B. This chapter shall apply concurrently with review under the State Environmental Policy Act (SEPA) and Shoreline Management Act (SMA) as locally adopted, if applicable.

C. Compliance with the provisions of this chapter does not constitute compliance with other local, state or federal regulations and permit requirements.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.111 Purpose.

The purpose of this chapter is:

A. To protect the public health, safety and welfare by preventing adverse impacts caused by development;

B. To protect the public and public resources and facilities from injury, loss of life, property damage or financial loss due to flooding, erosion, landslides, soils subsidence or steep slope failure;

C. To implement the goals, policies, guidelines and requirements of the city of Carnation comprehensive plan and the Washington State Growth Management Act; and

D. To preserve and protect critical areas, with special consideration for the habitat of anadromous fisheries, as required by the Washington State Growth Management Act by regulating development within and adjacent to the fisheries, while allowing use of private property.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.112 Applicability.

The city of Carnation (city) shall regulate all uses, activities, and developments within or adjacent to, or likely to affect one or more critical areas, consistent with the provisions of this chapter. Frequently flooded areas are considered critical areas under the Growth Management Act, but are not regulated under this chapter. Frequently flooded areas are separately regulated by Chapter 15.64 CMC.

Critical areas regulated by this chapter include:

A. Wetland areas;

B. Critical aquifer recharge areas;

C. Frequently flooded areas (see CMC Chapter 15.64);

D. Fish and wildlife habitat conservation areas;

E. Geologically hazardous areas.

1. The provisions of this chapter shall apply to all land activities within the city whether or not a permit or authorization is required except as exempt in Section 15.88.122 of this chapter.

2. The city shall not approve any development proposal or otherwise authorize alterations to the condition of any land, water, or vegetation nor permit the construction or alteration of any structure or improvement in, over, or on a critical area or associated buffer, without first assuring that the proposal complies with the requirements of this chapter.

3. When the provisions of this chapter or any other provisions of the city's municipal code are in direct conflict with each other, or with other federal or state regulations, the most restrictive provision shall apply.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.113 Designation of critical areas.

A. The city has designated critical areas by defining their characteristics. An applicant for a development proposal shall determine, and the city shall verify on a case-by-case basis, in accordance with the definitions in this Section 15.88.700, whether or not a regulated critical area exists on or within three hundred feet of the subject property that could be subject to this chapter.

B. The following resources may help determine the likelihood that a critical area exists on the subject or approximate property: City of Carnation Map Folio (wetlands, geologically hazardous areas, and frequently flooded areas), National Wetlands Inventory maps, U.S. Geological Survey (USGS) landslide hazard and seismic hazard maps, U.S.G.S. topographic maps, Management Recommendations for Washington's Priority Species (WDFW), Federal Emergency Management Administration (FEMA) flood insurance maps, East King County groundwater management plan maps, the King County channel migration zones map, and the city's sewer line map.

C. The actual type, extent, and boundaries of critical areas shall be designated by the city upon consultation with qualified persons with direct knowledge of the project and the project limits and according to the procedures, definitions, and criteria established in this chapter.

D. The city shall maintain maps or descriptions of all previously designated critical areas and these maps or descriptions shall be available for review at City Hall by the public during normal business hours.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.114 Applicant disclosure.

An applicant for a development proposal shall disclose the presence of any critical areas on the subject property and to the extent known by, or readily available to the applicant, any mapped or identifiable critical areas within three hundred feet of the subject property.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.115 Pre-application conference.

When an applicant knows or believes that critical areas are located on, or near the subject property, the applicant is encouraged, and may be required, to contact the city prior to finalizing development plans and

applying for development permits. Early disclosure of critical areas and potential state or federal approvals also necessary for the project will reduce delays during the permit review process.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.116 Submittal requirements.

In addition to the information required for a development permit, any development activity that is subject to the provisions of this chapter may be subject to a critical areas report as described under Section 15.88.200(G), provided that these additional requirements shall not apply to any action exempted in Section 15.88.122.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.117 Notice on title.

The owner of any real property containing a regulated critical area or buffer on which a development proposal is submitted and approved, or on which an off-site mitigation area is approved, shall file a notice with the records division of King County to inform subsequent purchasers of the real property that regulated critical areas exist (excluding soil liquefaction and floodplain outside of the floodway or channel migration area).

A. The notice shall state:

   1. The presence of the critical area, buffer, or mitigation area on the property;

   2. The allowable use of this property; and

   3. The limitations that may exist on actions in, or affecting, the critical area, buffer, and/or mitigation area.

B. The notice on title shall run with the property.

C. The notice on title will not be required if the work on existing structures or uses is valued at less than fifty percent of the assessed value of the existing structure or use, and if it does not increase the area of impact to the critical area and/or its buffer, except where the work is for an off-site mitigation area.

D. This notice on title shall not be required for a development proposal by a public agency or public or private utility:

   1. Within a recorded easement or right-of-way; or

   2. Where the agency or utility has been adjudicated the right to an easement or right-of-way.

E. The applicant shall submit proof that the notice has been filed for public record for all affected real property prior to building permit approval or prior to recording of the final plat in the case of subdivisions.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.118 Inspection and right of entry.

The city manager or designee may inspect any development activity necessary to enforce the provisions of this chapter. The applicant will consent to site visits by the city manager or designee during regular business hours to make reasonable inspections to verify the applicant's information and to verify that work is being performed in accordance with the approved plans, permits, and the requirements of this chapter. For on-site and off-site

mitigation areas, the applicant shall grant, or acquire approval for, right-of-access for the entirety of construction and the required monitoring period.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 952, § 7, 4-5-2022)

15.88.119 Enforcement.

A. The provisions of CMC Chapter 15.28 (Enforcement) shall regulate the enforcement of the critical areas ordinance (CAO).

B. The applicant is required to adhere to the provisions of this chapter and to the conditions imposed on the permitted development proposal throughout construction of the project. Should the city manager or designee determine that a project is not in compliance with the development proposal, the city may issue a stop work order.

C. When the city issues a stop work order, construction shall not continue until the person or agent responsible has corrected the violation and has established that the same or a similar violation is not likely to recur.

D. In the event of a violation of this chapter, the city manager or designee shall have the authority to order complete restoration of the critical area by the person or agent responsible for the violation. If such responsible person or agent does not complete such restoration within a reasonable time following the order, the city manager or designee shall have the authority to restore the affected critical area to the prior condition wherever possible, and the person or agent responsible for the original violation shall be indebted to the city for the cost of restoration. Without limitation of the foregoing, the existence of a performance and/or maintenance and monitoring bond shall not prevent the city from enforcing violations of this chapter, or any approval condition issued under the authority of this chapter, through any and all applicable remedies and penalties, specifically including without limitation injunctive relief, in addition to and/or in lieu of such bond.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 952, §§ 3, 7, 4-5-2022)

15.88.120 Fees.

A. The development proposal applicant must initiate, prepare, submit, and bear the expense of all required reports, assessments, studies, plans, reconnaissances, peer review by qualified consultants, and other work prepared in support of, or necessary for, compliance with the city's critical areas review process.

B. The applicant shall be responsible for monitoring and maintaining critical areas if such action is required as a condition of permit approval. Required performance bonds shall be held until all work is completed to the satisfaction of the city manager or designee. A maintenance bond shall be required for the maintenance and monitoring of the mitigation activity prior to the release of the performance bond, final inspection or occupancy, whichever comes first.

C. The applicant shall also be responsible for the city's review or peer review of performance standards as constructed, and for necessary monitoring and maintenance reports.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 952, § 4, 4-5-2022)

15.88.121 Appeals.

Appeals of administrative decisions shall be governed by Section 15.09.020 of the Carnation Municipal Code.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.122 General exemptions.

The following developments, activities, and associated uses shall be exempt from the provisions of this chapter and from any imposed administrative rules provided they are consistent with the provisions of other local, state, and federal laws and requirements. The city manager or designee shall determine that exempt actions use reasonable methods to avoid potential impacts to critical areas. An exempt action may not degrade a critical area or ignore the risk from natural hazards. The party responsible for performing an exempt action shall promptly restore, rehabilitate, or replace the disturbed critical area or buffer.

A. Emergencies.

1. Alterations in response to emergencies that threaten public health, safety, welfare or the risk of damage to private property, and those that require remedial or preventative action in a time frame too short for compliance with this chapter, as long as the alteration is reported to the city manager or designee immediately. The city manager or designee shall confirm the presence of an emergency and shall determine if mitigation will be required to protect or repair the damaged critical area.

Alterations in response to emergencies that create an impact on a critical area or its buffer shall use reasonable methods to address the emergency. In addition, those actions must have the least possible impact to the critical area and/or its buffer.

2. The person or agency undertaking the action shall fully restore and/or mitigate any impacts to the critical area and buffers resulting from the emergency action in accordance with the critical area report and the mitigation plan prepared in accordance with this chapter and as approved by the city manager or designee.

B. Operation, maintenance or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems, including routine vegetation management activities when performed in accordance with approved best management practices, if the activity does not increase risk to life or property as a result of the proposed operation maintenance or repair, or when sufficient data is shown indicating that such harvesting would reduce flooding potential. All alterations to existing dikes and levees must be performed by government entities or their designees, unless the alteration qualifies as an emergency under subsection A of this section.

C. Gravel harvesting by a public agency when in accordance with local, state, and federal regulations only when there is an imminent threat that material may cause flooding or there is a potential for migration of the riverbed.

D. Activities Within the Improved Right-of-way. Replacement; modification, installation or construction of utility facilities, lines, pipes, mains, equipment or appurtenances; not including substations, when such facilities are located within the improved portion of the public right-of-way or a city-authorized private roadway. These activities shall be subject to the following:

1. The activity shall result in the least possible impact and have no practical alternative with less impact on the critical area and/or its buffer;

2. An additional, contiguous and undisturbed critical area buffer shall be provided, equal in area to the disturbed critical area buffer;

3. Retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance; and

4. The activity does not alter a wetland or watercourse such as culverts or bridges, or result in the transport of sediment or increased stormwater.

E. Minor utility projects that are subject to local permits in accordance with the criteria below and that do not significantly impact the functions and values of a critical area(s). Utility projects that have minor or short-term impacts to critical areas may include the placement of a utility pole, street sign, anchor, vault, or other small component of a utility facility provided that such projects are constructed with best management practices and additional restoration measures are provided. Minor activities shall not result in increases of impervious surface. Such exemptions shall meet the following criteria:

1. There is no practical alternative to the proposed activity that has fewer adverse impacts on critical areas, and, all attempts have been made: (a) to avoid impacts, and (b) to minimize impacts;

2. The minor utility project will not change or diminish the overall critical area hydrology or flood storage capacity;

3. The minor utility project shall be designed and constructed to prevent spills and leaks into critical areas;

4. The minor utility project will not reduce the existing functions and values of the affected critical areas;

5. To the maximum extent practicable, utility corridor access for maintenance shall be limited to perpendicular access points into the critical area or buffer rather than by a parallel access road; and

6. Unavoidable impacts will be mitigated pursuant to an approved mitigation plan.

F. Existing and Ongoing Agricultural Activities. Existing and ongoing agricultural activities normal or necessary to general farming conducted according to industry-recognized best management practices including raising crops or livestock grazing provided no alteration of flood storage capacity or conveyance occurs. The installation of raised livestock flood sanctuary area (critter pads) constructed within the floodplain and maintained to the standards of the soil conservation service and the best management practices approved by the city shall also be exempt from the provisions of this chapter.

G. New accessory structures and additions to structures, provided that the lot coverage does not exceed a cumulative additional five hundred square feet of impervious surface, and provided that the new construction or related activity does not further intrude into a critical area or buffer and that it is subject to flood hazard areas reconstruction restrictions.

H. Activities involving those wetlands or watercourses intentionally created from nonwetland sites, including grass-lined swales, irrigation and drainage ditches, detention facilities, wetlands constructed to provide water quality treatment in conjunction with a local, state or federal water quality permit, and landscape features, except wetlands, streams, or watercourses that have documented use by state or federally listed species or wetlands created as compensatory mitigation.

I. Vegetation management that is part of the ongoing maintenance of facilities, infrastructure, public rights-of-way, or utilities, provided the vegetation management activity does not expand further into the critical area or its buffer.

J. Passive recreation such as hiking, fishing, and wildlife viewing that does not involve the construction of trails.

K. Vegetation clearing and soil disturbance with less than five hundred square feet disturbance to critical areas associated with land surveying, geotechnical investigations, water well drilling, or other site work completed in conjunction with the preparation of a critical areas report.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 952, § 7, 4-5-2022)

15.88.123 Administrative exceptions.

For consideration of an administrative exception, the applicant shall submit a written request to the city manager or designee describing the proposed activity and the applicable exception. The city manager or designee shall review the requested exception to determine if it complies with this chapter. The city manager or designee may approve or deny the request for an exception. Exceptions that may be requested include:

A. Single-family residential building permits when the development proposal involves the following three conditions:

1. Structural modifications to, or replacement of, an existing single-family residential structure; or, construction of a new residential structure if construction and associated disturbance do not increase the footprint of any existing structure;

2. The structure is not relocated or expanded closer to the critical area; and

3. The existing impervious surface is not expanded within the critical area or buffer.

B. Invasive and noxious weeds, and additional aggressive nonnative species including Japanese knotweed, Scotch broom, English ivy, Himalayan blackberry, and evergreen blackberry may be removed by hand labor and with light equipment. Such removal minimizes disturbance to the critical area and buffer, does not involve the use of hazardous substances, and, is associated with subsequent enhancement or restoration or ongoing maintenance activities.

C. Hazard trees may be removed provided that the hazard is documented by a certified arborist or professional forester and that the work does not require soil disturbance.

D. Enhancement and restoration activities that do not require building permits may be conducted to restore the functions and values of critical areas.

E. Vegetation clearing and soil disturbance may take place for less than five hundred square feet of disturbance for land surveys, geotechnical investigations, well drilling, or other work necessary to complete a critical areas report where all disturbance is restored to pre-existing conditions and vegetation is replaced or enhanced upon completion of work.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 952, § 7, 4-5-2022)

15.88.124 Public agency and utility exception.

If a public agency or public utility submits a development application for work essential to its ability to provide service that would not comply with and would be prohibited by this chapter, except as exempted in Section 15.88.122, the agency or utility may apply for an exception pursuant to this section. After holding a public

hearing pursuant to CMC Section 15.09.020, the hearing examiner may approve the exception if found that there is no other practical alternative to the proposal with less impact on critical areas. Beneficial impacts to critical areas may be considered in this review of alternatives.

Review of the application shall be based on the public agency or public utility's ability to substantiate the following four factors:

A. The applicant has considered all alternative sites and alignments that meet the project purpose and for which operating rights are available or could be acquired within the timeframe necessary for the public agency to provide the essential service;

B. The applicant has considered all construction techniques based on available technology that are feasible for the proposed project and has eliminated any that would result in unreasonable risk of impact to the critical area;

C. The proposal avoids, minimizes, and compensates for unavoidable impacts to critical areas and/or buffers; and

D. The applicant has documented adequately the existing conditions and proposed impacts to critical areas and/or buffers.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.125 Reasonable use exception.

If compliance with this chapter would deny all reasonable use of the subject property, the applicant may apply for a reasonable use exception. Following a public hearing pursuant to CMC Section 15.09.020, if the hearing examiner finds that the request meets the conditions below, a reasonable use exception may be granted.

A. This chapter would otherwise deny all reasonable use of the property;

B. There is no other reasonable use that is consistent with the underlying zoning of the property that has fewer adverse impacts on the critical area and/or associated buffer;

C. The proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the property;

D. Any alteration is the minimum necessary to allow for reasonable use of the property;

E. The applicant may only apply for a reasonable use exception under this section if the requested exception provides relief that would not be granted by a variance.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.126 Variance.

A variance from the requirements of this chapter may be authorized by the hearing examiner in accordance with the procedures set forth in CMC Section 15.20.030.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.127 Mitigation required.

Any authorized alteration to a wetland or fish and wildlife habitat conservation area or its associated buffer, as approved under Sections 15.88.121 through 15.88.125 of this chapter, shall be subject to conditions established

by the city and shall be required to mitigate alterations under an approved mitigation plan per Section 15.88.200(K).

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.128 Nonconforming uses and structures.

The purpose of this section establishes the terms and conditions for continuing nonconforming uses, structures, and lots that are lawfully established prior to the effective date of the ordinance codified in this chapter.

A. A legally established nonconforming lot, use, or structure may be continued, transferred, or conveyed and/or used as if it conformed.

B. The burden of establishing that any nonconforming lot, use, or structure lawfully existed as of the effective date of the ordinance codified in this chapter shall, in all cases, rest with the owner and not with the city.

C. Normal maintenance and incidental repair of a legal nonconforming lot, use, or structure shall be permitted providing it complies with all the sections of this chapter and other pertinent chapters of the Carnation Municipal Code and does not further intrude into a critical area or buffer or result in the creation of new impervious surface coverage or area.

D. Reconstruction, restoration or repair (and remodeling) of a legal nonconforming structure damaged by fire, flood, earthquake, falling trees or limbs, or other disasters, shall be permitted provided that such reconstruction shall not result in the expansion of the nonconforming structure into or towards the critical area or buffer and does not result in the creation of new impervious surface coverage or area, or occurs in a manner that increases the potential impact to the critical area or risk of harm to public safety. Legal nonconforming status will be lost if a building permit is not secured within one year of the date the damage is incurred. The burden of establishing the date damage occurred, in all cases, rests with the owner and not with the city.

E. No legal nonconforming use or structure may be expanded or extended into a critical area buffer unless such modification is in full compliance with this chapter and conditions of approved permits pursuant to this chapter.

F. All legal nonconforming uses shall be encouraged to convert to a conforming use whenever possible. Conformance shall be required when:

   1. A change of use is proposed; or

   2. The current use is terminated or discontinued for more than one year, or the structure(s) is abandoned for more than one year; or

   3. The structure(s) or area in which the use is conducted is proposed for relocation.

G. On a parcel on which a nonconforming situation exists, development or redevelopment that does not temporarily or permanently encroach within, alter, or increase the impact to the environmentally critical area or buffer on the parcel on which the development occurs is exempt from the provisions of this chapter; if existing development that encroaches within or impacts the environmentally critical area or buffer is removed, then new development that encroaches within, alters, or impacts the environmentally critical area is not exempt.

H. In the case of any conflicts within this section or between this section and Chapter 15.32 CMC, as now or hereafter amended, the more specific provisions of this section shall apply.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

15.88.130 Density credits.

A. Critical areas and their buffers may be used in the calculation of allowed residential density whenever two or more residential lots or two or more multifamily dwelling units are created, subject to the following limitations:

1. Density credits shall be allowed for all critical areas, with the exception of wetlands or streams, and all critical area buffers, in accordance with the following table:

Percent of Site in Buffers and/or Critical Areas	Density Credit
1—10 percent	100 percent
11—20	90
21—30	80
31—40	70
41—50	60
51—60	50
61—70	40
71—80	30
81—90	20
91—99	10

2. The density credit may only be utilized within the development proposal site. The applicant may cluster and configure the site's development to accommodate the transfer of density subject to the requirements of this title, but may not change the type of uses allowed within the underlying zone.

B. For development proposals involving sites containing critical areas and associated critical area buffers, the city manager or designee shall determine allowable dwelling units for residential development proposals based on the formulas below.

1. The percentage of the lot containing critical areas, excluding wetlands and streams, and all critical area buffers, shall be calculated based on the critical areas report submitted as per this chapter.

2. The amount of density credit allowed shall be calculated based on the table in subsection (A)(1) of this section.

3. The minimum permissible lot size shall be calculated as follows:

a. Determine the Critical Area Yield: Multiply the area containing critical areas or their buffers by seventy percent, and divide that number by the minimum lot size of the underlying zone. Multiply the quotient by the density credit percentage from the table in subsection (A)(1) of this section. Round upward or downward to the nearest whole number.

b. Determine the Noncritical Area Yield: Multiply the area that does not contain critical areas or their buffers by seventy percent, and divide that number by the minimum lot size of the underlying zone. Round upward or downward to the nearest whole number.

c. Determine the Total Yield: Add the critical area yield to the noncritical area yield.

d. Determine the ratio by dividing the noncritical area yield by the total yield.

e. Multiply the ratio by the minimum lot size of the underlying zone to determine the minimum size of the lots that may be subdivided in the area that does not contain critical areas.

4. To the extent that application of the above formula may result in lot sizes less than the minimum allowed by the underlying zone, they are authorized; provided, that in no case shall the lot sizes resulting from the density credit be smaller than sixty-five percent of the minimum lot size of the underlying zone. In any case, all other established setbacks and requirements of the underlying zone shall be met, pursuant to this title.

(Ord. 728 § 2, 2007)

(Ord. No. 952, § 7, 4-5-2022)

15.88.200 General provisions.

The city will apply the following general methods and mechanisms to accomplish the purposes of its critical areas ordinance. This section shall be applied to all approved development applications and alterations where critical areas may be affected.

A. General Approach. Protecting critical areas shall observe the following sequence, unless it is part of a restoration plan for a significantly degraded wetland or fish or wildlife habitat conservation area, or buffer, described under subsection (B)(3), below:

1. Avoid the impact by refraining from certain actions or parts of an action;
2. Where impact will not be avoided to critical areas or their buffers, the applicant shall demonstrate that the impact meets the criteria for granting a variance under Section 15.88.126 or for other applicable exemption or exceptions as set forth in Section 15.88.122, 15.88.123, 15.88.124, or 15.88.125;
3. Minimize the impacts by limiting the degree or magnitude of the action by using affirmative steps to avoid or reduce impacts or by using appropriate technology;
4. Rectify the impact by repair, rehabilitation, or restoration of the affected critical areas;
5. Reduce or eliminate the impact over time by preservation and maintenance operations;
6. Compensate for the impacts with ways to create, replace, enhance or provide substitute resources or critical areas.

B. Buffers.

1. Measurement of Buffers. All buffers shall be measured from the critical area boundary as surveyed in the field or as otherwise designated or described by the city manager. The width of the buffer shall be determined according to the methods and procedures described in this chapter pursuant to each type of critical area affected.
2. Standard Buffers. The standard buffer widths presume the existence of a native forest vegetation community in the buffer zone adequate to protect the critical area functions and values at the time of the proposed activity. If the vegetation or protection area is inadequate, the city may require an increase in the buffer width or additional native plantings within the standard buffer width. Provisions to reduce or to average buffer widths to obtain optimal habitat value are provided under the performance standards for each critical area.
3. Significantly Degraded Wetlands, Fish and Wildlife Conservation Areas, and Buffers. In areas where the functions of wetland and fish and wildlife conservation areas or buffer are already significantly degraded prior to the effective date of this chapter, restoration of the degraded areas may be more beneficial than avoidance. Certain expanded uses shall be allowed at the discretion of the city manager or designee if the applicant's critical areas report demonstrates

that greater habitat functions can be obtained in the affected sub-drainage basin as a result of mitigation.

4. Averaging Buffers. The city manager or designee will consider allowing buffer averaging only when the averaged buffer area width will not adversely impact the critical area and/or buffer functions and values. At a minimum, any proposed buffer averaging shall meet the following criteria:

    a. The total averaged buffer area is not less than the size of the standard buffer before applying averaging;

    b. The buffer width shall not be reduced by more than twenty-five percent at any one point as a result of the buffer averaging;

    c. The averaged buffer area shall be enhanced;

    d. The additional buffer is contiguous with the standard buffer; and

    e. Encroachment into the buffer does not occur waterward of the top of an associated steep slope or into a channel migration zone.

5. Reducing Buffers. The city manager or designee may reduce up to twenty-five percent of the critical area buffer width requirement only if a critical area report sufficiently demonstrates the following:

    a. The applicant has demonstrated that mitigation sequencing (avoid, minimize, mitigate) efforts have been appropriately applied;

    b. The proposed buffer reduction shall be accompanied by a mitigation plan per subsection K of this section that includes enhancement of the reduced buffer area;

    c. The reduction will not adversely affect water quality;

    d. The reduction will not destroy, damage, or disrupt a significant habitat area;

    e. The reduction is necessary for reasonable development of the subject property;

    f. Where a legally established roadway transects the buffer, the minimum buffer width may be reduced to the edge of the roadway if the part of the buffer sought to be reduced:

    i. Does not provide additional protection to the proposed development or the stream, and

    ii. Does not perform any biological, geological, or hydrological buffer functions to undisturbed portions of the streams or its buffer;

    g. This section may not be used to reduce the buffers of the Tolt or Snoqualmie Rivers.

C. Land Segregation. Subdivisions, short subdivisions, boundary line adjustments, and planned residential developments of land located in critical areas and associated buffers are subject to the following:

1. Land that is wholly within a wetland or fish and wildlife habitat conservation area or associated buffer may not be subdivided or the boundary line adjusted except as approved under a reasonable use exception.

2. Land that is partially within a wetland or fish and wildlife habitat conservation area or associated buffer area may be subdivided, or the boundary line adjusted, provided that an accessible and contiguous portion of each new or adjusted lot is:

    a. Located outside the critical area and buffer; and

    b. Sizable enough to accommodate the intended (and allowable) use.

D. Marking and/or Fencing.

1. Survey Stakes. Development proposals shall include permanent survey stakes delineating the boundary between adjoining property and critical area tracts using iron or concrete markers as established by current survey standards.

2. Permanent Signs. The applicant shall identify the boundary between a critical area tract and contiguous land with permanent signs.

3. The city manager or designee may require such fencing subsequent to approval of the development proposal when intrusions threaten conservation of critical areas. To ensure compliance, the city manager or designee may use any appropriate enforcement actions including, but not limited, to fines, abatement, or permit denial.

E. Critical Areas Reports/Studies.

1. When an applicant submits a development proposal, the proposal shall indicate whether any critical areas or buffers are located on or could be within three hundred feet of the proposed development site. The city staff shall visit the proposed development site and review the information submitted by the applicant along with any other available information. The city staff shall notify the applicant that a critical areas report is required if the city determines that the proposed site may include, is adjacent to, or that the proposal could have probable adverse impacts to critical areas (except that critical area reports for CARAs shall only be required as specified in Section 15.88.400(D)). If required, the report shall be undertaken at the applicant's expense. A critical areas report shall meet the following minimum requirements:

a. Critical area reports shall be written by a qualified professional, as defined in the definitions section of this chapter. A critical areas report shall include all information required pursuant to subsection (E)(2) below.

b. When unavoidable impacts to critical areas or their buffers would occur, a monitoring and maintenance program shall be designated by a qualified professional and the applicant shall conduct monitoring to evaluate the effectiveness of mitigating measures.

c. Studies generated as part of an expanded SEPA environmental checklist or an environmental impact statement (EIS) may qualify as a critical areas report if the project is described in enough detail to provide an evaluation of site-specific impacts and mitigation measures.

2. General Critical Areas Report Requirements.

a. A critical areas report shall have three components: (i) a site analysis, (ii) impact analysis, and (iii) proposed avoidance and mitigation measures. More or less detail may be required for each component depending on the size of the project, severity of the intrusion, and the potential impacts. When adequate information is otherwise available to document compliance with this chapter, the city manager or designee may waive the requirement of any of the three components.

b. Unless already available in the development application, all studies shall contain the following information in addition to the requirements specified for each critical area.

i. Site map of the project area at a one is to twenty or larger scale dimensioned, including:

(A) Reference streets and property lines.

(B) Existing and proposed easements, rights-of-way, trail corridors and structures.

(C) Contour intervals (two feet); steep slope areas to be highlighted.

(D) Vicinity map showing project location in relation to city-designated critical areas as shown on mapping available from the city.

(E) The edge of the one hundred-year floodplain, and edge of the floodway if appropriate.

(1) Channel migration zone boundaries if appropriate;

(2) Shoreline management program environmental designation and zone, if appropriate;

(3) Location of wetlands and fish and wildlife habitat conservation areas or other critical areas on the site;

(4) Hydrology. Show surface water features both on and adjacent to the site; show any water movement into, through, and off the project area; show stream and wetlands classifications, show seeps, springs, and saturated soil zones; label wetlands not found on the city inventory maps as un-inventoried;

(5) Identification of all site preparation, clearing and grading activities and dimensioned location of proposed structures, roads, stormwater facilities, impervious surfaces, and landscaping within three hundred feet of critical areas;

(6) All drainage plans for discharge of stormwater runoff from developed areas;

(7) Location of standards and proposed buffer and building setback lines (if required or proposed);

(8) Location of any existing or proposed critical area tracts.

ii. Written report detailing.

(A) How, when, and by whom the report was performed (including methodology and techniques);

(B) Seasonal and weather conditions during and prior to any field studies if relevant to conclusions and recommendations;

(C) Description of the project site and its existing condition including degraded critical areas;

(D) Description of existing critical area and buffer functions and values;

(E) Description of habitat features present and determination of actual use of the critical area by any endangered, threatened, rare, sensitive, or unique species of plants or wildlife as listed by the federal government or state of Washington;

(F) The total acreage of the site in each type of critical area(s) and associated standard buffers;

(G) The proposed action, including but not limited to description of filling, dredging, modification for stormwater detention or discharge, clearing, grading, restoring, enhancing, grazing or other physical activities that change the existing vegetation, hydrology, soils or habitat;

(H) When alteration to a critical area or its buffer is proposed provide an explanation why the impact is unavoidable and how it meets the criteria for a defined exception or allowed use;

(I) Description of potential environmental impact of the proposed project to the critical area(s) and demonstration of mitigation sequencing approach, and description of any proposed mitigation measures;

(J) Habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site critical area functions;

(K) The mitigation measures and best management practices proposed to avoid or lessen the project impacts (during construction and permanently);

(L) When alteration to the critical area or its buffer is proposed, include a mitigation plan as specified by this chapter;

(M) A discussion of ongoing management practices that will protect critical areas and their buffers after the project site has been developed, including proposed monitoring and maintenance programs;

(N) Description of local, state, and federal regulations and permit requirements that regulate the proposed development, use, and/or critical area and that apply to the proposal.

F. Mitigation Timing.

1. Mitigation shall be provided prior to the authorized activity that results in unavoidable impacts, except in the case of restoration and enhancement. For restoration and enhancement, mitigation shall be completed immediately following disturbances and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and water quality. Off-site mitigation activities shall be completed prior to initiating the activity or development. Any proposed deviations to mitigation timing based on seasonal considerations, shall be approved in advance by the city manager or designee.

2. The city manager or designee shall have the authority to impose the mitigation measures identified in this chapter or recommended in a critical areas report as a condition of any development approval or other activity creating the need for mitigation.

The city manager or designee may alter the mitigation recommended in a critical areas report if the recommendations are not consistent with best available science or otherwise fail to adequately protect critical areas. Any mitigation measures imposed through this chapter shall be consistent with constitutional principles of nexus and proportionality.

The hearing examiner and city council shall have the authority of the city manager to impose mitigation measures to the extent that they have authority to review a development application. The mitigation measures identified herein may also be imposed through the Washington State Environmental Policy Act ("SEPA"), Chapter 43.21C RCW. This chapter is adopted as a SEPA policy for purposes of exercising SEPA substantive authority as authorized by RCW 43.21C.060. In the event of conflicts between mitigation imposed by this chapter or any other law, the more restrictive mitigation measures shall prevail.

3. The city manager or designee may waive any or all of the requirements of a critical area report if the applicant demonstrates that the required information will not be of any benefit in assessing and mitigating adverse impacts.

G. General Mitigation Requirements. The following section provides general mitigation requirements applicable to alteration of critical areas. Additional specific mitigation requirements are found under the sections for the particular type of critical area.

1. When a critical area or its buffers has been altered on the development site prior to approval of the development permit in violation of city regulations, and, as a consequence, the functions and values have been degraded, restoration and/or rehabilitation is required. Restoration/rehabilitation is required when a critical areas or its buffer has been altered during the construction of an approved project as a result of the failure of the applicant to disclose the occurrence of the critical area on the property. At a minimum, all impacted areas shall be restored to their previous condition pursuant to an approved mitigation plan.

2. When a critical area or its buffers will be temporarily altered during the construction, restoration and/or rehabilitation is required. At a minimum, all impacted areas shall be restored to their previous conditions to comply with the approved mitigation plan.

3. Compensation includes replacement or enhancement of the critical area or its buffer depending on the scope of the approved alteration and what is needed to maintain or improve the critical area and/or buffer functions. The goal of compensation is no net loss of critical area/or buffer functions on a development site. The city manager or designee may approve compensation to include replacement of similar critical areas or buffer functions through the creation of enhancement or rehabilitation of other types of critical areas or buffers as part of a mitigation bank or other pre-approved off-site mitigation proposal. Compensation for approved critical area or buffer alterations shall meet the following minimum performance standards and shall occur in compliance with the approved mitigation plan:

    a. As compensation for approved alterations, a created, restored, or enhanced critical area buffer shall meet the category requirements of the created, restored, or enhanced critical area. Created, restored, or enhanced, buffers shall be fully vegetated and shall not include lawns, walkways, driveways and other mowed or paved areas.

    b. On-site and In-kind. Unless otherwise approved, all critical area impacts shall be compensated by restoration or creation of replacement areas that are in-kind, on-site, and of similar or better critical area category. Mitigation shall occur prior to, or concurrent with, the approved alteration and shall have a high probability of success.

    c. Off-site Mitigation. When the applicant demonstrates that greater biological and hydrological functions and values will be achieved, the city manager or designee may consider, and approve, off-site compensation. Off-site compensation may include restoration, creation, or enhancement of other types of critical areas than those impacted. The compensation ratios specified under the "on-site" compensation section for each critical area shall apply for off-site compensation. At no time shall the off-site mitigation result in a smaller mitigation area than the area of the impacted critical area or buffer.

    d. Increased Replacement Ratios. The city manager or designee may increase the ratios under the following circumstances:

        i. Uncertainty exists as to the probable success of the proposed restoration or creation due to an unproven methodology or applicant; or

        ii. The applicant proposes out-of-kind mitigation; or

        iii. A significant time period will elapse between impact and replication of wetland functions; or

        iv. The impact was unauthorized.

e. Decreased Replacement Ratios. The city manager or designee may decrease the ratios specified under the compensation section of each critical area as required from the "on-site" ratios, when all of the following criteria are met:

i. A minimum replacement ratio of one is to one (no net loss) will be maintained;

ii. Documentation by a qualified specialist demonstrates that the proposed mitigation actions have a very high rate of success;

iii. Documentation by a qualified specialist demonstrates that the proposed mitigation actions will provide functions and values that are significantly greater than the critical area being impacted; and

iv. The proposed mitigation actions are conducted in advance of the impact and have been shown to be successful as established through the implementation of a monitoring program.

f. Critical Area Enhancement as Mitigation.

i. Impacts to critical areas may be mitigated by enhancement of existing significantly degraded critical areas only after a one is to one minimum acreage replacement ratio (one is to one linear feet ratio for streams) has been satisfied. Development applications that propose to enhance critical areas must produce a critical areas report that identifies how enhancement will increase the functions and values of the degraded critical areas and how this increase will adequately mitigate for the loss of critical area function at the impact site.

ii. At a minimum, enhancement acreage shall be double that of the acreage (or linear feet for streams) required for creation under the "on-site" compensation section specified under each critical area. The ratios shall be greater than double the required acreage (or linear feet) when the enhancement proposal would result in minimal gain in the performance of critical area functions currently provided in the critical area.

H. Best Available Science. Any approved mitigation plan to compensate for impacts to a critical area or its buffer shall be supported by the best available science documented at the time of the application.

I. Mitigation Plans.

1. Mitigation or alterations to critical areas shall achieve equivalent or greater biological functions for wetlands and fish and wildlife conservation areas, and shall include mitigation for adverse impacts that would affect property beyond to the proposal site. Mitigation sites for wetlands, streams, and fish and wildlife habitat conservation critical areas shall be located to achieve contiguous habitat corridors in accordance with a mitigation plan that is part of an approved critical areas report to minimize the isolating effects of development on habitat areas. Mitigation of aquatic habitat shall be located within the same subbasin as the area disturbed unless the applicant proposed to utilize available mitigation bank credits pursuant to this section. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

2. The scope and content of a mitigation plan shall be decided on a case-by-case basis. As the impacts to the critical area increase, the mitigation measures to offset these impacts also will increase in number and complexity. During its review of the requested critical area studies the city will determine which of the components listed below in subsection (I)(3) it shall be require as part of the mitigation plan. Key factors in this determination shall be the size and nature of the

development proposal, the nature of the impacted critical areas, and the degree of cumulative impacts on the critical area from other development proposals.

3. At a minimum, the following components shall be included in a complete mitigation plan:

    a. Baseline Information. Provide existing conditions information for both the impacted critical areas and the proposed mitigation site as described in "general critical area report requirements" and "additional report requirements" for each "critical area."

    b. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:

        i. A description of the anticipated impacts to the critical areas, the mitigating actions proposed, and the purposes of the compensation measures, including the site selection criteria, identification of compensation goals, identification of resource functions, and dates for beginning and completing site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area; and

        ii. A review of the best available science supporting the proposed mitigation.

    c. Performance Standards. The mitigation plan shall include measurable performance standards to evaluate whether or not the goals and objectives of the mitigation plan have succeeded and whether or not the plan meets the requirements of this chapter. Performance standards may include water quality standards, species richness and diversity targets, habitat diversity indices, or other ecological, geological, or hydrological criteria.

    d. Detailed Construction Plan. These are landscape and/or engineering drawings and the written specifications and descriptions of mitigation technique. This plan should include the proposed construction sequencing, grading and excavation details, erosion and sedimentation control features, a native planting plan, and detailed site diagrams and any other drawings appropriate to show construction techniques or anticipated final outcome.

    e. Monitoring and/or Evaluation Program. The mitigation plan shall include a program for monitoring construction of the compensation project, and for assessing a completed project, as detailed under subsection L below.

    f. Contingency Plan. When monitoring or evaluating the plan indicates that the applicant has not met the performance standards, a contingency plan shall identify potential courses of action and any corrective measures to be taken.

J. Monitoring.

1. When a development application to alter critical areas or their buffers is approved or where alterations occur in violation of this chapter, the city will require long-term monitoring. Monitoring shall be part of the required mitigation plan and shall document and track impacts of development on the functions and values of critical areas and will track the success and failure of mitigation requirements. Monitoring may include, but is not limited to:

    a. Establishing vegetation transects or plots to track changes in plant species composition over time;

    b. Using aerial or other photography to evaluate vegetation community response;

    c. Sampling surface and ground waters to determine pollutant loading;

d. Measuring base flow rates and stormwater runoff to model and evaluate water quantity predictions;

e. Measuring sedimentation rates;

f. Sampling fish and wildlife populations to determine habitat utilization, species abundance, and diversity; and

g. Sampling of water temperatures for wetlands and streams.

2. The applicant will be required to submit monitoring data and reports to the city on an annual basis or other schedule as required by the city manager or designee. Monitoring shall continue for a minimum period of five years. Longer periods may be required to establish that the mitigation performance standards have been met. The city manager or designee may approve a monitoring period of ten years if there is significant uncertainty involved in the mitigation proposal.

3. Performance Bond. Prior to issuance of any permit or approval that authorizes site disturbance under this chapter, the city manager or designee shall require performance security in a form acceptable by the city in the amount equal to 150 percent of the cost of design, installation, maintenance and monitoring of the required mitigation. Performance security for required mitigation projects shall be held by the city until the mitigation project has been completed to the satisfaction of the city manager or designee. The performance bond may be held for longer periods upon finding by the city manager or designee that it is still necessary to hold the bond to ensure the mitigation project has met applicable provisions of the approved mitigation plan.

4. Maintenance and Monitoring Bond. Prior to the release of the performance bond, the city manager or designee shall require a maintenance bond in a form acceptable to the city, equal to 50 percent of the performance bond to guarantee satisfactory workmanship on, materials in and performance of or related to structures and improvements allowed or required by this chapter for a period of no less than five years. Maintenance security for required mitigation will be released after meeting the maintenance and monitoring requirements of this chapter and any other applicable conditions of approval. The maintenance bond may be held for longer periods, not to exceed an additional three years, upon finding by the city manager or designee that it is still necessary to hold the bond to ensure the mitigation has met all elements of the approved mitigation plan, or if there is significant uncertainty involved in the mitigation and its functionality.

K. Contingencies/Adaptive Management. When monitoring reveals a significant deviation from predicted impacts or the failure of mitigation measures, the applicant shall be responsible for appropriate corrective action. Contingency plans developed as part of the original mitigation plan shall apply but may be modified to address a specific deviation or failure. Contingency plan measures shall extend the monitoring period and shall be subject to the monitoring requirement to the same extent as the original mitigation measures.

L. Habitat Management Plans.

1. A habitat management plan is an alternative method for compliance with the intent of this critical areas ordinance for wetland critical areas and fish and wildlife habitat conservation critical areas. Preparation of a habitat management plan provides an applicant the opportunity to seek relief from the provisions of this chapter when the variance criteria cannot be met or when innovative development is proposed while protecting and enhancing wetland and fish and wildlife habitat resources.

2. A habitat management plan shall be prepared by a qualified professional and shall include the following:

a. A critical areas report as specified in subsection G of this section, as well as specified under wetland critical areas and fish and wildlife conservation areas;

b. An analysis of how the preferred development proposal will affect the wetland or fish and wildlife habitat conservation area and any critical species;

c. A comparative analysis of the benefits to habitat resources of the preferred development proposal, including scientific basis, with the proposed development if it were to comply with the development regulations as specified in this chapter;

d. Mitigation and monitoring plans as specified in this section as well as specified under wetland critical areas and fish and wildlife conservation areas;

e. Mitigation and monitoring plans shall include methods and processes such as innovative restoration techniques to restore degraded habitat; use of low impact development techniques; connecting habitat corridors that have a primary association with a listed species; collaborating with WDFW on innovative protection, enhancement or monitoring methods or otherwise advancing the science on mitigation and monitoring.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 952, §§ 3, 7, 4-5-2022)

15.88.300 Wetland critical areas.

A. Purpose. The purpose of the wetland critical areas provisions is to protect existing wetlands and maintain no net loss of their functions and values.

B. Designation. Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be determined by a qualified professional in accordance with the most current approved federal wetland delineation manual and applicable regional supplements. All areas within the City meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this section.

C. Wetland Rating. Determination of wetland ratings will be based on the entire extent of wetlands, unrelated to property lines or ownership patterns. For the purpose of categorization, wetlands shall be designated according to the Washington State Wetland Rating System for Western Washington (Ecology Publication ~~#14-06-029~~ #23-06-009) as revised: Wetlands shall be designated as follows:

1. Category I. Are those wetlands that represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a high level of functions. Category I wetlands are those that meet any of the following criteria:

   a. Wetlands that perform many functions well;

   b. Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR as high quality wetlands or wetlands that support state listed threatened or endangered plants;

   c. Bogs; or

   d. Mature and old growth forested wetlands larger than one acre.

2. Category II. Are those wetlands with a moderately high level of functions.

3. Category III. Are those wetlands with a moderate level of functions that can often be adequately replaced with a well-planned mitigation project. These wetlands have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

4. Category IV. Are those wetlands that have the lowest levels of functions and are often heavily disturbed. These are wetlands that should be able to be replaced, or in some cases improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.

5. Any wetlands created as compensation for approved wetland alteration shall be designated as the same category as the wetland it replaces and shall be considered a critical area and subject to all provision of this chapter.

D. Buffers. The standard buffer widths (as defined below) presume the existence of a native forest community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If existing vegetation composition or structure is inadequate, then the buffer width shall be increased or the buffer should be enhanced through planting to create a functional buffer. Required standard wetland buffers, based on wetland category, the level of impacts from adjacent land uses, and the functions or special characteristics of the wetland~~wetland category and land use intensity~~, are as follows:

~~1. Category I~~

~~a. Adjacent to high intensity uses .....300 feet~~

~~b. Adjacent to moderate intensity uses .....225 feet~~

~~c. Adjacent to low intensity uses .....150 feet~~

~~Category II~~

~~a. Adjacent to high intensity uses .....300 feet~~

~~b. Adjacent to moderate intensity uses .....225 feet~~

~~c. Adjacent to low intensity uses .....150 feet~~

~~Category III~~

~~a. Adjacent to high intensity uses .....150 feet~~

~~b. Adjacent to moderate intensity uses .....110 feet~~

~~c. Adjacent to low intensity uses .....75 feet~~

~~Category IV~~

~~a. Adjacent to high intensity uses .....50 feet~~

~~b. Adjacent to moderate intensity uses .....40 feet~~

~~c. Adjacent to low intensity uses .....25 feet~~

1. Wetland buffer width requirements (in feet) if minimization measures in subsection 7 below are not implemented and a habitat corridor is not provided.

Buffer Width (in Feet) Based on Habitat Score Without Minimization Measures				
Category of wetland	**Habitat score 3-5 points (corridor not required)**	**Habitat score 6-7 points**	**Habitat score 8-9 points**	**Buffer width based on special characteristics**
Category I or II: Based on rating of wetland functions (and not listed below)	100	150	300	NA
Category I: Bogs and Wetlands of High Conservation Value	NA	NA	300	250
Category I: Forested	100	150	300	NA
Category III: All types	80	150	300	NA
Category IV: All types	NA	NA	NA	50

2. Wetland buffer width requirements (in feet) if minimization measures in subsection 7 below are implemented and a habitat corridor is provided.

Buffer Width (in Feet) Based on Habitat Score With Minimization Measures				
Category of wetland	**Habitat score 3-5 points (corridor not required)**	**Habitat score 6-7 points**	**Habitat score 8-9 points**	**Buffer width based on special characteristics**
Category I or II: Based on rating of wetland functions (and not listed below)	75	110	225	NA
Category I: Bogs and Wetlands of High Conservation Value	NA	NA	225	190
Category I: Forested	75	110	225	NA
Category III: All types	60	110	225	NA
Category IV: All types	40	40	40	NA

3. For wetlands with a habitat score of 6 points or more, the buffers in Table 2 can be used only if all of the following criteria are met:

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

i. A legally protected, relatively undisturbed and vegetated area (e.g., Priority Habitats, as defined by the Washington State Department of Fish and Wildlife, compensatory mitigation sites, wildlife areas/refuges; or

ii. 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

iii. An area where development is prohibited per the Shoreline Master Program; or

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

b. 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.

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

d. The measures in Table 7 are implemented, as applicable, to minimize the impacts of the adjacent land uses.

4. For wetlands with a habitat score of 5 points or fewer, only the measures in Table 7 are required for the use of the buffers in Table 2.

5. If an applicant does not apply the mitigation measures in Table 7 or is unable to provide a protected corridor, then the buffers in Table 1 shall be used.

6. The buffer widths in Tables 1 and 2 assume that the buffer is vegetated with native plants. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer must either be planted with native vegetation or be widened to ensure that the buffer provides adequate functions to protect the wetland.

7. Impact Minimization Measures

Disturbance	**Measures to minimize impacts**
Lights	• 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

Disturbance	Measures to minimize impacts
Noise	• 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	• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within one hundred fifty feet of wetland • Apply integrated pest management
Stormwater runoff	• Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized 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	• 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 fifty to two hundred 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	• Use best management practices to control dust

8. Any wetland created as compensation for an approved wetland alteration shall meet the standard buffer requirements for the new category of the created wetland or the category of the impacted wetland, whichever is greater. Created wetlands shall be located in such a way that the new associated wetland buffer does not cross onto adjacent property unless that property is owned by the owner of the subject property. Wetlands that have not been inventoried shall be assigned a rating based on the Washington State Wetland Rating System for Western Washington (Ecology Publication ##23-06-009~~14-06-029~~) or as revised and field verification, and the appropriate buffer shall apply.

~~E~~F. General Performance Standards. The requirements provided in this section supplement those identified in Section 15.88.200 General provisions. Activities and uses shall be prohibited from wetlands and wetland buffers, except as provided by this chapter.

~~F~~G. Permitted Alterations. The following activities may only be permitted in a wetland or wetland buffer if the applicant can demonstrate that the activity will not degrade the functions and values of the wetland and

other critical areas. The city manager or his designee may require the preparation of a critical area report to confirm compliance with the requirements of this chapter.

1. Conservation or preservation activities that improve the function of the existing wetland.
2. Modifications to existing structures where no further alteration or increase in footprint will occur.
3. Trails. Public and private trails may be allowed within all wetland buffers when a critical areas report can demonstrate that the wetland and wetland buffer functions and values will not be degraded by trail construction or use. Trail planning, construction, and maintenance shall adhere to the following criteria:
    a. Trail alignment shall follow a path beyond a distance from the wetland edge equal to seventy-five percent of the buffer width except as needed to access viewing platforms. Trails may be placed on existing levees or railroad grades within these limits;
    b. Trails and associated viewing platforms shall be constructed of pervious materials, unless necessary for conformance to the Americans with Disabilities Act. The trail surface shall meet all other requirements, including water quality standards set forth in the Washington State Department of Ecology Stormwater Management Manual for Western Washington, 2012 or as revised;
    c. Trail alignment shall avoid trees in excess of six inches in diameter of any tree trunk at a height of four and one-half feet above the ground on the upslope side of the tree;
    d. Trail construction and maintenance shall follow the U.S. Forest Service Trails Management Handbook (FSH 2309.18, April 1993 or as revised) and Standard Specifications for Construction and Maintenance of Trails (EM-7720-103, September 1996 or as revised);
    e. Access trails to viewing platforms within the wetland may be provided. Trail access and platforms shall be aligned and constructed to minimize disturbance to valuable functions of the wetland or its buffer and still provide enjoyment of the resource;
    f. Buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and
    g. Equestrian trails shall be located or measures provided to assure that runoff from the trail does not directly discharge to the wetland.
4. Stormwater Management Facilities. Stormwater management facilities are not allowed in Category I and II wetlands and buffers. Category I and II, III, and IV wetlands may receive runoff from sources such as roof drains and footing drains when in accordance with the local stormwater code and when such runoff is demonstrated as beneficial to wetland functions. The outer twenty-five percent of Category III and IV wetland buffers may be used for detention/retention areas where the applicant can demonstrate no practical alternative and that such use is beneficial to wetland functions. Enhanced treatment is required prior to discharge to such wetlands, and a stormwater facility maintenance plan shall be submitted.
5. Public Roads and Utilities. Footprint expansion of public roads and utilities may take place to maintain local levels of service, and to provide for and protect public safety when there is no feasible option with less impact and the width of the corridor is minimized to the maximum extent possible. Public and private utility corridors may be allowed within wetland buffers for Category II, III, and IV wetlands when no lesser impacting alternative alignment is feasible, and wetland and wetland buffer functions and values will not be degraded. Whenever possible, utilities shall be constructed in existing, improved roads, on drivable surface or shoulder, and shall be subject to compliance with road maintenance BMPs, or constructed within an existing utility corridor. Otherwise, corridor alignment, construction, restoration and maintenance shall adhere to the following criteria:

a. Corridor alignment shall follow a path beyond a distance from the wetland edge equal to seventy-five percent of the buffer width, except when crossing a Category IV wetland and its buffer;

b. Corridor construction and maintenance shall maintain and protect the hydrologic and hydraulic functions of the wetland and the buffer;

c. Corridors shall be fully revegetated with appropriate native vegetation upon completion of construction; and

d. Utilities requiring maintenance roads shall be prohibited in wetland buffers unless the following criteria are met:

i. There are no lesser impacting alternatives,

ii. Any required maintenance roads shall be no greater than fifteen feet wide. Roads shall closely approximate the location of the utility to minimize disturbances, and

iii. The maintenance road shall be constructed of pervious materials and designed to maintain and protect the hydrologic functions of the wetland and its buffer.

6. Category IV Wetlands. Allowable uses and activities shall include all uses and activities identified in Section 15.88.200(F)(1) through (F)(5) above. In addition, activities and uses that result in unavoidable and necessary impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical areas report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objective.

~~G~~H. Critical Areas Report/Study. In addition to the general requirements for critical areas reports provided under Section 15.88.200 General provisions, wetland critical area reports shall include the following:

1. On the site map:

a. The edge of the wetland as flagged and surveyed in the field using the most current approved federal wetland delineation manual and applicable regional supplements;

b. The location of any proposed wetland area(s) to be created through mitigation measures; and

c. The location of any proposed wetland alteration or fill.

2. In the report:

a. Description of the wetland by classification per the Washington State Wetland Rating System for Western Washington (Ecology Publication #14-06-029);

b. General condition of wetland;

c. Description of vegetation species and community types present in the wetland and surrounding buffer;

d. Description of soil types within the wetland and the surrounding buffer using the USDA Soil Conservation Service soil classification system; and

e. Description of hydrologic regime and findings.

~~H~~I. Wetland Mitigation Requirements. No net loss of wetland functions and values shall occur as a result of the overall project. If a wetland alteration is permitted, then the associated impacts will be considered unavoidable. In addition to the requirements in Section 25.05.200 General provisions, the following mitigation measures to minimize and reduce wetland impacts shall be required:

1. Mitigation shall achieve equivalent or greater biological functions. Mitigation plans shall be consistent with the state Department of Ecology, U.S. Army Corps of Engineers Portland District, and U.S. EPA

Region 10 "Wetland Mitigation in Washington State - ~~Part 2: Developing Mitigation Plans (Version 1),~~ Part 1 – Agency Policies and Guidance (Version 2)" ~~2006~~2021, (~~Publication No. 06-06-011b~~ Publication No. 21-06-003) (or as revised).

2. Preference of Mitigation Actions. Mitigation actions that require compensation shall occur in the following order of preference:

   a. Restoring wetlands on upland sites that were formerly wetlands.

   b. Creating wetlands on disturbed upland sites such as those with vegetation cover consisting primarily of nonnative introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is designed.

   c. Enhancing significantly degraded wetlands only after a minimum one is to one replacement ratio has been met.

3. Mitigation Ratios.

   a. The following standard ratios shall apply to mitigation that is in-kind, on-site, the same category, timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a state-certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification. The first number specifies the acreage of mitigation wetlands and the second specifies the acreage of wetlands altered.

Table X. Wetland Mitigation Ratios[a]

Category and Type of Wetland Impacts	**Creation**	**Rehabilitation**	**Preservation**	**Enhancement**
Category I - based on score for functions	4:1	8:1	16:1	16:1
Category I Mature Forested	6:1	12:1	24:1	24:1
Category I - Bog, Natural Heritage Site	Not considered possible ~~;sup\sup;~~	Case-by-case	Case-by-case	Case-by-case
All Category II	3:1	6:1	12:1	12:1
All Category III	2:1	4:1	8:1	8:1
All Category IV	1.5:1	3:1	6:1	6:1

[a] Ratios for rehabilitation, preservation, and enhancement may be reduced when combined with 1:1 replacement through creation or re-establishment. See Table 1a, Wetland Mitigation in Washington State - Part 1: Agency Policies and Guidance—Version ~~1~~2, (Ecology Publication #21-06-003~~#06-06-011a~~, Olympia, WA, ~~March 2006~~April 2021 or as revised).

   b. Increased Ratios. The City 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 was an unauthorized impact.

c. Decreased Ratios. The City may decrease these ratios under the following circumstances:

i. Documentation by a qualified wetlands specialist demonstrates that the proposed mitigation actions have a very high likelihood of success;

ii. Documentation by a qualified professional demonstrates that the proposed mitigation actions will provide functions and values that are significantly greater than the wetland being impacted; or

iii. The proposed mitigation actions are conducted in advance of the impact and have been shown to be successful.

d. Credit/Debit Method. To more fully protect functions and values, and as an alternative to the mitigation ratios found in Table X, the Administrator may allow mitigation based on the "credit/debit" method developed by the Department of Ecology in "Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Final Report," (Ecology Publication #10-06-011, Olympia, WA, March 2012, or as revised).

4. Wetland Mitigation Banks.

a. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:

i. The bank is certified under state rules;

ii. The Administrator determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and

iii. The proposed use of credits is consistent with the terms and conditions of the certified bank instrument.

b. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the certified bank instrument.

c. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the certified bank instrument. In some cases, the service area of the bank may include portions of more than one adjacent drainage basin for specific wetland functions.

5. Advance Mitigation. Mitigation for projects with pre-identified impacts to wetlands may be constructed in advance of the impacts if the mitigation is implemented according to federal rules, state policy on advance mitigation, and state water quality regulations.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 865, § 2(Exh. A), 8-4-2015)

15.88.400 Critical aquifer recharge areas.

A. Purpose. The purpose of the critical aquifer recharge area (CARA) provisions is to protect groundwater quality and quantity for public water supply and to maintain hydrologic functions of aquatic areas. CARAs contribute to the replenishment of groundwater and, due to their prevailing geologic conditions associated with infiltration rates, have a high potential for contamination of groundwater resources.

B. Designation. Critical aquifer recharge areas are areas to be determined by the city to have a critical recharging effect on aquifers used for potable water consistent with WAC 365-190-030(2) and as designated on maps to be located in Carnation City Hall.

1. Critical aquifer recharge areas are categorized as follows:

a. Category I critical aquifer recharge areas include those areas designated on the critical aquifer recharge area map as highly susceptible to groundwater contamination and that are located within a sole source aquifer or wellhead protection area.

b. Category II critical aquifer recharge areas include those mapped areas designated that:

i. Have a medium susceptibility to groundwater contamination and are located in a sole source aquifer or wellhead protection area; or

ii. Are highly susceptible to groundwater contamination and are not located in a sole source aquifer or wellhead protection area.

2. An applicant may request the city to declassify a specific area included in the city's CARA designation map. The request must be supported by a critical areas report that includes a hydrogeologic assessment by a qualified professional. The city shall review the request to declassify an area and shall make a determination to amend the CARA designation map as appropriate.

C. Prohibited Uses and Activities.

1. The following uses or activities are prohibited in designated Category I critical aquifer recharge areas:

a. Hazardous liquid pipelines;

b. Sand and gravel, and hard rock mining on land that is not zoned for mining as of the effective date of the ordinance codified in this chapter;

c. Mining of any type below the groundwater table;

d. Processing, storage, and disposal of radioactive wastes;

e. Hydrocarbon extraction;

f. Commercial wood treatment facilities on permeable surfaces;

g. Golf courses;

h. Cemeteries;

i. Wrecking yards; and

j. Landfills for hazardous waste, municipal solid waste, or special waste.

2. The following uses and activities are prohibited in a designated Category II critical aquifer recharge area:

a. Mining of any type below the water table;

b. Processing, storage, and disposal of radioactive substances;

c. Hydrocarbon extraction;

d. Commercial wood treatment facilities on permeable surfaces;

e. Wrecking yards; and

f. Landfills for hazardous waste, municipal solid waste, or special waste.

D. Performance Standards. The city manager or designee shall only require a critical areas report for a development proposal in a CARA if the city manager or designee determines that the report will provide information that is necessary to protect the CARA from adverse impacts created by the development proposal. In addition, the following performance standards will apply:

1. Containment. Every development proposal involving hazardous substance processing or handling which is located in or adjacent to a CARA shall provide containment devices adequate in size to contain on-site any unauthorized release of hazardous substances from any area where these substances are either stored, handled, treated, used, or produced. Containment devices shall prevent such substances from penetrating into the ground. This provision also applies to releases that may mix with storm runoff.

2. Hazardous Substances Management Plan. Every development proposal involving hazardous substance processing or handling which is located in or adjacent to a CARA shall prepare a plan containing procedures to be followed to prevent, control, collect, and dispose of any unauthorized release of a hazardous substance.

3. Storage Tanks.

   a. All storage tanks proposed to be located in a CARA must comply with local building code requirements and must conform to the current International Fire Code requirements for secondary containment.

   b. Underground Tanks. All new underground tanks located in or adjacent to a CARA shall 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 noncorrosive material, steel clad with a noncorrosive 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.

   c. Adequate protection against corrosion shall be verified by a qualified professional following construction and shall be re-verified by a qualified professional every three years that the tanks are in use.

   d. Aboveground Tanks. No new aboveground storage tank located in or adjacent to a CARA shall be installed, used or maintained in any manner which may allow the release or a hazardous substance to the ground, groundwaters, or surface water.

4. Agriculture. Agricultural activities in or adjacent to a CARA shall use best management practices to prevent ground quality degradation from livestock waste.

5. Sewage Disposal. All residential, commercial or industrial development proposals located in or adjacent to a CARA shall comply with CMC Section 13.06.120.

6. Golf Courses. Golf course operations proposed in or adjacent to a CARA shall be subject to a golf course maintenance plan using best management practices to protect groundwater quality. The plan shall detail the proposed use of fertilizers, herbicides, pesticides, fungicides, or other maintenance agents, with projected application methods and schedules and measures to prevent pollution of groundwater.

7. Commercial Vehicle Repair and Servicing. 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. No dry wells

shall be allowed in CARAs on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility development must be abandoned using techniques approved by the Washington State Department of Ecology prior to commencement of the proposed activity.

8. The city shall impose conditions on the uses listed in the table below in accordance with the applicable state and federal regulations as necessary to protect CARAs.

Statutes, Regulations, and Guidance Pertaining to Groundwater Impacting Activities

Activity	Statute—Regulation—Guidance
Aboveground 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)
Chemical treatment storage and disposal facilities	Chapter 173-303-182 WAC
Hazardous waste generator (boat repair shops, biological research facility, dry cleaners, furniture stripping, motor vehicle service garages, photographic processing, printing and publishing shops, etc.)	Chapter 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	Chapter 332-12-450 WAC, WAC, 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, 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	Chapter 332-18-015 WAC
Underground storage tanks	Chapter 173-360 WAC
Wastewater application to land surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 952, § 7, 4-5-2022)

15.88.500 Fish and wildlife habitat conservation areas.

A. Purpose. The purpose of fish and wildlife habitat conservation is to preserve and protect those areas with which anadromous fish, threatened and endangered species, and species of local importance have a primary association.

B. Designation.

1. For purposes of this chapter, fish and wildlife conservation areas are those habitat areas that meet any of the following criteria:

   a. Documented presence of species listed by the federal government or the state of Washington as endangered, threatened, and sensitive species; or

   b. Sites containing bald eagle habitat as mapped by WDFW; or

   c. Sites containing heron rookeries or active nesting trees; or

   d. All waterways which meet the criteria for streams set forth in WAC 222-16-030 and based on the interim water typing system in WAC 222-16-031.

2. All areas within the city meeting one or more of the above criteria, regardless of any formal identification, are designated critical areas and are subject to the provisions of this chapter. 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 most recently updated.

3. Any fish and wildlife conservation areas or other critical areas created or recorded as compensation for approved wetland alterations shall be designated as the same type, class, or category as the critical area it replaces and shall be subject to all provisions of this chapter.

C. Buffers.

1. Waterways. Waterways are classified according to WAC 222-16-031. Definitions are provided in Section 15.88.700. The following buffer widths are the minimum requirements for waterways, except as provided for the Tolt ~~River~~ and Snoqualmie Rivers in subsection (C)(3) of this section. All buffers shall be measured from the ordinary high water mark (OHWM).

   a. A one hundred fifteen foot buffer on each side of the channel of Class 1, 2, and 3 watercourses.

   b. A sixty-five foot buffer on each side of the channel of a Class 4 watercourse.

   c. A twenty-five foot buffer on each side of the channel of a Class 5 watercourse.

2. Wildlife and Other Habitat. Buffer widths and setbacks for the protection of listed species outside of streams and stream buffers will be determined by the city on a site-specific basis through the approval of a critical areas report. The city manager of his designee shall consider the recommendation for adequate buffers for wildlife and other habitat as identified in the current management recommendations for Washington Priority Species (WDFW).

3. Tolt ~~River~~and Snoqualmie Rivers: Channel Migration Zone. The buffer for the Tolt and Snoqualmie River~~s~~ shall extend one hundred feet from the edges of their ~~its~~ channel migration zone. The channel migration zone shall be designated according to the 2017 King County Department of Natural Resources and Parks, Water and Land Resources Division Tolt River Channel Migration Study and the 2025 King County Department of Natural Resources and Parks, Water and Land Resources Division Lower Snoqualmie River Channel Migration Study, as revised. ~~The floodway for the Tolt River as mapped by FEMA on map 53033C0418G and 53033C0419G, December 6, 2001 shall be used as a surrogate for the channel migration zone. If the floodway is mapped differently in the future by FEMA, the map with the largest area mapped as floodway shall be used as a surrogate for the channel migration zone.~~

D. General Performance Standards. The requirements provided in this section supplement those identified in Section 15.88.200 General provisions. Fish and wildlife habitat conservation areas may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the qualitative functions and

values of the habitat. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with Section 15.88.121 of this chapter. Additional performance standards follow:

1. No development shall be allowed within a habitat conservation area or any associated buffer with which state or federal endangered, threatened, or sensitive species have a primary association.

2. Whenever development is proposed adjacent to a fish and wildlife habitat conservation area with which state or federal endangered, threatened, or sensitive species have a primary association, such areas shall be protected by the measures recommended in a critical areas report prepared by a qualified professional and approved by the city manager or designee.

3. Approval of alteration of the fish and wildlife habitat conservation area, buffer or any associated setback requirements shall not occur prior to approval by the city upon the completion of consultation with the State Department of Fish and Wildlife and the appropriate federal agency, if applicable.

4. No plant, wildlife, or fish species that is not indigenous to the region shall be introduced into a fish and wildlife habitat conservation area unless authorized by the city manager or designee after reviewing related state or federal permit or approval.

5. Alteration of natural watercourses shall be avoided, if feasible. If alteration is unavoidable, the following provisions shall apply:

    a. Watercourse alteration projects shall not result in blockage of side channels. Known fish barriers into side channels shall be removed as part of an approved watercourse alteration project.

    b. Removal of large woody debris (LWD) and vegetation, including salvage logging, shall be avoided or minimized unless it is demonstrated that the LWD poses an imminent safety hazard to the public, property or structures, or when it is part of a larger restoration project. Any removal that is unavoidable shall be mitigated by replanting with native vegetation and by augmenting lost LWD where LWD can be anchored in such a way to provide fisheries, riparian or shoreline erosion benefits; and to avoid safety hazards where recreational boating and swimming are expected.

    c. The applicant shall provide a performance bond in a form acceptable to the city manager or designee prior to issuance of any permits for alteration of natural watercourses in the amount of 150 percent of the cost of design, installation, maintenance and monitoring of the project. The bond shall remain in effect until the watercourse alteration project has been inspected and completed to the satisfaction of the city manager or designee.

    d. The applicant shall maintain the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished. A maintenance bond shall be required prior to the release of the performance bond, final inspection or occupancy, whichever comes first, in a form acceptable to the city manager or designee in the amount of 50 percent of the performance bond. Maintenance and monitoring shall be bonded for a period of five years and be in accordance with an approved maintenance program.

6. The city manager or designee shall place conditions on the requested permit to restrict activities allowed within a fish and wildlife habitat conservation area or its buffer, as necessary, per the approved critical area report and habitat management plan to minimize or mitigate any potential adverse impacts. Conditions may include:

    a. Establishment of buffer zones outside of the required watercourse, channel migration zone and wetland buffers, on a case-by-case basis, as may be necessary to retain adequate natural habitat for listed species;

    b. Preservation of critically important vegetation and/or habitat features (e.g., snags);

c. Limitation of access to the habitat area, including fencing (on a case-by-case basis) to deter unauthorized access; (Note: Fencing shall not create a barrier to habitat function.)

d. Seasonal restrictions of construction activities; and

e. Establishment of a duration and timetable for periodic review of mitigation activities.

6. The city manager or designee shall place conditions on the requested permit to restrict activities allowed within a fish and wildlife habitat conservation area or its buffer, as necessary, per the approved critical area report and habitat management plan to minimize or mitigate any potential adverse impacts. Conditions may include:

a. Establishment of buffer zones outside of the required watercourse, channel migration zone and wetland buffers, on a case-by-case basis, as may be necessary to retain adequate natural habitat for listed species;

b. Preservation of critically important vegetation and/or habitat features (e.g., snags);

c. Limitation of access to the habitat area, including fencing (on a case-by-case basis) to deter unauthorized access; (Note: Fencing shall not create a barrier to habitat function.)

d. Seasonal restrictions of construction activities;

e. Establishment of a duration and timetable for periodic review of mitigation activities; and

f. Requirement of a performance bond, when necessary, to ensure successful completion.

E. Special Provisions—Watercourses.

1. The requirements provided in this section supplement those identified in Section 15.88.200 General provisions. Activities may only be permitted in a watercourse or watercourse buffer if the applicant can show that the proposed activity will not degrade the functions and values of the watercourse, watercourse buffer, or other critical area.

2. Class 1, 2, and 3 watercourses as defined in Section 15.88.700. Activities and uses shall be prohibited in Class 1 and 2 watercourses except as provided for in Sections 25.05.122 through 25.05.125, and the allowable activities and uses listed below.

a. Watercourse Crossings. Watercourse crossing shall be minimized, but when necessary they shall conform to the following standards as well as other applicable laws (see the State Department of Fish and Wildlife, or Ecology).

i. The watercourse crossing is the only reasonable alternative that has the least impact;

ii. It has been shown in the critical areas report that the proposed crossing will not decrease the watercourse and associated buffer functions and values;

iii. The watercourse crossing shall use bridges instead of culverts unless it can be demonstrated that a culvert would result in equal or less ecological impacts;

iv. All watercourse crossings using culverts shall use super span or oversized culverts with appropriate fish enhancement measures. Culverts shall not obstruct fish passage;

v. Watercourse crossings shall be designed according to the current Washington Department of Fish and Wildlife ~~Fish Passage Design at Road Culverts, 1999~~ Water Crossing Design Guidelines, 2013 (and as amended), and the National Marine Fisheries Service Guidelines for Salmonid Passage Facility Design, 2008 (and as revised);

vi. All watercourse crossings shall be constructed during the summer low flow period between June 15th and September 15th or as specified by the State Department of Fish and Wildlife in the hydraulic project approval;

vii. Watercourse crossings shall not occur through salmonid spawning areas unless no other feasible crossing site exists;

viii. Bridge piers or abutments shall not be placed in either the floodway or between the ordinary high water marks unless no other feasible alternative placement exists;

ix. Watercourse crossings shall not diminish the flood carrying capacity of the stream;

x. Watercourse crossings shall minimize interruption of downstream movement of wood and gravel;

xi. Watercourse crossings shall provide for maintenance of culverts and bridges; and

xii. Watercourse crossings shall be minimized by serving multiple properties whenever possible.

b. Trails. The criteria for alignment, construction, and maintenance of trails within wetlands and their buffers shall apply to trails within watercourse buffers.

c. Utilities. The criteria for alignment, construction, and maintenance within the wetland buffers shall apply to utility corridors within watercourse buffers. In addition, corridors shall not be aligned parallel with any watercourse channel unless the corridor is outside the buffer, and crossings shall be minimized. Installation shall be accomplished by boring beneath the scour depth and hyporheic zone of the water body where feasible. Where possible crossings shall be contained within the existing footprint of an existing road or utility crossing. Otherwise, crossings shall be at an angle greater than sixty degrees to the centerline of the channel. Criteria for watercourse crossing shall also apply.

d. Stormwater Facilities. Stormwater facilities may be permitted provided that they are located in the outer twenty-five percent of the buffer and are located in the buffer only when no practicable alternative exists outside buffer. Stormwater facilities should be planted with native plantings where feasible to provide habitat, and/or less intrusive facilities should be used. Detention/retention ponds should not be located in the buffer.

e. Floodway Dependent Structures. Floodway dependent structures or installations may be permitted within streams if allowed or approved by other ordinances or other agencies with jurisdiction.

f. Stream Bank Stabilization. Stream bank stabilization shall only be allowed when it is shown, through a stream bank stability assessment conducted by a qualified fluvial geomorphologist or hydraulic engineer, that such stabilization is required for public safety reasons, that no other less intrusive actions are possible, and that the stabilization will not degrade in-stream or downstream channel stability. Stream bank stabilization shall utilize bioengineering or soft armoring techniques unless otherwise demonstrated. Stream bank stabilization shall conform to the Integrated Streambank Protection Guidelines developed by the Washington State Department of Fish and Wildlife, 2002 or as revised. Stabilization measures must demonstrate the following:

i. Natural shoreline processes will be maintained. The project will not result in increased erosion or alterations to, or loss of, shoreline substrate within one-fourth mile of the project area;

ii. The stabilization measures will not degrade fish or wildlife habitat conservation areas or associated wetlands;

iii. Adequate mitigation measures ensure that there is no net loss of the functions or values of riparian habitat.

g. Steam Bank Stabilization Maintenance. Maintenance of lawfully established existing bank stabilization is allowed provided it does not increase the height or linear amount of bank and does not expand waterward or into aquatic habitat landward.

3. Class 3, 4 and 5 Watercourses. Activities and uses that result in unavoidable and necessary impacts may be permitted in Class 3, 4, and 5 watercourses and buffers in accordance with an approved critical areas report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives.

F. Special Provisions—Anadromous Fish.

1. Activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, the following:

a. Activities shall be timed to occur only during the allowable work window as designated by the State Department of Fish and Wildlife;

b. An alternative alignment or location for the activity is not feasible;

c. The activity is designed so that it will minimize the degradation of the functions or values of the fish habitat or other critical areas; and

d. Any impact to the functions and values of the habitat conservation area are mitigated in accordance with an approved critical areas report.

2. Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and shall prevent juveniles migrating downstream from being trapped or harmed.

3. Fills, when authorized, shall minimize the adverse impacts to anadromous fish and their habitat, shall mitigate any unavoidable impacts, and shall only be allowed for water-dependent uses.

4. Fueling facilities within one hundred feet of the buffer must follow all applicable state regulations that achieve fuel containment.

5. To the extent allowed by law, any mitigation of development impacts within the Tolt and Snoqualmie River buffers shall ensure that native species are retained. The buffer shall be comprised of plant species native to the region. If the buffer does not contain sufficient native species as determined by the critical areas report, mitigation (to the extent allowed by law) shall require that trees be planted from among the following species: black cottonwood (Populus trichocarpa), Douglas fir (Pseudotsuga menziesii), eastern red cedar (Thuja plicata), Sitka spruce (Picea sitchensis), bigleaf maple (Acer macrophyllum) and red alder (Alnus Rubra). Monitoring and maintenance will be used to ensure that the buffer achieves mature forest conditions and contributes wood to maintain channel processes.

G. Special Provisions—Wildlife. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292).

H. Critical Areas Report.

1. A critical areas report for fish and wildlife habitat conservation areas shall be prepared by a qualified biologist with experience analyzing aquatic and/or wildlife habitat and who has experience preparing reports for the relevant type of critical area.

2. In addition to the requirements of Section 15.88.200 General provisions, critical area reports for wildlife habitat areas shall include the following additional information:

    a. Any species of local importance; priority species; or endangered, threatened, sensitive, or candidate species that has a primary association with habitat on or adjacent to the project area;

    b. The qualities that are essential to maintain feeding, breeding, and nesting of listed species using the fish and wildlife habitat conservation area; and

    c. Measures to minimize the impact on these ecological processes from proposed activities. The applicant shall be guided by the document Management Recommendations for Washington's Priority Habitats and Species, issued by the Washington Department of Wildlife, May 1991, (or as revised), and by any recovery and management plans prepared by the Washington Department of Wildlife for the listed species pursuant to WAC 232-12-297(11). Measures to minimize impacts shall consider the following:

        i. Seasonal restrictions on construction activities,

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

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

        iv. Establishment of expanded buffers around the critical area,

        v. Limitation of access to the critical area and buffer, and

        vi. The creation of restoration of habitat area for listed species.

3. A critical areas report for watercourses shall include the following information:

    a. On the site map:

        i. The location of the ordinary high water mark;

        ii. The toe of any slope twenty-five percent or greater within twenty-five feet of the ordinary high water mark; and

        iii. The location of any proposed or existing watercourse crossing.

    b. In the report:

        i. Characterization of riparian (streamside) vegetation species, composition, and habitat function;

        ii. Description of the soil types adjacent to and underlying the watercourse, using the soil conservation service soil classification system;

        iii. Determination of the presence or absence of fish, and reference sources; and

        iv. When watercourse alteration is proposed, the report shall include watercourse width and flow; stability of the channel including erosion potential; type of substratum; discussions of infiltration capacity and bio-filtration as compared to the watercourse prior to alteration;

presence of hydrologically linked wetlands; analysis of fish and wildlife habitat; and proposed floodplain limits.

I. Watercourse Mitigation. No net loss of watercourse functions and values shall occur as a result of the overall project. The mitigation requirements for watercourse alterations, in addition to the requirements in Section 15.88.200 General provisions, shall meet the following minimum performance standards and shall occur pursuant to an approved mitigation plan:

1. Achieve equivalent or greater functions, including, but not limited to, habitat functions and hydrologic functions.

2. Maintain or improve watercourse channel dimensions, including depth, length, and gradient.

3. Restore watercourse buffers disturbed by the project with native vegetation.

4. Create an equivalent or improved channel bed.

5. Replace watercourse and watercourse buffer habitat features and areas disturbed by the project.

6. Unless it is demonstrated that a higher level of watercourse function would result from an alternate mitigation approach, compensatory mitigation should be either in-kind and on-site, or in-kind and within the same subbasin. Mitigation actions should be conducted on-site except when:

   a. There are no reasonable on-site or in-sub-drainage basin opportunities with a high likelihood of success;

   b. Off-site mitigation has a greater likelihood of providing equal or improved habitat functions for fish and wildlife;

   c. Established watershed goals for water quality, flood or conveyance, habitat, or other functions, including priorities and recommendations outlined in the WRIA 7 Salmon conservation plan, justify location of mitigation at another site.

      i. Prior to approval of off-site mitigation, the off-site mitigation area shall be recorded as stipulated in Section 15.88.116.

7. The requirements in this section may be modified at the city manager or designee's direction if the applicant demonstrates that, with respect to each watercourse area function, greater functions can be obtained in the affected drainage subbasin through alterative mitigation.

J. Mitigation Plans for Alteration to Watercourses and Watercourse Buffers. The scope and content of a mitigation plan to alter watercourse and watercourse buffers shall be decided on a case-by-case basis. As the impacts to the critical area increase, the mitigation measures to offset these impacts will increase in number and complexity. Refer to provisions in Section 15.88.200 General provisions.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 952, §§ 6, 7, 4-5-2022)

15.88.600 Geologically hazardous areas.

A. Purpose. The purpose of this section is to reduce the risk to public health and safety by preventing incompatible development activity in or near geologically hazardous areas.

B. Designation. Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. These areas pose a threat to the health and safety of citizens when incompatible development is sited in significant hazardous areas. Such incompatible development may not only place itself

at risk, but may also increase the hazard to surrounding development and uses. Areas susceptible to one or more of the following types of hazards shall be designated as geologically hazardous areas:

1. Slope erosion hazard;
2. Class II and Class III landslide hazards (including steep slopes);
3. Seismic hazard;
4. ~~Other geological events including mass wasting, debris flows, rock falls, and differential settlement.~~
4. Channel migration hazard

C. Prohibited Development and Activities.

1. Pipelines containing hazardous substances (e.g., petroleum) are prohibited in geologically hazardous areas.

D. Performance Standards.

1. All projects shall be evaluated to determine whether the project is proposed to be located in a geologically hazardous area, the project's potential impact on the geologically hazardous area, and the potential impact on the proposed project. The city manager or designee may require the preparation of a critical area report to determine the project's ability to meet the performance standards.
2. Alterations of geologically hazardous areas or associated buffers may only occur for activities that:
   a. Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;
   b. Will not adversely impact other critical areas;
   c. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than pre-development conditions;
   d. Are certified as safe as designed and under anticipated conditions by a qualified geotechnical engineer or geologist, licensed in the state of Washington.
3. All development applications shall submit an erosion control plan consistent with this section prior to receiving approval.
4. Clearing limits for roads, water, wastewater, and stormwater utilities, and temporary erosion control facilities shall be marked in the field and approved by the city prior to any alteration of existing native vegetation.
5. Approved clearing shall only be allowed from May 1st to October 1st of each year considering that the city may extend or shorten the dry season on a case-by-case basis depending on the actual weather conditions; except that timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practices permit issued by the State Department of Natural Resources.
6. Access roads and utilities may be permitted in the erosion or landslide hazard area and associated buffers if the city determines that no other feasible alternative exists.
7. Utility lines and pipes shall be permitted in the erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be located aboveground and be properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Stormwater conveyance shall be allowed only through a high-density polyethylene pipe with fuse-welded joints, or similar product that is technically equal or superior.

8. Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except that conveyance is allowed via continuous storm pipe down slope to a point where there are no erosion hazard areas downstream from the discharge.

9. The division of land in erosion or landslide hazard areas and associated buffers is subject to provisions established for all critical areas in Section 15.88.200 General provisions.

E. Special Provisions— Slope Erosion ~~-~~ Hazard ~~and Landslide~~ Areas. Activities on sites containing slope erosion ~~or landslide~~ hazards shall meet the following requirements:

1. Buffers Required. A buffer shall be established for all edges of slope erosion ~~or landslide~~ hazard areas. The size of the buffer shall be determined by the city manager or designee in order to eliminate or minimize the risk of property damage, death, or injury resulting from slope erosion ~~and landslides~~ caused in whole or part by the development, based upon review of and concurrence with a critical areas report prepared by a ~~qualified professional~~licensed geotechnical engineer.

2. Minimum Buffers. The minimum buffer shall be equal to the height of the slope, or fifty feet, whichever is greater.

3. Buffer Reduction. The buffer may be reduced to a minimum of ten feet when a licensed geotechnical engineer ~~a qualified professional~~ demonstrates to the satisfaction of the city manager or designee that the reduction will adequately protect the proposed development, adjacent developments and uses, and the subject critical area.

4. Increased Buffer. The buffer may be increased when the city manager or designee determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.

5. Alterations. Alterations of ~~an~~ a slope erosion hazard area ~~or landslide hazard area~~and/or buffer may only occur for activities for which a geotechnical analysis is submitted and certifies that:

   a. The development will not increase surface water discharge or sedimentation to adjacent properties beyond the pre-development condition;

   b. The development will not decrease slope stability on adjacent properties; and

   c. Such alteration will not adversely impact other critical areas.

F. Special Provisions— Landslide Hazard Areas. Activities on sites containing landslide hazard areas shall meet the following requirements:

1. Buffers Required. A buffer shall be established for all edges of landslide hazard areas. The size of the buffer shall be determined by the city manager or designee in order to eliminate or minimize the risk of property damage, death, or injury resulting from landslides caused in whole or part by the development, based upon review of and concurrence with a critical areas report prepared by a licensed geotechnical engineer.

2. Minimum Buffers. The minimum buffer shall be fifty feet from all sides of a landslide hazard area.

3. Buffer Reduction. The buffer may be reduced to a minimum of ten feet when a licensed geotechnical engineer demonstrates to the satisfaction of the city manager or designee that the reduction will adequately protect the proposed development, adjacent developments and uses, and the subject critical area.

4. Increased Buffer. The buffer may be increased when the city manager or designee determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.

5. Alterations. Alterations of a landslide hazard area and/or buffer may only occur for activities for which a geotechnical analysis is submitted and certifies that:

a. The development will not increase surface water discharge or sedimentation to adjacent properties beyond the pre-development condition;

b. The development will not decrease slope stability on adjacent properties; and

c. Such alteration will not adversely impact other critical areas.

G. Special Provisions— Channel Migration Hazard Areas. Activities on sites containing channel migration hazard areas shall meet the following requirements:

1. Buffers Required. A buffer shall be established for all edges of channel migration hazard areas. The size of the buffer shall be determined by the city manager or designee in order to eliminate or minimize the risk of property damage, death, or injury resulting from channel migration caused in whole or part by the development, based upon review of and concurrence with a critical areas report prepared by a licensed engineer or a licensed geologist.

2. Minimum Buffers. The minimum buffer shall be fifty feet.

3. Buffer Reduction. The buffer may be reduced to a minimum of ten feet when a licensed engineer or licensed geologist demonstrates to the satisfaction of the city manager or designee that the reduction will adequately protect the proposed development, adjacent developments and uses, and the subject critical area.

4. Increased Buffer. The buffer may be increased when the city manager or designee determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.

5. Alterations. Alterations of a channel migration hazard area and/or buffer may only occur for activities for which a geomorphic analysis prepared by a licensed engineer or licensed geologist is submitted and certifies that:

a. The development will not increase surface water discharge or sedimentation to adjacent properties beyond the pre-development condition;

b. The development will not decrease slope stability on adjacent properties; and

c. Such alteration will not adversely impact other critical areas.

~~F.~~H. Design Standards— Slope Erosion and Landslide Hazard Areas. Design standards for a development proposal within an erosion area or a Class II or Class III landslide hazard area and/or buffer shall meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this section. The requirements for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design standards are:

1. Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;

2. Structures and improvements shall minimize alterations to the natural contours of the slope and foundations shall be tiered where possible to conform to existing topography;

3. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

4. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties; and

5. The use of a retaining wall that allows the maintenance of existing natural slopes are preferred over graded artificial slopes.

~~G.~~I. Impervious Surface Ratio.

1. An impervious surface ratio is a measurement of the amount of the site that is covered by any material that substantially reduces or prevents the infiltration of stormwater into previously undeveloped land. The maximum impervious surface ratios for Class II and Class III landslide hazard areas are set forth as follows:

    a. Class II landslide hazard areas may have a maximum impervious surface ratio of .30.

    b. Class III landslide hazard areas may have a maximum impervious surface ratio of .20.

~~H.~~J. Native Vegetation.

1. The minimum percentage of native vegetation that must be retained on sites including Class II or Class III landslide hazard areas is set forth as follows:

    a. Class II landslide hazard areas require a minimum of sixty-five percent retained native vegetation.

    b. Class III landslide hazard areas require a minimum of sixty-five percent retained native vegetation.

~~I.~~K. Seismic Hazard Areas.

1. Development proposals on sites containing mapped seismic hazard areas may make alterations to a seismic hazard area only when the applicant demonstrates and the city concludes that:

    a. Evaluation of site specific subsurface conditions show that the site is not located in a seismic hazard area; or

    b. The applicant implements appropriate engineering design based on the best available engineering and geological practices that either eliminates or minimizes the risk of structural damage or injury resulting from seismically induced or soil liquefaction related ground deformations.

2. The city may in its sole discretion waive or reduce engineering study and design requirements for alterations in seismic hazard areas for any development permits except those for:

    a. Essential facilities as defined by the International Building Code (IBC) as adopted by the city, or a facility the destruction of which would constitute a hazard to life or property due to the potential for release or discharge of hazardous materials or other applicable relevant considerations pursuant to Chapter 16 of the IBC. The foregoing includes, but is not limited to, wastewater treatment plants, public potable water supply facilities, city hall, and fire stations;

    b. Nonresidential structures with an occupancy load of fifty persons or greater, or facilities that are publicly funded or owned, specifically including without limitation school buildings,

    c. Any development that includes new construction, additions or alterations that will increase occupancy or significantly affect the risk of structural damage or injury located on a site with areas identified as containing erosion and/or landslide hazards in addition to seismic hazard.

3. Nothing herein shall be deemed as waiving, altering, or otherwise abridging any applicable requirement of the state building code, as adopted by the city.

~~J.~~L. Critical Areas Report.

1. When a critical areas report is required for a geologically hazardous area, it shall be prepared by an engineer or geologist licensed in the state of Washington with experience analyzing geologic, hydrogeologic, and groundwater flow systems, and who has experience preparing reports for the relevant type of hazard.

2. In addition to the requirements of Section 15.88.200 General provisions, critical area reports required for geologically hazardous areas shall include the following additional information:

a. On the site map:

i. All geologically hazardous areas within or adjacent to the project area or that have potential to be affected by the proposal; and

ii. The top and toe of slope (Note: These should be located and flagged in the field subject to city staff review).

b. In the report:

i. A geological description of the site;

ii. A discussion of any evidence of existing or historic instability, significant erosion or seepage on the slope;

iii. A discussion of the depth of weathered or loosened soil on the site and the nature of the weathered and underlying basement soils;

iv. An estimate of load capacity, including surface and ground water conditions, public and private sewage disposal system, fill and excavations, and all structural development;

v. Recommendations for building limitations, structural foundations, and an estimate of foundation settlement;

vi. A complete discussion of the potential impacts of seismic activity on the site;

vii. Recommendations for management of stormwater for any development above the top of slope;

viii. A description of the nature and extent of any colluviums or slope debris near the toe of slope in the vicinity of any proposed development; and

ix. Recommendations for appropriate building setbacks, grading restrictions, and vegetation management and erosion control for any proposed development in the vicinity of the geologically hazardous areas.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 765, § 2, 8-4-2009; Ord. No. 952, § 7, 4-5-2022)

15.88.700 Definitions.

"Access roads" means a nonpublic vehicular access, established and maintained for, but not limited to, observing, operating, maintaining, repairing and/or replacing man-made improvements or natural resources.

"Active fault" means a fault that is considered likely to undergo renewed movement within a period of concern to humans. Faults are commonly considered to be active if the fault has moved one or more times in the last ten thousand years.

"Adjacent" means immediately adjoining (in contact with the boundary of the influence area) or within a distance less than that needed to separate activities from critical areas to ensure protection of the functions and values of the critical areas. Adjacent shall mean any activity or development located:

1. On site immediately adjoining a critical area; or

2. A distance equal to or less than the required critical area buffer width and building setback.

"Alteration" means any human-induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to: grading, filling, dredging, channelizing, clearing (vegetation), applying

pesticides, discharging waste, construction, compaction, excavation, modifying for stormwater management, relocating, or other activities that change the existing landform, vegetation, hydrology, wildlife, or habitat value, of critical areas.

"Anadromous fish" means fish that spawn in fresh water and mature in the marine environment.

"Applicant" means the person, party, firm, corporation, or other entity that proposes any activity that could affect a critical area.

"Aquifer recharge area" means an area that, due to the presence of certain soils, geology, and surface water, acts to recharge groundwater by percolation.

"Base flood" means a flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "one hundred-year flood."

"Base flood elevation" means the water surface elevation of the base flood. It shall be referenced to the National Geodetic Vertical Datum of 1929 (NGVD).

"Best available science" means current scientific information derived from a valid scientific process as defined by WAC 365-195-900 through WAC 365-195-925 and applied to the process for designating, protecting, or restoring critical areas.

"Best management practices" means conservation practices or systems of practice and management measures that:

1. Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics, and sediment;
2. Minimize adverse impacts to surface water and groundwater flow, circulation patterns, and the chemical, physical, and biological characteristics of wetlands;
3. Protect trees and vegetation designated to be retained during and following site construction; and
4. Provides standards for proper use of chemical herbicides within critical areas.

"Buffer" means the zone contiguous with a critical area that is required for the continued maintenance, function, and structural stability of the critical area.

Channel Migration Hazard Area, Moderate. "Moderate channel migration hazard area" means a portion of the channel migration zone, as shown on King County's channel migration zone maps, that lies between the severe channel migration hazard area and the outer boundaries of the channel migration zone.

Channel Migration Hazard Area, Severe. "Severe channel migration hazard area" means a portion of the channel migration zone, as shown on King County's channel migration zone maps, that include the present channel. The total width of the severe channel migration hazard area equals one hundred years times the average annual channel migration rate, plus the present channel width.

"Channel migration zone (CMZ)" means the lateral extent of likely movement along a stream or river during the next one hundred years as determined by evidence of active stream channel migration movement over the past one hundred years. The channel migration zone shall be designated according to the 2017 King County Department of Natural Resources and Parks, Water and Land Resources Division Tolt River Channel Migration Study and the 2025 King County Department of Natural Resources and Parks, Water and Land Resources Division Lower Snoqualmie River Channel Migration Study, as revised. ~~The floodway as mapped by FEMA on map 53033C0418G and 53033C0419G, December 6, 2001 shall be used as a surrogate for the channel migration zone. If the floodway is mapped differently in the future by FEMA, the map with the largest area mapped as floodway shall be used as a surrogate for the channel migration zone.~~

"City" means the city of Carnation.

"Clearing" means the removal of vegetation by any means and includes cutting or grubbing vegetation.

"Compensation project" means actions specifically designed to replace project-induced critical area and buffer losses. Compensation project design elements may include, but are not limited to, land acquisition, planning, construction plans, monitoring, and contingency actions.

"Compensatory mitigation" means types of mitigation used to replace project-induced critical area and buffer losses or impacts.

Critical Aquifer Area Recharge Area Categories:

Category I Critical Aquifer Recharge Areas. Those areas designated by the city on the critical aquifer recharge area map as highly susceptible to groundwater contamination and that are located within a sole source aquifer or wellhead protection area.

Category II Critical Aquifer Recharge Areas. Those areas designated by the city on the critical aquifer recharge area map that:

1. Have a medium susceptibility to groundwater contamination and are located in a sole source aquifer or wellhead protection area; or
2. Are highly susceptible to groundwater contamination and are not located in a sole source aquifer or wellhead protection area.

"Critical aquifer recharge area" means areas designated by WAC 365-190-080(2) that are determined to have critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

"Critical areas" means any of the following areas or ecosystems and their buffers: wetlands, critical aquifer recharge areas, streams, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas as defined by the Growth Management Act (RCW 36.70A.170).

"Critical facility" means a facility where even a slight chance of flooding, inundation, or impact from a hazard event might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency installations, and installations that produce, use, or store hazardous materials or hazardous waste.

"Developable area" means a site or portion of a site that may be utilized as the location of development, in accordance with the rules of this chapter.

"Development permit" means any permit issued by the city of Carnation, or other authorized agency, for construction, land use, or the alteration of land.

"Erosion" means the process by which soil particles are mobilized and transported by natural agents such as wind, rain, frost action, or stream flow.

"Erosion hazard area" means lands or areas underlain by soils identified by the U.S. Department of Agriculture ~~Soil~~ Natural Resources Conservation Service Soil Survey as having "severe" or "very severe" erosion hazards. This includes, but is not limited to the following groups of soils: Alderwood-Kitsap (AkF) occurring on slopes of fifteen percent or greater.

"Existing and ongoing agriculture" means those activities conducted on lands defined in RCW 84.34.020(2), and those existing activities involved in the production of crops or livestock. Activities may include the operation and maintenance of farm and stock ponds or drainage ditches; operation and maintenance of existing ditches or irrigation systems; changes from one type of agricultural activity to another agricultural activity; and normal maintenance, repair, and operation of existing serviceable structures, facilities, or improved areas. Activities which bring nonagricultural area into agricultural use are not part of an ongoing operation. An operation ceases to be ongoing when the area on which it is conducted is converted to a nonagricultural use or has lain idle for more than five years.

"Federal Emergency Management Agency (FEMA)" means the agency that, oversees the administration of the National Flood Insurance Program (44 CFR).

"Fish and wildlife habitat conservation areas" means areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created as designated by WAC 365-190-~~080(5)~~030(6). These areas include:

1. Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association;
2. Habitats of local importance, including, but not limited to, areas designated as priority habitat by the State Department of Fish and Wildlife;
3. Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish and wildlife habitat;
4. Waters of the state, including lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface water and watercourses within the jurisdiction of the state of Washington;
5. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; state natural area preserves and natural resources conservation areas; and
6. Land essential for preserving connections between habitat blocks and open spaces.

"Fish and wildlife habitat conservation areas" does 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.

"Flood" or "flooding" means ~~a~~:

1. A ~~G~~general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters, ~~and/or~~ the unusual and rapid accumulation of runoff or surface waters from any source, and/or mudslides (i.e., mudflows) which are proximately caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

~~1.~~ The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

2.

"Flood hazard area" means a designated zone on the FEMA flood insurance rate map (FIRM), this does not mean that actual flooding has or will occur. These areas consist of the following components:

1. Floodplain. The total area subject to inundation by the base flood.
2. Flood Fringe. That portion of the floodplain outside the floodway which is generally covered by floodwaters during the base flood. It is generally associated with standing water rather than rapidly flowing water.
3. Floodway. The channel of the stream and that portion of the adjoining floodplain that is necessary to contain and discharge the base flood flow without increasing the base flood elevation.

"Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance Administration has delineated many areas of flood hazard, floodways, and the risk premium zones (CFR44 Part 59).

"Flood insurance study" means the official report provided by the Federal Insurance Administration that includes the flood profiles and the FIRM (CFR44 Part 59).

"Flood proofing" means adaptations that ensure a structure is substantially resistant to the passage of water below the flood protection elevation and resists hydrostatic and hydrodynamic loads and effects of buoyancy.

"Flood protection elevation" means an elevation that is one foot above the base flood elevation.

"Floodway dependent structure" means structures that are floodway dependent include, but are not limited to, dams, levees and pump stations, stream bank stabilization, boat launches and related recreational structures, bridge piers and abutments, and fisheries enhancement or stream restoration projects.

"Formation" means an assemblage of earth materials grouped together into a unit that is convenient for description or mapping.

Formation, Confining. "Confining formation" means the relatively impermeable formation immediately overlaying a confined aquifer.

"Frequently flooded areas" means a designated AE zone on the FEMA flood insurance rate map (FIRM), this does not mean that actual flooding has or will occur.

"Functions and values" means the beneficial roles served by critical areas, including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, and recreation. This should be divided into functions and also values.

"Geologically hazardous areas" means areas that may not be suited to commercial, residential, or industrial development consistent with public health, safety or environmental standards, because of their susceptibility to erosion, sliding, earthquake, or other geological events as designated by WAC 365-190-~~080(4)~~120(1). Types of geologically hazardous areas include erosion, landslide, channel migration zones, seismic, volcanic hazards, and mine.

"Grading" means any excavation, clearing, filling, leveling, or contouring of the ground surface by human or mechanical means.

"Hazard areas" means areas designated as frequently flooded or geologically hazardous areas due to potential for erosion, landslide, seismic activity, mine collapse, or other geologically hazardous conditions, including steep slopes.

"Hazardous liquid pipeline" as defined by RCW 81.88.040, "hazardous liquid" means: (a) petroleum, petroleum products, or anhydrous ammonia as those terms are defined in 49 CFR Part 195; and (b) carbon dioxide. Pipeline, pipeline system, or hazardous liquid pipeline means all parts of a pipeline facility through which a hazardous liquid moves in transportation. Pipeline or pipeline system does not include process or transfer pipelines.

"Heavy equipment" means such construction machinery as backhoes, treaded tractor, dump trucks, and front-end loaders.

"High-intensity land use" means land uses consisting of commercial, urban, industrial, institutional, retail, residential with more than one unit per acre, agricultural (dairies, nurseries, raising and harvesting crops, requiring annual tilling, raising and maintaining animals), high-intensity recreation (golf courses, ball fields), and hobby farms.

"Impervious surface area" means any nonvertical surface artificially covered or hardened so as to prevent or impede the percolation of water into the soil mantle including, but not limited to, rooftops swimming pools, paved or graveled roads and walkways or parking areas and excluding landscaping and surface water retention/detention facilities.

"Landslide" means episodic down slope movement of a mass of soil or rock that includes, but is not limited to, rock falls, slumps, mudflows, and earth flows.

"Landslide hazard areas" means areas that are potentially subject to risk of mass movement due to a combination of geologic, topographic, and hydrologic factors. Landslide hazards are classified as Classes I through III based on the degree of risk as follows:

1. Class I/low hazard areas with slopes of less than fifteen percent.
2. Class II/moderate hazard areas with slopes of between fifteen percent and thirty percent that are underlain by soils that consist largely of sand, gravel, or glacial till.
3. Class III/high hazard areas with slopes of greater than fifteen percent that are underlain by soils consisting largely of silt and clay, or any slope over thirty percent.

"Lowest floor" means the lowest enclosed area (including basement) of a structure. An area used solely for parking of vehicles, building access, or storage, in an area other than a basement area, is not considered a building's lowest point, provided that the enclosed area meets all of the structural requirements of the flood hazard development standards.

"Low-intensity land use" means and includes, but is not limited to, forestry, open space (such as passive recreation and natural resources preservation).

"Minor utility project" means the placement of a utility pole, street sign, anchor, vault, or other small component of a utility facility, where the disturbance of an area is less than seventy-five square feet.

"Mitigation" means the process of minimizing or compensating for adverse environmental impact(s) of a development proposal on a critical area.

"Moderate-intensity land use" means land uses associated with moderate levels of human disturbance or substantial habitat impacts including, but not limited to, low-density residential (no more than one home per five acre), active recreation, and moderate agricultural land uses.

"Monitoring" means the collection of data by various methods for the purpose of understanding natural systems and features, evaluating the impact of development proposals on such systems, and/or assessing the performance of mitigation measures imposed as conditions of development.

"Native vegetation" means plant species that are indigenous and naturalized to the Snoqualmie Valley region and which can be expected to naturally occur on a site. Native vegetation does not include noxious weeds.

"Off-site watercourse mitigation" means within the same watercourse drainage subbasin as the proposed alteration site and beyond one-half mile upstream or downstream.

"On-site watercourse mitigation" means within the same stream drainage subbasin as the alteration site and within one-half mile upstream or downstream.

"Ordinary high water mark" means on all lakes, watercourses, and tidal waters, the biological vegetation mark that indicates the "ordinary" high water level (WAC 173-22-030(11)).

"Practical alternative" means an alternative that is available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes, and having less impact to critical areas.

"Primary association area" means the area used on a regular basis by, in close association with, or is necessary for the proper functioning of the habitat of a critical species. "Regular basis" means the habitat area is known normally or usually to contain the critical species. Regular basis is species population dependent. Species that exist in low numbers may be present infrequently yet rely on certain habitat types.

"Priority habitat" means habitat types or elements with unique or significant value to one or more species as classified by the State Department of Fish and Wildlife.

"Qualified professional" means a person with experience and training in the pertinent scientific discipline, and who is a qualified expert with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4). A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental sciences, fisheries, geomorphology or related field, and two years of related work experience.

1. A qualified professional for habitats or wetlands must have a degree in biology or a related environmental science and professional experience related to the subject.
2. A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the state of Washington.
3. A qualified professional for critical aquifer recharge areas must be a hydrologist, geologist, engineer, or other scientist with experience in preparing hydrological assessments.

"Reasonable use" means a legal concept articulated by federal and state courts in regulatory taking cases.

"Riparian habitat" means areas adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems that mutually influence each other.

"Salmonid" means a member of the fish family Salmonidae. In King County, Chinook, coho, chum, sockeye, and pink salmon; cutthroat, brook, brown, rainbow, and steelhead trout; kokanee; and native char (bull trout and Dolly Varden).

"Seismic hazard areas" means area that are subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, or soil liquefaction. These areas are typically underlain by soft or loose saturated soils (such as alluvium), have a shallow ground shaking, slope failure, settlement, or soil liquefaction. These areas are typically underlain by soft or loose saturated soils (such as alluvium), have a shallow groundwater table and are typically located on the floors of river valleys.

"Sole source aquifers" means areas designated by the U.S. Environmental Protection Agency under the Safe Drinking Water Act of 1974, Section 1424(e). The aquifer(s) must supply fifty percent or more of the drinking water for an area without a sufficient replacement available.

Species, Threatened and Endangered. "Threatened and endangered species" means those native species that are listed in rule by the State Department of Fish and Wildlife pursuant to RCW 77.12.070 as threatened (WAC 232-12-011) or endangered (WAC 232-12-014), or that are listed as threatened and endangered under the federal Endangered Species Act (16 U.S.C. 1533).

"Steep slopes" means those slopes forty percent or steeper within a vertical elevation change of at least ten feet. A slope is defined by establishing its toe and top and is measured by averaging the inclination over at least ten feet of vertical relief.

"Stream" means any portion of a watercourse, either perennial or intermittent, where the surface water flow is sufficient to produce a defined channel or bed. Streams also include natural watercourses modified by humans. Streams do not include irrigation ditches, canals, stormwater run-off facilities, or other entirely artificial watercourses.

"Topping" means the severing of main trunks or stems of vegetation at any place above twenty-five percent of the vegetation height.

"Transport" means the conveyance of silt or sediment overland during a rain event.

"Unavoidable" means adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.

"Understory" means the vegetation layer of a forest that includes shrubs, herbs, grasses, and grass-like plants, but excludes trees.

"Utility" means a service and/or facility that produces, transmits, carries, stores, processes, or disposes of electrical power, gas, potable water, stormwater, communications (including, but not limited to, telephone and cable), sewage, oil and the like.

"Utility corridor" means the linear alignment location of a utility such as water, wastewater, stormwater, electric or communication lines.

"Vegetation" means plant life growing below, at, and above the soil surface.

"Vegetation alteration" means any clearing, grading, cutting, topping, limbing, or pruning of vegetation.

"Water dependent ~~dependant~~ activities" means a use or portion of a use that cannot exist in a location that is not adjacent to the water, but is dependent on the water by reason of the intrinsic nature of its operations. A use that can be carried out only on, in, or adjacent to water. Examples of water dependent uses include; fishing, marinas, moorage, and boat launching facilities; aquaculture; surface water intake; and sanitary sewer and storm drain outfalls.

"Water resources inventory area (WRIA)" means one of sixty-two watersheds in the state of Washington, each composed of the drainage areas of a stream or streams, as established in Chapter 173-500 WAC as it existed on January 1, 1997.

"Watercourse" for purposes of this chapter, means perennial or intermittent waters, where the surface water flow is sufficient to produce a defined channel or bed. Watercourses also include natural waters modified by humans. Watercourses do not include irrigation ditches, canals, stormwater run-off facilities, or other entirely artificial watercourses.

"Watercourse—Classes" means waters classified according to WAC 222-16-031 as follows:

1. Class I Water. All waters, within the ordinary high-water mark, as inventoried as "shorelines of the state" under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW, but not including those waters' associated wetlands as defined in Chapter 90.58 RCW.
2. Class 2 Water. Segments of natural waters that are not classified as Class 1 water and have a high fish, wildlife, or human use. These are segments of, natural waters and periodically inundated areas of their associated wetlands, which:
    a. Are diverted for domestic use by more than one hundred residential or camping units or by a public accommodation facility licensed to serve more than ten persons, where such diversion is determined by the Washington State Department of Natural Resources to be a valid appropriation of water and only considered Type 2 water upstream from the point of such diversion for one thousand five hundred feet or until the drainage area is reduced by fifty percent, or whichever is less;
    b. Are diverted for use by federal, state, tribal, or private fish hatcheries. Such waters shall be considered Class 2 water upstream from the point of diversion for one thousand five hundred feet, including tributaries if highly significant for protection of downstream water quality;
    c. Are within a federal, state, local, or private campground having more than thirty camping units: provided, that the water shall not be considered to enter a campground until it reaches the boundary of the park lands available for public use and comes within one hundred feet of a camping unit;
    d. Are used by fish for spawning, rearing or migration. Waters having the following characteristics are presumed to have highly significant fish populations;

e. Stream segments having a defined channel twenty feet or greater within the bankfull width and having a gradient of less than four percent;

f. Lakes, ponds, or impoundments having a surface area of one acre or greater at seasonal low water;

g. Are used by fish for off-channel habitat. These areas are critical to the maintenance of optimum survival of fish. This habitat shall be identified based on the following criteria;

h. The site must be connected to a fish bearing stream and be accessible during some period of the year; and

i. The off-channel water must be accessible to fish through a drainage with less than a five percent gradient.

3. Class 3 Water. Segments of natural waters that are not classified as Class 1 or 2 waters and have a moderate to slight fish, wildlife, and human use. These are segments of natural waters and periodically inundated areas of their associated wetlands which:

a. Are diverted for domestic use by more than ten residential or camping units or by a public accommodation facility licensed to serve more than ten persons, where such diversion is determined by the Washington State Department of Natural Resources to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type 3 water upstream from the point of such diversion for one thousand five hundred feet or until the drainage area is reduced by fifty percent, whichever is less; or

b. Are used by fish for spawning, rearing, or migration. The requirements for determining fish use are described in the State Forest Practices Board Manual, Section 13. If fish use has not been determined:

i. Waters having the following characteristics are presumed to have fish use:

(A) Stream segments having a defined channel of two feet or greater within the bankfull width in Western Washington; or three feet or greater in width in Eastern Washington; and having a gradient of sixteen percent or less;

(B) Stream segments having a defined channel or two feet or greater within the bankfull width in Western Washington; or three feet or greater within the bankfull width in Eastern Washington; and having a gradient greater than sixteen percent and less than or equal to twenty percent, and having greater than fifty acres in contributing basin size in Western Washington or greater than one hundred seventy-five acres contributing basin size in Eastern Washington, based on hydrographic boundaries;

(C) Ponds or impoundments having a surface area of less than one acre at seasonal low water and having an outlet to a fish stream; and

(D) Ponds of impoundments having a surface area greater than one-half acre at seasonal low water.

ii. The Washington State Department of Natural Resources shall waive or modify the characteristics in subsection (a)(i) of this definition, where:

(A) Waters have confirmed, long-term, naturally occurring water quality parameters incapable of supporting fish;

(B) Snowmelt streams have short flow cycles that do not support successful life history phases of fish. These streams typically have no flow in the winter months and discontinue flow by June 1st; or

(C) Sufficient information about a geomorphic region is available to support a departure from the characteristics in subsection (a)(i) of this definition, as determined in consultation with the Washington Department of Fish and Wildlife, Washington State Department of Ecology, affected tribes, and interested parties.

4. Class 4 Water. All segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are waters that do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Class 4 waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow. If the uppermost point of perennial flow cannot be identified with simple, nontechnical observations (see State Forest Practices Board Manual, Section 23), then Class 4 waters begin at a point along the channel where the contributing basin area is:

   a. At least thirteen acres in the Western Washington coastal zone (which corresponds to the Silica spruce zone defined in Franklin and Dyrness, 1973);

   b. At least fifty-two acres in other locations in Western Washington; or

   c. At least three hundred acres in Eastern Washington.

5. Class 5 Waters. All segments of natural waters within the bankfull width of the defined channels that are not Class 1, 2, 3, or 4 waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of the year and are not located downstream from any stream reach that is a Class 4 water. Class 5 waters must be physically connected by an aboveground channel system to Class 1, 2, 3, or 4 waters.

"Wetland" as defined by RCW 36.70 or as hereafter amended, those areas that are inundated or saturated by ground or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

1. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, 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.

2. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate conversion of wetlands.

"Wetlands rating system" means wetlands shall be rated according to the Washington State Wetland Rating System for Western Washington, Department of Ecology, Publication #14-06-029, or as revised.

(Ord. 693b § 1 (Exh. A) (part), 2006: Ord. 670 § 9 (Exh. H) (part), 2005)

(Ord. No. 865, § 3, 8-4-2015)