Chapter 20.740 CRITICAL AREAS PROTECTION

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20.740.010 Purpose.

- A.—The purpose of this chapter is to designate and protect ecologically sensitive and hazardous areas (critical areas) and their functions and values, while also allowing for reasonable use of property.
- A. B. As Critical areas are ecologically sensitive and hazardous areas and protecting them or mitigating any impacts to them is important for protection of the environment and quality of life for the citizens of Vancouver, and is mandated by the Washington Growth Management Act (GMA) (RCW <u>36.70A)</u>, this <u>36.70A</u>).
- B. This chapter provides protection for the <u>following</u> critical areas of wetlands, fish and wildlife habitat conservation areas, geologically hazardous areas, and frequently flooded areas. Critical aquifer recharge areas area: Wetlands, Fish and Wildlife Habitat Conservation Areas, Geologically Hazardous Areas, and Frequently Flooded Areas. Critical Aquifer Recharge Areas are covered in VMC 14.26Chapter 14.26.

C. — This chapter implements the goals and policies of the Vancouver Comprehensive Plan, 2003-2023, under the Washington Growth Management ActGMA and other related state and federal laws. (Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.020 General Provisions.

- A. A. No Net Loss of Functions. ActivityDevelopment activity shall result in no net loss of the functions and values in theof critical areas. Since values are difficult to measure no net loss of functions and values means no net loss of functions. The beneficial functions provided by each type of critical areasarea include, but are not limited to, water quality:
 - Fish and Wildlife Habitat Conservation Areas. Providing habitat for breeding, rearing, foraging, protection and enhancement; fish and wildlife habitat; food chain support; flood storage; conveyanceescape, migration, and over-wintering; and providing complexity of physical structure, supporting biological diversity, regulating stormwater runoff and infiltration, providing wave attenuation, removing pollutants from water, and maintaining appropriate water temperatures.
 - 2. Frequently Flooded Areas. Providing flood storage, conveyance, and attenuation of flood waters; ground water recharge and discharge; erosion control; and wave attenuation. These beneficial functions are not listed in order of priority. This chapter is also intended to protect residents from hazards and minimize risk minimizing the amount of injury or property damage: development at risk in such areas to protect human life and safety, including reducing damage to homes, places of business, public facilities, and utilities; and minimizing business interruptions.
 - 3. Geologic Hazard Areas. Providing erosion control and protecting public safety, including people, structures, and infrastructure, from damage during earthquakes and landslides.
 - 4. Wetlands. Providing carbon sequestration, cleansing surface water, storing and conveying floodwater, and providing fish and wildlife habitat.
- B. Temporary and Permanent Markers and Signs. With the exception of Frequently Flooded Areas and Seismic Hazard Areas, temporary and permanent markers and signs shall be installed for critical areas as follows:

- The location of the outer perimeter of the critical area(s) and buffer(s) shall be marked in the field and approved by the Planning Official prior to the commencement of permitted activities and maintained throughout the duration of the construction.
- 2. A permanent physical demarcation along the outer/upland boundary of the critical area buffer(s) shall be installed and thereafter maintained. Such demarcation may consist of fencing, hedging, or other prominent physical marking that allows wildlife passage, blends with the critical area environment, and is approved by the Planning Official. If the function and values of the critical area would be degraded by the existing or proposed activity, such as the presence of grazing animals, a fence shall be erected and maintained.
- 3. Permanent signs are posted at intervals of one every 50 feet, or, if this interval cannot be met, an interval of one per lot for single-family residential uses or at a maximum interval of 200 feet, or as otherwise determined by the Planning Official, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the Planning Official: "The area beyond this sign is a critical area or critical area buffer. Alteration or disturbance is prohibited by law. Please call the City of Vancouver for more information."
- 4. Additional standards for temporary and permanent marking of geologic hazards are contained in VMC 20.740.130.

C. Relationship to Other Regulations.

A.—B. Relationship to Other Regulations.

- 1. TheseThe critical areas regulations shall apply in addition to zoning and other regulations adopted by the city.City.
- 2. Any individualWhen more than one critical area that overlaps another type of is located on a project site, regulations protecting each critical area shall meet the requirements apply to the site. Where critical areas overlap (e.g., a wetland buffer and a riparian buffer), the most restrictive regulations that provide the most

- protection to for the critical areas involved present establish the outer boundary of the regulated critical areas.
- 3. 3.—When there is a conflict between any provisions of this chapter <u>orand</u> any other regulations, <u>the requirement</u> that <u>which</u> provides the most protection to the <u>subject</u> critical area-<u>shall apply.(s) applies.</u>
- 4. Conditions of approval of a project affecting critical areas may be supplemented by a review under the State Environmental Policy Act (SEPA), as locally adopted.
 - 4. 5.—Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements. The applicant is responsible for complying with other state and federal requirements in addition to the requirements of this chapter. (for example, Shoreline Substantial Development Permits, Hydraulic Project Approval [HPA] permits, Section 106 of the National Historic Preservation Act, U.S. Army Corps of Engineers Section 404 permits, or National Pollution Discharge Elimination System permits). The applicant is responsible for complying with other state and federal requirements in addition to the requirements of this chapter. Obtaining all applicable state and federal permits shall be made a condition of a Critical Areas Permit. Such permits shall be obtained prior to issuance of permits for development, construction or site disturbance except under the circumstances set forth in VMC 20.740.040(l).

D. _______ Jurisdiction.

- 1. All areas within the city meeting the definition of one or more critical areas and their buffers, whether mapped or not, are hereby designated critical areas and with their buffers are subject to the provisions of this chapter.
- 2. Watersheds (Chapter 20.150 VMC) are those most recently identified and mapped by Clark County Public Works. Watershed maps are available from the planning official. Burnt Bridge Creek, Columbia Slope, and Vancouver Lake/Lake River are the primary watersheds in Vancouver.
- E. D. Warning and Disclaimer of Liability. The standards established herein are minimum standards. The standards are established for regulatory purposes only. Minimum compliance with these standards may not be sufficient protection from identified or

unidentified hazards. City establishment of these minimum standards is not a representation that these standards are sufficient protection from any hazard. Critical areas development should be based on sound scientific and engineering considerations that may be more stringent than those presented in this chapter. The cityCity assumes no liability if these established standards prove to be insufficient protection of property or the environment.

20.740.030 Applicability and Exemptions from Requirement to Obtain Permit.

E. Interpretation of Critical Area Boundaries. The planning official shall be authorized to interpret the exact location of the critical area boundary. Final designations shall be based on site conditions and other available data or information. A person who disagrees with the interpretation may appeal the interpretation pursuant to VMC 20.255.020(D). (Ord. M-4017 § 4, 07/16/2012; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.030 Applicability and Exemptions from Requirement to Obtain Permit.

A. Applicability.

- 1. Unless exempted by this chapter the provisions of this chapter shall apply to all lands, all land uses, clearing and development activity, and all structures and facilities in the city located within a critical area or buffer or on a site containing a critical area or buffer including single-family residential lots platted prior to April 29, 2005, and developments such as play structures that require no other permits.
- 2. The provisions of this chapter shall apply whether or not a permit or authorization is required.
 - 1. 3. No person, company, agency, or applicant shall alter a critical area or buffer (including removal of downed woody vegetation or application of chemicals harmful to fish and wildlife within 25 feet of wetlands, ponds, lakes, streams or rivers) except as consistent with the requirements of this chapter, whether or not a permit is required.
- 4. The Critical Areas Permit required pursuant to this chapter shall be obtained prior to undertaking any activity or development regulated by this chapter, unless exempted by this chapter.

- B. Statements of Exemption Process. For exempt activities listed in subsection (C)(1)(C)(1) of this section, a written Statement of Exemption from securingthe requirement to obtain a Critical Areas Permit must be obtained is required prior to undertaking any developmentthe activity. Activities exempt from listed in subsection (C)(2)(C)(2) of this section do not require a statement of exemption.
 - 1. AllExempt activities are not required to obtain a Critical Areas Permit. However, all activities in critical areas, including exempt activities, are still subject to the policies and regulations of this chapter. The planning official shall! If a land use permit is not required, the Planning Official may attach Critical Areas Ordinance conditions to the building and engineering permits and other permits and approval, as necessary, to enforce the policies and regulations provisions of this chapter.

The request for the Statement of Exemption shall be in writing, on forms required by the planning official, and include the information required by the planning official.

- The planning official shall issue a decision on a request for a StatementPlanning
 Official. Statements of Exemption in writing within 21 calendar days of receiving the
 requestshall be processed as a Type I procedure per Chapter 20.210 Decision
 Making Procedures.
- C. ___Exemptions from Requirement to Obtain a Critical Areas Permit.
 - Activities for which requiring a Statement of Exemption is required. The following
 activities shall obtain a Statement of Exemption under subsection B of this section:
 - a. a. Existing Structure Remodel Impervious Surface Increase Less thanof 500 Square Feet or Less. Development or clearing, outside areas of special flood hazards and other than tree removal, as minimally inside a Critical Area or buffer as necessary to remodel an existing structure, provided:
 - i. i. The activity will increase the footprint of structures including with impervious surfaces by less than 500 square feet from the footprint size at the time of the adoption of this chapter; and or less;
 - <u>ii.</u> <u>ii.</u> <u>lf the structure or impervious surface is within a critical area or buffer, the The</u> distance from the nearest structure or impervious

surface to lakes, streams, rivers, wetlands or geological hazardsa critical area is not decreased; and

- <u>iii.</u> <u>iii.</u> All <u>native</u> vegetation disturbed as a result of the development shall be replaced one-to-one, except <u>that</u> trees shall be replaced using tree units derived from <u>VMC</u> Chapter <u>20.770 VMC,20.770</u>, Tree, Vegetation, and Soil Conservation. Native vegetation shall be used where feasible.;
- iv._iv._Impacts to critical areas and buffers shall be minimized and mitigated, in accordance with the City's critical areas approval criteria; and
- v. b. No adverse impacts to priority Oregon white oak trees may result.
- b. No Impervious Surface Increase in the Riparian Management Area (RMA) or Riparian Buffer- (RB) and Located outside Frequently Flooded Areas.
 Development activity on a site within the portionsfootprint of sites with existing structures or impervious surfaces which that does not increase the impervious surface area withinin the Riparian Management AreaRMA or Riparian BufferRB, not located in Frequently Flooded Areas, and which that is not otherwise exempt under subsection BB of this section shall be exempt from the provisions of VMC 20.740.11020.740.110 (Fish and Wildlife Habitat Conservation Areas).

The applicant is encouraged to provide enhancement to the extent feasible. The applicant is encouraged to provide enhancement to the extent feasible. Such enhancement activities may include, but are not limited to, landscaping using native plants, additional treatment of stormwater as appropriate, and implementation of best management practices (BMPs) that would enhance habitat functions.

c. Approved Subarea Plan with EIS. Development activity covered by and in compliance with all the conditions of an approved subarea plan that contains:

- i. Baseline information on existing critical areas and their functions at the level of detail required for an Environmental Impact Statement (EIS) under the State Environmental Policy Act (SEPA);
- <u>ii.</u> An analysis of the impacts of full development at the level of detail required for an EIS under SEPA and in keeping with the plan; and
- a- c. Approved Subarea Plan with EIS. Development activity covered by and in compliance with all the conditions of an approved subarea plan that contains:
 - i. Baseline information on existing critical areas and their functions at the level of detail required for an Environmental Impact Statement (EIS) under the State Environmental Policy Act (SEPA);
 - i. An analysis of the impacts of full development at the level of detail required for an EIS under SEPA and in keeping with the plan; and
 - <u>iii.</u> <u>iii.</u> Mitigation for those impacts consistent with the requirements of this chapter.
- <u>d.</u> <u>d.</u> *Fence.* A fence may be installed in a critical area buffer (not in a critical area) where:
 - i. i. The fence is necessary for safety and security;
 - <u>ii.</u> The property was developed prior to the effective date of <u>VMC</u> Chapter <u>20.740 VMC20.740</u> (April 29, 2005); <u>and/or</u>
 - iii. The fence is designed and installed in a manner that protects the critical area and buffer functions and blends with the critical area environment.
 - i.— iii. The fence is designed and installed in a manner that protects the critical area and buffer functions and blends with the critical area environment.
- e. e. On-site Critical Area will be Will Be Avoided. Development may be permitted on a site containing a critical area or buffer not also subject to state or

federal permits wherewhen the Planning Official determines that theimpacts to critical areas and buffers will be clearly avoided using. In making this determination, the Planning Official may utilize any of the following procedures and criteria: or other methods as necessary to determine that the adverse impacts will be avoided.

i. The planning official has visited the site;

- i.—The critical area(s) and buffer(s) has/have been identified in the field-and, clearly mapped by a qualified professional through an approved, and documented by a limited-scope Critical Areas

 Reportcritical areas report (for example, a wetland boundary delineation without categorization or functional assessment, but with the minimum documentation necessary to justify the boundary location); except that for a single-family or duplex residential development on a property with a stream not regulated under the state Shoreline Management Act, its Riparian Management Area or Riparian Buffer, the planning official may accept an aerial photo overlain with two-foot contour lines from the Clark County Digital Atlas with the required information drawn to scale by someone other than a qualified professional;).
- ii. iii. The site plan and final preliminary plat show a development envelope within which that demonstrates that all development activity will take place, and a note identifying the development envelope and its purpose is placed on the face of the site plan and the final plat; outside critical areas and buffers.
- iii. The boundaries of the development envelope are clearly outside of all maximum critical areas and all maximum buffers. iv. The boundaries of the development envelope are clearly outside of all maximum critical areas and all maximum buffers. The maximum critical area and maximum buffer are the greatest that may be applied under any circumstances. (For example, under this chapter, the maximum wetland buffer that could be applied under any circumstance is 300

feet; the maximum Riparian Management Area is 100 feet, and the maximum Riparian Buffer is

Maintaining 75 feet from the outer boundary of the Riparian Management Area.)

- f. f. Fire-Defensible Space. Maintaining fire-defensible space around a structure to reduce fire hazards, involving regular maintenance of existing trees at least six-inch6 inches in diameter at breast height, grasses, and underbrush, not tree removal or other ground-disturbing or soil-destabilizing activities. Creating fire-defensible space (see VMC 20.740.040(H)) or undertaking other development requires a Critical Areas Permit under VMC 20.740.040(A)(2)(f)per the critical areas approval process and could require other permits as well.
 - i. Pruning trees, grasses, and brush within a critical area or buffer to maintain fire-defensible space around a structure may be permitted when one or more of the following criteria are met:
 - i. Pruning trees, grasses, and brush within a critical area or buffer to maintain fire-defensible space around a structure may be permitted when one or more of the following criteria are met:
 - (A) A.—The structure nearest the property line is within 30 feet of a slope of at least 25 percent (also designated as a landslide hazard area_Landslide Hazard Area under this chapter);
 - (B) B. The nearest structure is within 30 feet of a forested area;
 - (C) C. The vegetation within 30 feet of the structure is comprised of less than 50 percent native species;
 - (D) D. The vegetation within 30 feet of the structure is higher than 12 inches;
 - (E) E. Trees are crowded within 30 feet of the structure or overhanging the structure's roof; or

- (F) F.—The structure is located in an area designated by the Fire Marshal as a "Wildfire Safety Area."
- ii. iii. When maintenance of a fire-defensible space is permitted, the following standards shall apply:

Trees may be pruned or limbed-up to mitigate a hazard, but trees may not be removed without a Critical Areas Permit and any other necessary permit(s). A.—Trees may be pruned or limbed up to mitigate a hazard, but trees may not be removed without a Critical Areas Permit and any other necessary permit(s). (See VMC 20.740.040(A)(2)(f) and 20.740.040(H) on creating fire-defensible space.)

- (A) B.
- (B) Topping trees is prohibited.
- (C) Grasses and underbrush shall be maintained between eight8 inches and 12 inches in height.
- (A) C. Topping trees is prohibited.
- (D) D. Any debris from pruning shall be disposed of promptly and properly.
- g. 2.—Development Located within Soil Erosion Hazard Areas Only. When no other type of critical area, including other types of geologic hazards is present, development within Soil Erosion Hazard Areas shall meet the requirements of VMC Chapter 14,24, Erosion Control, including preparation of . a Stormwater Report, if required.. In addition, the applicant shall file a limited scope Geotechnical Report prepared by a qualified professional as defined by VMC Chapter 20.150, which shall be provided to the Planning Official for review at the earlier of development application, engineering document review, or building permit review. Upon review of the limited scope Geotechnical Report, the Planning Official may exempt the development from the need for a Critical Areas Permit.
- h. Development/Expansion of a Single-Family Residence with a Loss of a Single,

 Standalone Oregon white oak. The loss of a single, standalone Oregon white

oak tree that meets the WDFW PHS status (must not be part of a woodland that includes off-site trees) and in accordance with the definition listed in VMC 20.150.150(D) that is equal to or less than 12 inches dbh for the purpose of developing a single-family residence or expansion of an existing single-family residence structure (does not include expansion of detached garages, outbuildings, accessory dwellings, decks, gardens, etc.).

2. Activities for which a Statement of Exemption is not required. Reasonable methods shall be used to avoid potential impacts to critical areas. Any damage to, or alteration of, a critical area that is not a necessary outcome of the exempt activity shall be corrected at the property owner's expense.

The following activities are exempt from needing a Critical Areas Permit and do not require a statement of exemption:

- a. a. Emergencies. Those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of property damage and that require remedial or preventative action in a time frame too short to allow for compliance with the requirements of this chapter, so long as all of the following apply:
 - <u>i.</u> The emergency action uses reasonable methods to address the emergency.
 - <u>ii.</u> <u>ii.</u> The emergency action must have the minimum possible impact to the critical area or its buffer.
 - <u>iii.</u>—The property owner, person, or agency undertaking such action shall notify the <u>cityCity</u> within <u>one10</u> working <u>daydays</u> following commencement of the emergency activity.
 - iv. iv. Within 14 days the planning official Planning Official shall determine if the action taken was within the scope of the emergency actions allowed in this section. If the planning official Planning Official determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then the critical areas enforcement provisions of VMC 20.740.090 shall apply.

- v. v. After the emergency, the property owner, person or agency undertaking the action shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved Critical Areas Report and mitigation plan. The property owner, person or agency undertaking the action shall apply for review. The alteration, Critical Areas Report, and mitigation plan shall be reviewed by the cityCity in accordance with the review procedures contained in this chapter.
- vi. vi. Restoration and/or mitigation activities must be initiated within three months of the date of the emergency oran approved Critical Areas Report and mitigation planor as otherwise determined by the planning official, Planning Official and completed in a timely manner.
- b. Valid Critical Areas Permit. Any development proposed on property pursuant to a currently valid Critical Areas Permit, provided all conditions and requirements of the Critical Areas Permit are met and the proposed activity is within the scope of the original permit.
 - b. ——Hazard Tree. Emergency or hazard tree removal (as defined in VMC Chapter 20.770 VMC)20.770) conducted so that critical area impacts are minimized.
 - c. d. Landscape Maintenance. Landscape maintenance (other than tree removal or use of pesticides, herbicides, fungicides or fertilizers applied into or within 25 feet of water bodies) consistent with accepted horticultural practices, such as those recommended by the Washington State University Extension Service, within the boundaries of an existing lawn, garden or landscaped area and not associated with development.
 - d. e. Noxious or Invasive Plants. Clearing of noxious or invasive plants using hand-held equipment such as a weed-whacker, provided (1) fueling and maintenance take place outside the critical area and buffer; (2) all cleared vegetation is taken away and disposed of properly; and (3) denuded soils are stabilized with native vegetation. The cityCity of Vancouver's Noxious or

Invasive Plants List and Native Plant Species List are available from the planning official Planning Official.

- e. f. Pesticides, Herbicides, Fungicides, or Fertilizers 25 feet from Critical Area.

 Application of pesticides, herbicides, fungicides, or fertilizers farther than 25 feet from any wetland, pond, lake, stream or river or, when done as directed in a manner specified in a valid permitthe package instructions as required by state and federal laws.
- f. g. State or Federally Approved Conservation or Preservation. State or federally approved conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing critical area or buffer.
- g. h. Harvesting Wild Crops. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops or other native vegetation and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the critical area or buffer by changing existing topography, water conditions or water sources.
- h. i.—Passive Activities. Passive outdoor recreation, education, and scientific research activities such as fishing, hiking, and bird watching that do not degrade the critical area or buffer.
- i. j.—Land surveys, soil sampling, percolation tests, and other related activities. In every case, impacts to the critical area or buffer shall be minimized and disturbed areas shall be stabilized and replanted immediately.
- j. k.—Navigational Aids and Boundary Markers. Construction or modification of navigational aids and boundary markers. Impacts to the critical area or buffer shall be minimized and disturbed areas shall be restored within 72 hours.
- k. |-- Agricultural Activities. Existing and ongoing agricultural activities protected under the federal Food Security Act occurring in wetland areas.

Existing and ongoing agriculture within fish<u>Fish</u> and <u>wildlife habitat</u>
conservation Areas so long as livestock

and application of pesticides, herbicides, fungicides, and fertilizers are kept 25 feet from any water bodyis done in accordance with package instructions.

- I.__m. State or Federally Approved Restoration or Enhancement Project.
 Implementation of a state or federally approved restoration or enhancement project not related to any development project.
- m. n. Operation, Repair and Maintenance. Operation, repair and maintenance of existing structures, infrastructure, roads, sidewalks, railroads, trails, dikes, or levees or water, sewer, stormwater, power, gas, telephone, cable, or fiber optic facilities if the activity does not further increase the impact to, or encroach farther within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, repair, or maintenance.
- o. Areas with only ground shaking or liquefaction hazards. In areas with only ground shaking or liquefaction hazards, repair or construction of roads, sidewalks or trails (except where there are structures), or water, sewer, stormwater, gas, power, cable, or fiber optic facilities shall be exempt from the ground shaking and liquefaction permitting requirements.
 - <u>n. p. Public Improvement Projects.</u> Public improvement projects located within existing impervious surface areas.
 - o. q.—City, State or Federally Approved Stand-alone "Critical Area" Creation Project.
 Implementation of a city, stateCity, State or federally approved stand-alone "critical area" creation project that is not mitigation. A "Critical Area" created under these circumstances that would not otherwise have met the definition of that type of critical area is exempt from the provisions of this chapter. Also see the definition of "Wetlands" atin VMC Chapter 20.150 VMC.20.150.
 - p. r.—Clearing in Frequently Flooded AreaAreas and/or Seismic Hazard AreaAreas
 Only. Clearing vegetation within the floodplain but outside the Riparian
 Management Area or Riparian Buffer (see VMC 20.740.040(A)(2)(f)).and within
 a Seismic Hazard Area, but outside other types of critical areas.

- q. Vegetation Clearing. Clearing vegetation in critical areas that are only seismic hazard areas (see VMC 20.740.040(A)(2)(f)). Seismic Hazard Areas
- <u>r.</u> <u>s.</u> *Fence Repair.* Maintenance, repair, and in-kind replacement of existing fences.
- 5. t.—Seismic Hazard Areas Only. Sites identified as located within only a Seismic Hazard Area (VMC 20.740.13020.740.130) Geologic Hazard Areas) shall be exempt from needing to obtain a critical areas permitCritical Areas Permit. All projects within the Seismic Hazard Area must comply with the Building Code at time of building permit review, including providing a geotechnical reportGeotechnical Report. (Ord. M-4034 § 23, 12/03/2012; Ord. M-4017 § 5, 07/16/2012; Ord. M-3931 § 22, 11/02/2009; Ord. M-3922 § 36, 07/06/2009; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.040 Approval Process.

- A. A. Critical Areas Permit Process.
 - 1.—Pre-application Conference Required. A pre-application meeting or waiver per VMC
 Chapter 20.210 VMC20.210 is required prior to submitting a critical areas permit.
 Provided, preCritical Areas Permit. Pre-application conferences shall not be required for the following:
 - a. Proposed activities within only ground shaking and/or liquefaction areas.
 - <u>a.</u> <u>b.</u> Activities and developments listed as exempted from critical areas standards and permits.
 - <u>b.</u> Proposals involving only an addition to an existing single-family <u>homeor</u> duplex house, including accessory structures, <u>such as accessory dwelling</u> units, attached and detached garages, and/or carports, shops, and sheds.
 - <u>c.</u> Other minor improvements determined by the <u>planning official Planning</u>
 Official to not warrant a pre-application meeting <u>or waiver</u>.
 - 2. <u>2. Critical Areas Permit.</u> All <u>Critical Areas Permit.</u> If a proposed development activity is determined not to be exempt per the listed critical areas exemptions, the applicant

and/or owner shall obtain a Critical Areas Permit prior to commencing the development activity. Critical Areas Permits as determined to be necessary under Chapter 20.740 VMC and as stated below shall shall be processed as a Type I permit or, when submitted with another land use application, no other permits are filed concurrently or reviewed according to the procedures of the underlying land use application pursuant to VMC Chapter 20.210 VMC.20.210.

- a. New single-family and duplex residences, alterations to existing single-family and duplex residences, or new accessory structures located within a critical area or buffer, or on a property containing a critical area or buffer.
- b. Application of pesticides, herbicides, fungicides or fertilizers within 25 feet of ponds, lakes, streams, rivers or wetlands.
- c. Approval of agricultural activities within 25 feet of ponds, lakes, streams or rivers.
- d. Critical Area restoration or enhancement projects not related to any development project; and establishment of mitigation banks.
- e. Public improvement projects located entirely within the previously improved portion of the right-of-way, not otherwise exempted by this chapter.
- f. Clearing vegetation within a critical area or buffer, including: (i) grading, uprooting or other activities that impair the soil stabilization function of vegetation in landslide hazard areas (VMC 20.740.130); (ii) removal of downed woody vegetation from wetlands, lakes, streams or rivers; and (iii) removal of trees, grasses, or brush to create fire-defensible space (subsection <u>H</u> of this section). However, clearing vegetation within the area of special flood hazard outside of the Riparian Management Area and Buffer and in seismic hazard areas shall not require a permit (see VMC 20.740.030).
- g. Approval of programmatic permits (subsection <u>G</u> of this section) for activities within critical areas or buffers.
- 3. _3. _Review Procedure. The planning official Planning Official shall make a determination as to whether the proposed activity and mitigation, if any, are consistent with the provisions of VMC Title 20. The planning official's determination shall be based on the approval criteria of VMC 20.740.060. The Critical Areas Permit shall be valid for as long as the underlying land use permit or as otherwise specified

by the planning official.critical areas approval criteria of VMC Chapter 20.740 and in compliance with the performance standards for the type(s) of critical area(s) involved.

- 4. B.—Expiration of Permit. The Critical Areas Permit shall be valid for as long as the underlying land use permit is in effect or as otherwise specified by the Planning Official.
- B. Notice on Title Covenant and Tracts.
 - 1. Covenants. This section applies to all nonexempt projects that involve critical areas and buffers.
 - 1. a. In order to inform subsequent purchasers of real property, with the exception of the existence of critical areas, the Frequently Flooded Areas.
 - a. The owner of any property containing a critical area or buffer on which a development proposal is approved shall file a covenant with the county records and elections division according to the direction of the cityCity. The covenant shall state the presence of the critical area and/or buffer on the property, the application of this chapter to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist. The covenant shall "run with the land.", including that the area(s) within the conservation covenant be maintained in a natural state without disturbance to vegetation or other features unless otherwise approved by the City. The covenant shall "run with the land" in perpetuity. The covenant shall include a map and legal description of the critical area, with wording in the notice substantially similar to the following:
 - b.—"Prior to and during the course of any grading, building construction or other development activity on this property containing or abutting a critical area, the area of development activity must be fenced or otherwise marked to the satisfaction of the City. The critical area shall be maintained in its natural state without disturbance to vegetation or other features, except as provided for by VMC Chapter 20.740, Critical Areas Protection. Yard waste,

debris, fill, equipment, vehicles, and materials shall not be placed in the critical area."

- b. The applicant shall submit proof that the covenant has been filed for public record before the cityCity approves any site development or construction for the property or, in the case of subdivisions, short subdivisions, planned unit developments, binding site plans, and other developments that involve platting, at or before recording of the plat.
- c. 2. Any modifications to an established and recorded conservation covenant shall be consistent with the standards of this chapter and the originally issued Critical Areas Permit that established the subject conservation covenant. The modification shall be processed as under a Type I review process. Any modification of the covenant that is inconsistent with the originally issued Critical Areas Permit or with the standards of this chapter shall be subject to a review and receive a Critical Areas Permit consistent with the standards of this chapter.
- 2. Tracts. This section applies in addition to subsection (B)(1)(1) of this section to projects that involve platting on properties containing fish and wildlife habitat conservation areas, wetlands. Geologic Hazard Areas, and their buffers. The planning official may also apply this section to developments that involve platting on properties containing geologic hazard areas and their buffers. The location of the tract, critical area(s), and buffer(s) shall be shown on the face of the plat. See subsection (B)(2)(b) of this section for exceptions.
 - a. a. The property owner shall place the subject critical areas and buffers in one or more nondevelopable tracts except when: the responsible official determines that a tract cannot be provided given the constraints of the site, such as size of the property in question, while meeting all other standards of VMC Title 20.
 - i. Creation of a nonbuildable tract would result in violation of minimum lot depth standards; or
 - ii. The responsible official determines a tract is impractical.

- b. b. When anthe exception in subsection (B)(2)(a) of this section applies, residential lots may extend into the critical area(s) or buffer(s) provided:
- i. The location of the outer perimeter of the critical area(s) and buffer(s) is marked in the field and approved by the planning official prior to the commencement of permitted activities and maintained throughout the duration of the permit.
- ii. A permanent physical demarcation along the outer/upland boundary of the critical area buffer(s) is installed and thereafter maintained. Such demarcation may consist of fencing, hedging or other prominent physical marking that allows wildlife passage, blends with the critical area environment, and is approved by the planning official.
- 1.—iii. Permanent signs are posted at an interval of one per lot for single-family residential uses or at a maximum interval of 200 feet, or as otherwise determined by the planning official, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the planning official: "The area beyond this sign is a critical area or critical area buffer. Alteration or disturbance is prohibited by law. Please call the City of Vancouver for more information."
 - i. C. Temporary and permanent markers and signs are installed in compliance with the requirements of VMC 20.740.020, General Provisions.
 - i. The applicant records a conservation covenant protecting the critical area in perpetuity in conformance with VMC 20.740.040(B)(1).

C.__Financial Assurances.

1.—1.—When mitigation required pursuant to a development proposal is not completed prior to the cityCity's final permit approval, such as final plat approval or final building inspection, the cityCity shall require the applicant to provide security in a form and amount deemed acceptable by the city. If the development proposal is subject to mitigation, the applicant shall provide security in a form and amount deemed acceptable by the city City, including to ensure that mitigation is fully

functional (including but not limited totaking into account remaining construction, maintenance, and monitoring).

- 2. 2. The security shall be in the amount of 125 percent of the estimated cost of restoring the functions of the critical area that are at risk.
- 3. The security authorized by this section-shall remain in effect until the cityCity determines, in writing, that the applicable standards for which the security is required have been met. Bonds or otherThe security shall be held by the cityCity for a minimum of five years to ensure that the requiredfully functional mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.
- 5. 9- Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed in the project budget or capital improvement budget for mitigation, maintenance, monitoring, or restoration.
- 6. 6. Failure to satisfy any critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the city may demand payment of any financial guarantees or require other action authorized by the city code or any other law.
- 7. Any funds recovered pursuant to this section shall be used to complete the required mitigation. Excess funds shall be returned to the applicant.
- D. D. Critical Area Inspections. Reasonable access to the site shall be provided to the city, stateCity, State, and federal agency review staff for the purpose of inspections during any proposal review, delineation, restoration, emergency action, or monitoring period.

<u>Burden of Proof.</u> E. Reconsideration of planning official's determination. If, within five days following the date of mailing of a Critical Areas Permit, new information relevant to the decision is made available, any party may request that the decision be reconsidered. If the new

information is found to be substantial and relevant to the critical area review, the planning official may reopen the critical area review and make a new determination based on the revised report. The Critical Areas Permit shall not be considered final and subject to appeal until the decision on the request for reconsideration, if applied for, has been issued.

- E. F.—The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the exemption, Critical Areas Permit, Minor Exception, Reasonable Use Exception, or any other approval requested under this chapter.
- E. Appeals. Any decision to approve, condition, or deny a development proposal or other activity based on the requirements of this chapter may be appealed according to VMC 20.210.1302.
- G. G. Programmatic Permits. The purpose of a programmatic permit is to provide for ongoing, routine maintenance, operation, or repair activities on sites containing critical areas or buffers (1) so as not to impair an agency's or business's ability to operate effectively and efficiently by requiring separate Critical Areas Permits for each activity; and (2) at the same time protect critical areas and buffers in accordance with this chapter.
 - 1. In addition to the submittal requirements in VMC 20.740.050,20.740.050 and any additional Critical Areas report requirements under VMC 20.740.110-140, applicants for a programmatic permit shall submit a proposed management plan. The management plan shall contain:
 - a. a. A narrative explaining the need for the programmatic permit.
 - <u>b.</u> <u>b.</u> A list of the ongoing, routine, maintenance, operation, or repair activities that impact or potentially impact critical areas and buffers.
 - c. A description of the potentially impacted critical area and buffer functions;
 - d. d. Proposed measures and standards for avoiding impacts to critical area and buffer functions and, where unavoidable, minimizing and mitigating those impacts to achieve no net loss of functions; and

- e. A training program ensuring that all employees, contractors, and individuals under the supervision of the applicant who are involved in permitted activities understand and perform them in accordance with the terms of the permit.
- 2. 2. A programmatic permit may be approved for up to seven years. The permit duration may be tied to other permits or processes.
- 3. Every two years within for the duration of the programmatic permit 30 days of prior to the anniversaryoriginal date of permit issuance for the duration of the permit, the applicant shall submit a report to the planning official summarizing activities undertaken under the programmatic permit including any issues to be resolved. The report shall also document the training provided in accordance with subsection (G)(1)(e) of this section.
- 4. 4. The applicant or the <u>cityCity</u> may initiate an amendment to the programmatic permit to respond to if anticipated activities, terms, or conditions of the <u>programmatic</u> permit <u>performance issues.will change.</u> An amendment shall be considered through a Type 1 process following a pre-application conference.
- 5. An application for reauthorization of a programmatic permit shall be submitted at least 90 days prior to the date the current permit expires. Programmatic permits may be reauthorized through a Type 1 process following a required pre-application conference. Permit standards and conditions may be modified to conform to the current codes, policies, and standards or based on past performance. Where the review of the reauthorization application will extend beyond the expiration date of the current programmatic permit, the planning official Planning Official may extend the duration of the current permit for 30up to 60 days at a time, not to exceed 180 days.

H. Trees, grasses, and brush in a critical area or buffer may be pruned or removed to create fire-defensible space around a structure (see subsection (A)(2)(f) of this section) when one or more of the criteria in VMC 20.740.030(C)(1)(f)(i)(A) through (C)(1)(f)(i)(F) are met. When creating fire-defensible space is permitted, the following standards shall apply:

1. Grasses and underbrush shall be maintained between eight inches and 12 inches in height.

- 2. Trees may be pruned, limbed-up, or removed. Topping trees is prohibited.
- 3. Removal of vegetation in a landslide hazard area is prohibited during the wet season (November 1st to May 1st). The area must be immediately replanted to ensure soil stability. The property owner shall maintain the newly planted vegetation to ensure its survival.
- 4. Any debris from vegetation removal shall be disposed of promptly and properly.
- 5. Required replantings shall be of native, fire-resistant species. A list of native, fire-resistant species is available from the planning official.
- A.—I. Development may be permitted on a site containing a critical area(s) or buffer(s) which may also be subject to state or federal permits prior to all necessary state or federal permits being obtained when all of the following criteria are met:
 - 1. A phased master plan is submitted under Chapter <u>20.260</u> or <u>20.268</u> VMC as appropriate, demonstrating:
 - a.—a. How the maximum critical area(s) and maximum buffer(s) will be clearly avoided until all local, state, or federal permits are obtained;
 - <u>a.</u> <u>b.</u> How each phase could be permitted as an individual project not relying on development of any other phases in any way;
 - c. How each phase could be developed regardless of whether any or all of the pending state or federal permits are ever obtained;
 - d. No net loss of critical area functions for each phase and for the project as a whole, regardless of whether any or all of the pending state or federal permits are ever obtained.
 - 1.—2. Development is permitted only in the area that clearly avoids (VMC 20.740.030(B)(2)(f)(i)(A)) the maximum critical area(s) and buffer(s). (Ord. M 4105 5 3, 11/17/2014; Ord. M-4017 \$ 6, 07/16/2012; Ord. M-3959 \$ 37, 07/19/2010; Ord. M-3931 \$ 23, 11/02/2009; Ord. M-3844 \$ 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.050 Submittal Requirements.

- A. Preparation by Qualified Professional. Any required Critical Areas Reportcritical areas report shall be prepared by a qualified professional as defined hereinin VMC Chapter 20.150.
- <u>B.</u> <u>B.</u> <u>General Critical Areas Report Contents.</u> At a minimum, the <u>Critical Areas Reportcritical</u> <u>areas report</u> shall contain the following:
 - The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;
 - 2. 2. A copy of the site plan for the development proposal, including:
 - <u>a.</u> <u>a.</u> A map to scale depicting critical areas, buffers, the development proposal, and any areas to be <u>clearedaltered or developed</u>; and
 - b. Proposed proposed stormwater management and sediment control
 plan for the development, including a description of any impacts to drainage
 alterations; and
 - c. A digital map of the geographic information required pursuant to the applicable provisions of this chapter for each critical area and buffer on site. The digital map(s) must be based on the same coordinate system as the Clark County GIS database: state plane coordinates using the NAD 1983 datum and the Washington South zone (also referred to as the FIPS Zone 4602). The digital map(s) must also conform to other Clark County GIS digital mapping standards and specifications available from the Planning Official or directly from Clark County's Department of Assessment and GIS.
 - 3. _3. _The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site. <u>Critical Areas Reports shall</u> be prepared by a qualified professional for the type of critical area involved;
 - 4. __4.____dentification and scientific characterization of all critical areas and buffers. The scientific characterization shall include a detailed assessment of the functional characteristics of the critical areas:
 - 5. An assessment of the probable impacts to critical areas and buffers and risk of injury or property damage including permanent, temporary, temporal, and indirect

- impacts resulting from development of the site and the operations of the proposed development;
- 6. 6. A written response to each of the approval criteria in VMC 20.740.06020.740.060;
- 7. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with VMC 20.740.050(F)20.740.050(F) Mitigation Plan Requirements.; and
- 8. C. Additional Information. Any additional information required for the specific critical areas and buffers as specified in VMC 20.740.11020.740.110 Fish and Wildlife Habitat Conservation Area, VMC 20.740.12020.740.120 Frequently Flooded Areas, VMC 20.740.13020.740.130 Geologic Hazard Areas, and VMC 20.740.14020.740.140 Wetlands.
- C. D. Other Reports or Studies. Unless otherwise provided, a Critical Areas Report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the planning official. Planning Official. Provided, the site conditions shall not have changed since the earlier report or study was completed.
- D. E. Critical Areas Report Modifications to Requirements. Modifications to Required Contents. The applicant may consult with the planning official Planning Official prior to or during preparation of the Critical Areas Report to obtain city approval of modifications towhen the required contents of the report where, in the judgment of Planning Official determines and a qualified professional, more or recommends that less information is requirednecessary to adequately address the potential impacts to any critical areas or buffers and the required mitigation. The planning official such case the Planning Official may also initiate allow a modification to the required report contents by requiring either additional or less information, when determined to be necessary to the review of the proposed activity in accordance with this chapter reduced scoped critical areas report.
- E. F. Mitigation Plan Requirements. When mitigation is required, the applicant shall submit a mitigation plan as part of the Critical Areas Report. The mitigation plan shall include:
 - 1. Mitigation rationale: A discussion of the rationale for the proposed mitigation that includes other mitigation options and why the proposed method best achieves the

approval criteria in 20.740.060 as compared with other forms and locations for mitigation.

- Detailed Construction Plans. The mitigation plan shall include descriptions and plans of the mitigation proposed, such as:
 - a. a. The proposed construction sequence, timing, and duration;
 - b. b. Grading and excavation details;
 - c. c. Erosion and sediment control features;
 - <u>d.</u> <u>d.</u> A planting plan specifying plant species, quantities, locations, size, spacing, and density; <u>and</u>
 - e. e. Measures to protect and maintain plants until established; and
 - f. These written descriptions shall be accompanied by detailed Detailed site diagrams, scaled cross sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.
- 3. Adaptive Management. 2. The mitigation plan shall include identification of potential courses of action and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.
- 4. Monitoring Program. Monitoring Program. The mitigation plan shall include a program for monitoring construction of the mitigation project and for assessing a completed project.
 - a. A protocol shall be included outlining the schedule for site monitoring, and how the monitoring data will be evaluated to determine if the performance standards are being met.
 - b. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. The mitigation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five (5) years. For example, ten (10) years or more of monitoring are typically needed

for forested wetlands or scrub-shrub communities, years or more than 10 years, unless otherwise specified in this code.

- c. When the applicant believes that the conditions of the monitoring plan are met, the applicant shall contact the City and request that the City verify and certify so in writing. The City shall conduct an on-site assessment as part of the verification process. The applicant shall provide reasonable access to the property as necessary for verification and certification.
- d. When the City has verified and certified that the conditions of the monitoring plan have been met, the critical area shall no longer be considered as mitigation, but as a naturally-occurring critical area when processing a future development permit application(s).
- 3. Adaptive Management. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met. (Ord. M-3931 § 24, 11/02/2009; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)
- F. Development may be permitted on a site containing a critical area(s) or buffer(s) which may also be subject to state or federal permits prior to all necessary state or federal permits being obtained when all of the following criteria are met:
 - 1. A phased master plan is submitted under VMC Chapter 20.260 or Chapter 20.268 as appropriate, demonstrating:
 - a. How the maximum critical area(s) and maximum buffer(s) will be clearly avoided until all local, state, or federal permits are obtained;
 - b. How each phase could be permitted as an individual project not relying on development of any other phases in any way:
 - c. How each phase could be developed regardless of whether any or all of the pending state or federal permits are ever obtained; and
 - d. The applicant demonstrates that there will be no net loss of critical area functions for each phase or for the project as a whole even if state and/or federal permits are not obtained.

2. Development is permitted only in the area that clearly avoids the maximum critical area(s) and buffer(s). (Ord. M-4105 § 3, 11/17/2014; Ord. M-4017 § 6, 07/16/2012; Ord. M-3959 § 37, 07/19/2010; Ord. M-3931 § 23, 11/02/2009; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.060 Approval Criteria.

Any activity or development subject to this chapter, unless otherwise provided for in this chapter, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria. The cityCity may condition the proposed activity as necessary to mitigate impacts to critical areas and their buffers and to conform to the standards required by this chapter. Activities shall protect the functions of the critical areas and buffers on the site.

- A. A. Avoid Impacts. The Applicant shall first seek to avoid all impacts that degrade the functions and values of (a) critical area(s). This may necessitate a redesign of the proposal.
- B. B. Minimize Impacts. Where avoidance is not feasible, the applicant shall minimize the impact of the activity and mitigate to the extent necessary to achieve the activity's purpose and the purpose of this ordinance. The applicant shall seek to minimize the fragmentation of the resource to the greatest extent possible.
- C. C. Rectifying. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
- D. *Reducing*. Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
- E. Compensatory Mitigation. The applicant shall compensate for the unavoidable impacts by replacing each of the affected functions to the extent feasible. The compensatory mitigation shall be designed to achieve the functions as soon as practicable. Compensatory mitigation shall be in-kind and on-site, when feasible, and sufficient to maintain the functions of the critical area, and to prevent risk from a hazard posed by a critical area to a development or by a development to a critical area. Compensatory mitigation priority for wetlands is specified in VMC 20.740.140(C)(3)(b). Compensatory mitigation shall offset both permanent and temporal impacts.

- F. _D. _No Net Loss. The proposal protects the critical area functions and values and results in no net loss of critical area functions and values. <u>If loss of critical area functions are</u> <u>expected, adequate mitigation is provided to offset impacts of anticipated loss.</u>
- G. E. -Consistency with General Purposes. The proposal is consistent with the general purposes of this chapter and does not pose a significant threat to the public health, safety, or welfare on or off the development proposal site;
- H. F. Performance Standards. The proposal meets the specific performance standards of VMC 207.40.110 Fish and Wildlife Habitat Conservation Areas VMC 20.740.110, VMC 20.740.120 Frequently Flooded Areas VMC 20.740.120, VMC 20.740.130 Geologic Hazard Areas VMC 20.740.130, and VMC 20.740.140 Wetlands VMC 20.740.140, as applicable. (Ord. M-4017 § 7, 07/16/2012; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.070 Minor Exceptions.

- A. _A. _Minor Exceptions Authorized. Minor exceptions of no greater than 10% percent from the numeric standards of this chapter may be authorized by the cityCity in accordance with the Type II procedures set forth in VMC 20.210.050, Type II Applications. Chapter 20.210. Minor exceptions shall not be combined with buffer averaging [(20.740.140(C)(1)(b)(ii)]] or buffer reduction (20.740.140(C)(1)(b)(iii)]. for Fish and Wildlife Habitat Conservation Areas or Wetlands. Minor exceptions from the NFIPNational Flood Insurance Program development standards of VMC 20.740.12020.740.120, Frequently Flooded Areas, are prohibited (VMC 20.740.120(K)).
- B. B. Minor Exception Criteria. A minor exception from the standards of this chapter may be granted only if the applicant demonstrates that the requested action conforms to all of the following criteria:
 - Unusual conditions or circumstances exist that are peculiarspecific to the intended use, the land, the lot, or something inherent in the land, and that are not applicable to all other lands in the same vicinity or zoning district;
 - The unusual conditions or circumstances do not result from the actions of the applicant;

- Granting the minor exception requested will not confer on the applicant any special privilege that is denied by this chapter to other lands, structures, or buildings under similar circumstances;
- 4. 4. The minor exception is necessary for the preservation and enjoyment of a substantial property right of the applicant such as is possessed by the owners of other properties in the same vicinity or district;
- 5. The minor exception requested is the least necessary and no greater than 10% percent of the subject standard to relieve the unusual circumstances or conditions identified in Subsection VMC 20.740.070(B)(1) 20.740.070(B)(1) above;
- 6. 6.—The granting of the minor exception or the cumulative effect of granting more than one minor exception is consistent with the general purpose and intent of the City of Vancouver Comprehensive Plan, this <u>Titletitle</u>, this chapter, and the underlying zoning district;
- 7. Degradation of the functions (including public health and safety) of the subject critical areas and any other adverse impacts resulting from granting the minor exception will be minimized and mitigated to the extent feasible in accordance with the provision of this chapter;
- 8. Granting the minor exception will not otherwise be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity of the subject property; and
- 9. 9. The proposed development complies with all other applicable standards.
- <u>C.</u> <u>C.</u> Conditions May Be Required. In granting any minor exception, the <u>cityCity</u> may attach such conditions and safeguards as are necessary to secure adequate protection of critical areas and developments from adverse impacts, and to ensure conformity with this chapter.
- D. *Time Limit.* The city shall prescribe a time limit within which the action for which the minor exception is required shall be begun, completed, or both. Failure to begin or complete such action within the established time limit shall void the minor exception.

E. Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and upon which any decision has to be made on the application. (Ord. M-4017 § 8, 07/16/2012; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.080 Reasonable <u>Economic</u> Use Exceptions.

A. _A. _Exception Request and Review Process. If the application of this chapter would deny all reasonable economic use of the subject property, the cityCity shall determine if compensation is an appropriate action, or the property owner may apply for an exception pursuant to this section. Exceptions from the standards of this chapter may be authorized by the cityCity in accordance with the Type III procedures set forth in VMC 20.210.060, Type III procedures set forth in VMC 20.210.060, Type III procedures set forth in VMC 20.210.060, Type III procedures set forth in VMC 20.210.060, Type III procedures set forth in VMC 20.210.060, Type III populations: 20.210.

An application for a reasonable <u>economic</u> use exception shall be made to the <u>cityCity</u> and shall include a Critical Areas Report, <u>including with a</u> mitigation plan, <u>if necessary</u>; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (RCW <u>43.21C</u>). <u>The planning official43.21C</u>). <u>The Planning Official</u> shall prepare a recommendation to the Hearings Examiner based on review of the submitted information, a site inspection, and the proposal's ability to comply with <u>the critical areas</u> reasonable use exception criteria in VMC <u>20.740.080(B</u>).

- B. B. Reasonable Use Review Criteria. The cityCity shall approve applications for reasonable use exceptions when all of the following criteria are met:
 - The application of this chapter would deny all reasonable economic use of the property;
 - 2. No other reasonable economic use of the property has less impact on the critical area:
 - 3. _3. _ The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;
 - 4. 4. The inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of this chapter, or its predecessor;

- <u>5.</u> The proposal does not pose a significant threat to the public health, safety, or welfare on or off the development proposal site;
- <u>6.</u> _6. _The proposal mitigates for the loss of critical area functions to the greatest extent feasible; and contributes to the Critical Areas Restoration Fund for any impacts that cannot be mitigated.
- 7. The proposal is consistent with other applicable regulations and standards.

C. Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application. (Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.090 Unauthorized Critical Areas Alterations and Enforcement.

A. A. Enforcement.

- 1. _1.—It shall be unlawful to violate the provisions of VMC Chapter <u>20.740,20.740.</u> Any violation of this chapter shall constitute a public nuisance.
- 2. 2. VMC Title 2222 shall provide the enforcement provisions for VMC Chapter 20.74020.740. VMC Title 2222 may impose any of the remedies, requirements or corrective actions contained in this chapter. In lieu of or in addition to the enforcement provisions contained in VMC Title 22, the city22, the City may also seek injunctive or other relief from any court of competent jurisdiction.
- 3. The city shall deposit all monetary penalties collected pursuant to VMC Title <u>22</u> into the Critical Areas Restoration Fund. Accrued monies in the Critical Areas Restoration Fund shall be used to protect and restore critical areas within the City of Vancouver.
- B. B. Requirement for Restoration Plan. In the event the cityCity initiates enforcement action under VMC Title 2222 or files a complaint in court, the cityCity may require a restoration plan consistent with the requirements of this chapter. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum performance standards for restoration requirements described-in-VMC-20.740.090(C). The planning-Official shall, at the violator's expense, seek expert advice in determining whether the plan restores the affected area to its pre-existing condition or, where that is not possible, restores the functions of the

affected area. Inadequate plans shall be returned to the applicant or violator for revision and re-submittal.

- C. C. Minimum Performance Standards for Restoration.
 - 1. 1. For alterations to frequently flooded areas, wetlands Frequently Flooded Areas. Wetlands, and fish Fish and wildlife habitat conservation areas Wildlife Habitat Conservation Areas, the following minimum performance standards shall be met for the restoration of a critical area, provided that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:
 - <u>a.</u> <u>a.</u> The structure and functions of the critical area or buffer prior to violation shall be restored, including water quality and habitat functions;
 - b. b. The soil types and configuration prior to violation shall be replicated;
 - c. __c. _ The critical area and buffers shall be replanted with native vegetation (a list of native species is available from the Planning Official). If the critical area or buffer is on a site that meets the criteria of VMC 20.740.030(C)(1)(f)(i)20.740.030(C)(1)(f)(i), the vegetation for replanting must be not only native but also fire-resistant. A list of native, fire-resistant species is available from the Planning Official; and
 - d. _d. _Information demonstrating compliance with the requirements in VMC
 20.740.050(F)this chapter's Mitigation Plan Requirements shall be submitted to the planning official Planning Official.
 - 2. For alterations to frequently flooded Frequently Flooded and geologic hazard areas Geologic Hazard Areas, the following minimum performance standards shall be met for the restoration of a critical area or buffer, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:
 - <u>a.</u> <u>a.</u> The hazard shall be reduced to a level equal to, or less than, the previolation hazard;

- <u>b.</u> <u>b.</u> The risk of personal injury resulting from the alteration shall be eliminated or minimized;
- c. c. Drainage patterns shall be restored to those existing before the alteration; and
- d. _d. _The hazard area and buffers shall be replanted consistent with previolation conditions with native vegetation sufficient to minimize the hazard. If the critical area or buffer is on a site that meets the criteria of VMC <u>20.740.030(C)(1)(f)(i)</u>20.740.030(C)(1)(f)(i), the vegetation for replanting must be not only native but also fire-resistant. A list of native, fire-resistant species is available from the Planning Official.
- D. _D. _Site Investigations. The planning official Planning Official is authorized to make site inspections and take such actions as are necessary to enforce this chapter. As a condition of the restoration plan, the applicant shall grant reasonable access to the property.
- E. E. Noncompliance in Frequently Flooded Areas. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall upon conviction be subject to enforcement under subsection AA of this section. Nothing herein contained shall prevent the city of VancouverCity from taking such other lawful action as is necessary to prevent or remedy any violation. (Ord. M-4325 § 3, 2020; Ord. M-3844 § 2, 2007; Ord. M-3692 § 2, 2005)

20.740.100 Designation Process for Habitats of Local Importance.

A. A. Eligibility and Approval Criteria. Habitats of Local Importance are Fish and Wildlife Habitat Conservation Areas whichthat are not designated as Priority Habitats and Species by the stateunder VMC 20.740.110, but are designated as locally significant by the cityCity. Criteria for designation include all of the following:

- 1. A need for protection exists due to a high diversity of fish or wildlife species, declining populations, scarcity of the habitat type, sensitivity to disturbance from human activity or development, or other unique local habitat functions.
- The area is sufficient in size to support the species or habitat functions for which
 it is designated.
- 3. _3. The designation will not compromise the ability of the cityCity to achieve the goals of the Comprehensive Plan.
- 4. 4.—There is a proposed management strategy describing how the functions of the habitat will be protected after designation.
- B. The area and habitat are not otherwise protected under other critical areas regulations.
- B. Designation Process. Habitats of Local Importance may be proposed by the property owner or the cityCity and shall be designated according to a Type IV legislative procedure (VMC 20.210.070). Chapter 20.210). (Ord. M-3692, Added, 02/28/2005, Sec 2)

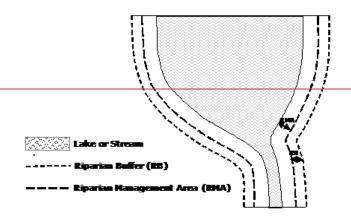
20.740.110 Fish and Wildlife Habitat Conservation Areas.

- A. A. Designation and Location.
 - 1. The City designates the following identified areas as Fish and Wildlife Habitat
 Conservation Areas.
 Final designations shall be based on site conditions and other available data or information (Seesee VMC 20.740.020(C)(1)). There are established in the city the following identified Fish and Wildlife Habitat Conservation
 Areas:20.740.020[C][1]).
 - a. Habitat used by any life stage of state or federally designated Areas where endangered, threatened, and sensitive fish or wildlife species. A current list of federally and state identified species is available from the planning official.
 - a. b. Priority Habitats and have a primary association, including priority
 habitats and areas associated with Priority Species. Current lists of Priority
 Habitats and Species and applicable Management Recommendations
 promulgated priority species as listed by the Washington Department of Fish

and Wildlife are available from the planning official.(WDFW). Within the city, these areas and species primarily include, but may not be limited to, the following:

- i. c. Water bodies including lakes, streams, rivers, Riparian areas composed of Riparian Management Areas (RMA's) and naturally Riparian Buffers (RB's);
- ii. Priority Oregon white oak habitat;
- iii. Biodiversity areas;
- iv. Waterfowl concentrations: and
- v. Aquatic habitat.
- b. Forage fish spawning areas;
- c. Naturally occurring ponds- under 20 acres and their submerged aquatic beds that provide fish and wildlife habitat;
- d. Waters of the state;
- e. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;
- State natural area preserves, natural resource conservation areas, and state wildlife areas; and
- g. d.— Habitats and Species of Local Importance. Fish and Wildlife Habitat Conservation Areas which are not designated as Priority Habitats and Species by the state but or individual species that are designated as locally significant by the cityCity in accordance with VMC 20.740.10020.740.100.
- e. Riparian Management Areas and Riparian Buffers. The regulated areas include the land from the ordinary high water mark to a specified distance as measured horizontally in each direction. The Riparian Management Fish and Wildlife Habitat Conservation Area is adjacent to the lake, stream or river, and the Riparian Buffer is adjacent to the Riparian Management Area.

Figure 20.740.110-1 Riparian Management Aren and Riparian Buffer



(1) The Riparian Management Areas and Riparian Buffers are as follows:

Table TABLE 20.740.110-1. RIPARIAN MANAGEMENT AREAS & BUFFERS

DNR/Vancouver Stream Type	Description	Land Use Intensity ¹	RMA	RB ²
S	Shorelines-of-the-State	High/Moderate/Low	100′	75′
E	Lakes, streams, and rivers that contain fish habitat	High/Moderate/Low	100'	75 ′
Np or Ns, large	Streams and rivers that: (1) are not shorelines-of-the-state; (2) do not contain fish habitat;	High/Moderate/Low	100′	75 ′

DNR/Vancouver Stream Type	Description	Land Use Intensity ¹	RMA	RB ²
	(3) are wider than 5' between the ordinary high water marks on the banks.			
Np,	Streams and rivers that:	High/Moderate	100'	50'
small,	(1) are not shorelines-of-the-state;	Low	100′	25′
connected	(2) do not contain fish habitat;			
	(3) are not more than 5' wide;			
	(4) do connect via surface water to another stream or river (whether perennial or seasonal) even if the connection traverses a culvert, wetland, or other feature; and			
	(5) are perennial			
Ns,	Streams and rivers that:	High/Moderate	100'	25 ′
small,	(1) are not shorelines-of-the-state;	Low	100′	0'
connected	(2) do not contain fish habitat;			
	(3) are not more than 5' wide;			
	(4) do connect via surface water to another stream or river (whether perennial or seasonal) even if the connection traverses a culvert, wetland, or other feature; and			

DNR/Vancouver Stream Type	Description	Land Use Intensity ¹	RMA	RB ²
	(5) are seasonal			
Np or Ns,	Streams and rivers that:	High/Moderate/Low	25 ′	θ'
small,	(1) are not shorelines-of-the-state;			
not connected	(2) do not contain fish habitat;			
	(3) are not more than 5' wide;			
	(4) do not connect via surface water			
	to another stream or river; and			
	(5) are either perennial or seasonal			

1 Refer to Table 20.740.140-1.

2-The RB is the distance shown or the full extent of the 100-year floodplain, whichever is farther landward.

(A) When impervious surfaces from previous development completely functionally isolate the Riparian Management Area or the Riparian Buffer from the waterbody, the regulated riparian area shall extend from the ordinary high water mark to the impervious surfaces. If the waterbody is not completely physically isolated, but is completely functionally isolated, the Planning Official may adjust the regulated riparian area to reflect site conditions and sound science.

g. 2. Habitat Location Information. Locations. Information on the approximate location and extent of Fish and Wildlife Habitat Conservation Areas is available from the planning official. following sources:

The habitat location information is based on:

<u>h. a. Washington Department of U.S.</u> Fish and Wildlife <u>Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries species <u>list;</u>
</u>

- i. a. WDFW Priority Habitat and Species Maps;
- j. <u>b. Washington Department of Fish and WildlifeWDFW</u> Anadromous and Resident Salmonid Distribution Maps in the Salmon and Steelhead Habitat Inventory Assessment Program (SSHIAP);
- <u>k.</u> <u>c.</u> <u>StreamNet.org maps from the Pacific States Marine Fisheries</u> Commission;
- <u>I.</u> Washington <u>State</u> Department of Natural Resources (<u>DNR</u>) Official Water Type Reference Maps; <u>and</u>
- d. City-designated Habitats of Local Importance;
 - m. e. Other information acquired by the cityCity such as site-specific or areaspecific delineations or studies.
- B. B. Development activities that functionally or physically isolate the RMA or RMB buffer.

When existing impervious surfaces or other built structures, such as a levee or railroad corridor, functionally or physically isolate the RMA or RB buffer from the waterbody, the regulated RMA or RB wetland buffer shall extend landward from the ordinary high water mark (OHWM) or channel migration zone (CMZ), whichever is greater and terminate at the waterward edge of the impervious surface or manmade structure. Development activities that occur within the area of functional isolation, or further landward, are exempt from the requirement to obtain a Critical Areas Permit.

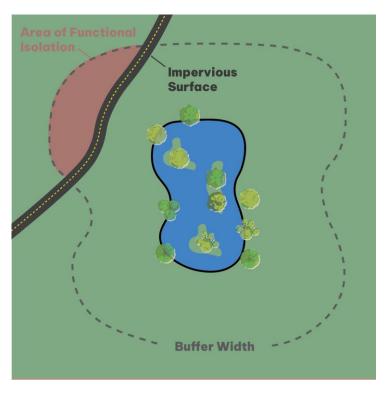


Figure 20.740.110-1: Functional Isolation

The Planning Official shall rely on a site visit, aerial photographs, or other evidence provided by the applicant or the applicant's qualified professional in making a determination to reduce the width of the RMA, RB, or wetland buffer based on functional and/or physical isolation.

Note: RMA's and RB's are measured from the OHWM or the edge of a channel migration zone (CMZ), whichever is further landward. However, no CMZs have been identified within the city limits as of the date this chapter was adopted.

A.—Additional Critical Areas Report Requirements.

- 1. A Critical Areas Report for a Riparian Management Area or Riparian Buffer shall include evaluation of the habitat functions using the Clark County Habitat Conservation Ordinance Riparian Habitat Field Rating Form or another habitat evaluation tool approved by the Washington Department of Fish and Wildlife.
 - a. In addition to the standards of (VMC <u>20.740.050(F)</u>), where a mitigation plan is required as part of the Critical Areas Report for a fish and wildlife habitat conservation area that involves a water body, Riparian Management Area or Riparian Buffer, the monitoring program protocol shall include where relevant to the impacted functions:
 - 1. Observations and measurements of riparian integrity and quality (buffer width, riparian corridor continuity or fragmentation, species diversity, stand age, plant survival rates)
 - 2. Large woody debris surveys
 - 3. Streamflow monitoring
 - 4. Water quality monitoring to detect pollution impacts
 - 5. Biological monitoring (including fish surveys and benthic macroinvertebrate sampling)
- 2. If the clearing or development activity is in the Riparian Management Area, the Critical Areas Report shall contain the following information, if applicable, in addition to the general Critical Areas Report requirements of VMC 20.740.050:
 - a. How the clearing or development activity constitutes a water-dependent, water-related or water-enjoyment use; or
 - b. How the clearing or development activity cannot feasibly be located on the site outside of the Riparian Management Area; and
 - c. How the proposal meets the Riparian Management Area width averaging standard (VMC 20.740.110(C)(2)(c)); and
 - a. d. How the proposal will not adversely affect the connectivity of habitat functions.

C. C. Performance Standards.

1. General.

1. a. Development Standards

- a. Development and Clearing Activities.
 - i. Development or clearing activities shall protect the functions of the Fish and Wildlife Habitat Conservation Areas on the site. The activity and shall_result in no net loss of functions. Protection can be provided by avoiding (the preferred protection) or minimizing and mitigating as described in the general critical areas, as required by the approval criteria (VMC 20.740.060). Functions include:of this chapter.
- 1. Providing habitat for breeding, rearing, foraging, protection and escape, migration, and over-wintering; and
- 2. Providing complexity of physical structure, supporting biological diversity, regulating stormwater runoff and infiltration, removing pollutants from water, and maintaining appropriate temperatures.
- b. An applicant shall replace any lost functions preferably by restoring or if not, then by enhancing other habitat functions, so long as the applicant demonstrates that enhancement of the other functions provides no net loss in overall functions and maintains habitat connectivity. An example of unavoidable loss of function would be interruption of a travel corridor in a Riparian Management Area or Buffer. To the maximum extent feasible, enhancement shall be undertaken on-site.
 - ii. c.—If development or clearing activity is within a Priority Habitat and Species area, the applicant shall follow Washington Department of Fish and WildlifeWDFW Management Guidelines, Management Recommendations, or other standards approved by the Washington Department of Fish and Wildlife. Where there are no guidelines, recommendations or other standards, development or clearing may occur provided that:WDFW.

- 1. The development or clearing results in no net loss of habitat function on the site; and
- 2. Functionally significant habitat, defined as habitat that cannot be replaced or restored within 20 years, shall be preserved.
- d. Signs for Fish and Wildlife Conservation Areas
 - 1. Temporary markers. The location of the outer perimeter of the fish and wildlife habitat conservation area shall be marked in the field, and such marking shall be approved by the planning official prior to the commencement of permitted activities. Such field markings shall be maintained throughout the duration of the permit.
 - 2. Permanent signs. Permanent signs shall be posted on public and private properties at an interval of one per lot for single family residential uses or at a maximum interval of 200 feet or as otherwise determined by the planning official, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the planning official: "The area beyond this sign is a fish and wildlife habitat conservation area. Alteration or disturbance is prohibited by law. Please call the City of Vancouver for more information."
- 2. Riparian Management Areas and Riparian Buffers.

In addition to the standards in VMC <u>20.740.060</u> and VMC <u>20.740.110(C)(1)</u> the standards in this section shall apply in Riparian Management Areas and Buffers.

- a. *Riparian Buffer.* Development or clearing activity may occur in the Riparian Buffer, providing that:
 - 1. The planned mitigation results in no net loss of riparian habitat functions on the site, and
 - iii. 2. Functionally significant habitat, defined as habitat that cannot be replaced or restored within 20 years, shall be preserved unless the activity meets the conditions of VMC

20.740.110(C)(2)(b).20.740.110(B)(2)(b). An example of habitat that

cannot be replaced within 20 years would be a stand of mature trees or a peat bog.

b. Mitigation. b.

- Mitigation for impacts within Fish and Wildlife Habitat Conservation
 Areas shall follow the sequence specified in this chapter's approval criteria.
- <u>ii.</u> Disrupted functions and values shall be mitigated on site as a first priority, and off site thereafter.
- iii. An up-to-date science-based guide, such as applicable watershed, fish recovery, sub-basin, or other science-based plans should be used to guide the proposed mitigation. Any science used to guide mitigation actions, whether on site or off site, must meet the criteria and characteristics of best available science listed in WAC 365-195-905 (Criteria for determining which information is the "best available science"), or the state standards in effect at the time of application.
- c. d. Signs for Fish and Wildlife Conservation Areas.
 - i. Temporary and permanent markers and signs shall be installed as required by this chapter's General Provisions.

2. Standards for RMAs RBs.

- a. RMA and RB Location and Width.
 - i. Standard Width. Standard RMA widths are 100 feet for Shorelines of the State (Type S), for both fish-bearing and non-fish-bearing waterbodies and for unclassified streams. The RB is 85 feet for all classified and unclassified waterbody types. The RMA and RB widths shall be combined for a total regulated riparian area width of 185 feet.
 - ii. Site Potential Tree Height (SPTH) RMA and RB Width. If the applicant cannot accommodate the standard-width RMA and RB on the project site for the proposed development, , applicants may use the 200-year

SPTH mapping tool referenced in WDFW's Riparian Ecosystems, Volume 2: Management Recommendations and justify a lesser-width RMA and/or RB in the project's Critical Areas Report. For project locations with multiple SPTH values, the largest SPTH value shall be used to establish the riparian area width. If the tool does not have data available to establish SPTH, the minimum combined RMA and RB width shall be the standard width as established in subsection (2)(a)(i).

iii. Measurement. Whether the standard or SPTH RMA and RB is used, the RMA is measured horizontally from the OHWM of the stream, river, or lake or from the CMZ, where present, to the specified width. The RB is measured horizontally from the landward boundary of the RMA as shown in Figure 20.740.110-1.

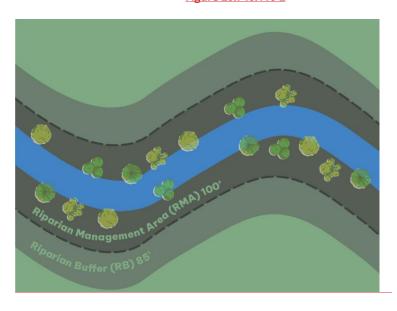


Figure 20.740.110-2

- b. Riparian Management Area Width Averaging. The width of the RMA may be modified (see VMC 20.170.080[B][1]) if all the following are met:
 - i. The total square footage of the Riparian Management Area RMA (VMC 20.740.110[B][2][a][i]) is not reduced;

- ii. There is no net loss of functions as a result of the averaging; and
- iii. Area. The reduction of the Riparian Management Area RMA width at any location is no greater than 25 percent of the required standard or SPTH width under VMC 20.740.110(2)(a)(i or ii).
- c. Permitted Development and Uses within RMAs and RBs and Development Standards.
 - i. Development and Uses within the Riparian Buffer. Development or clearing activity is permitted in the RB that meets the general performance standards in VMC 20.740.110(B).
 - <u>ii.</u> <u>Development and Uses within the RMA</u>. No development or clearing activity is allowed within the <u>Riparian Management Area RMA</u> unless such activity is:
 - (A) 1.—A water-dependent, water-related or water-enjoyment activity wherefor which there are no feasible alternatives that would have a less adverse impact on the Riparian Management Area or Riparian Buffer. The applicant shall minimize the impact and mitigate for any unavoidable impact to functions; Cost may be considered, but shall not be overriding; orRMA;
 - (B) 2. AInfrastructure, including a road, railroad, trail, dike, or levee or a water, sewer, stormwater conveyance, gas, power, cable, fiber optic, or telephone facility that cannot feasibly be located outside of the Riparian Management Area, that minimizes impacts, and that mitigates for any unavoidable impact to functions. Cost may be considered, but shall not be overriding; orRMA.;
 - (C) 3. Mitigation for activities allowed by this chapter, providing the activity provides results in no net loss of riparian habitat functions on the site.; or

- c. Modification of the Riparian Management Area Width. The width of the Riparian Management Area may be modified (See VMC 20.170.080(B)(1)) if all the following are met:
 - 1. The square footage of the area meeting the performance standards of the Riparian Management Area (VMC 20.740.110(C)(2)(b)) is not reduced; Trails and
 - <u>i.—2.</u> <u>wildlife viewing</u>There is no net loss of functions as a result of the averaging; and
 - 3. Notwithstanding any other provision, the reduction of the Riparian Management Area width at any location may be no greater than 25%.
- d. Owners of developed properties within the Riparian Management Area or Riparian Buffer are encouraged to enhance the area by planting native plants and to apply integrated pest management.
- e. Agricultural activities in the Riparian Management Area or Riparian Buffer are encouraged to develop farm conservation plans. (Ord. M-3931 § 25, 11/02/2009; Ord. M-3844 § 2, 10/01/2007; M-3692, Added, 02/28/2005, Sec 2)
 - (D) c. Enclosed areas below the BFE shall not be considered to be the lowest floor when so that they are not part of a basement and meet the requirements of subsection (J)(10)(d) of this sectiondo not interfere with hydrology of the waterbody and do not result in increased sediment entering the waterbody.
 - iii. Modifications to Existing Development. When replacing or removing existing development within an RMA or RB, the applicant shall implement the following, where applicable, during site construction:
 - (A) Evaluate the RMA and RB to pinpoint the best sites to restore and consider connectivity and adjacency to other priority habitats;
 - (B) Improve aquatic connectivity by replacing culverts and removing barriers to movement;

- (C) Revegetate with native plants and consider improvements for wildlife by integrating structures necessary for nesting, breeding, and foraging;
- (D) As existing development is remodeled or replaced, incorporate additional setbacks for streams;
- (E) Control access to RMAs and RBs during construction to limit soil compaction. Avoid operating equipment near waterbodies to reduce sedimentation and soil compaction; and
- (F) Avoid using chemicals in the RMA and RB that are not approved by the Washington State Department of Ecology (Ecology).
- iv. *Mitigation*. When mitigating on-site impacts, the following guidelines, where applicable, shall be implemented when designing mitigation for impacted riparian areas, if a restoration opportunity is available on site and within the RMA or RB:
 - (A) Protect riparian functions that remain, especially in places that are high functioning and implement actions that enhance degraded functions;
 - (B) Increase riparian width in areas of high function; and
 - (C) Prioritize opportunities to maintain and restore in-stream and riparian connectivity.

D. Additional Critical Areas Report Requirements.

- 1. A Critical Areas Report for an RMA or RB shall include:
 - a. The SPTH riparian area width in the mapping tool referenced in WDFW's
 Riparian Ecosystems, Volume 2: Management Recommendations document,
 if the applicant is not proposing to use the standard-width RMA and RB.
 - b. Evaluation of the habitat functions using a habitat evaluation tool approved by WDFW.
 - c. In addition to the standards of VMC 20.740.050(F), where a mitigation plan is required as part of the Critical Areas Report for a Fish and Wildlife Habitat Conservation Area that involves a waterbody, RMA, or RB, the monitoring program protocol shall include, where relevant to the impacted functions:
 - i. Observations and measurements of riparian integrity and quality (buffer width, riparian corridor continuity or fragmentation, species diversity, stand age, plant survival rates);
 - ii. Large woody debris surveys; and
 - iii. Streamflow monitoring.
 - iv. Water quality monitoring to detect pollution impacts.
 - v. Biological monitoring (including fish surveys and benthic macroinvertebrate sampling.
- If the clearing or development activity is in the RMA, the Critical Areas Report shall contain all the following information, if applicable:
 - a. How the clearing or development activity constitutes a water-dependent,
 water-related, or water-enjoyment use;
 - b. How the clearing or development activity cannot feasibly be located on the site outside of the RMA;
 - c. How the proposal meets the RMA width averaging standard (VMC 20.740.110(B)(2)(b)); and

- d. How the proposal will not adversely affect the connectivity of habitat functions.
- d. Crawlspace Construction. Crawlspaces are a type of enclosed area below the BFE. Crawlspaces constructed at or above the lowest adjacent exterior grade are preferred. (Note: Insurance premiums for structures with below-grade crawlspaces will be higher than those with the interior elevation at or above the lowest adjacent exterior grade.) Refer to the most current FEMA Technical Bulletin 11, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas (available from the planning official) for more information. Crawlspaces:
 - i. Are prohibited in areas with flood velocities greater than five feet per second unless designed by a qualified professional (in this case an architect or professional engineer).
 - ii. Shall meet the requirements of subsections (J)(8)(a) through (J)(8)(c) of this section, Enclosed Areas Below the Base Flood Elevation.
 - 3. Shall not be considered "basements" for the purposes of this section when constructed according to the following standards:
 - a. The interior grade of a crawlspace below the base flood elevation must not be more than two feet below the lowest adjacent exterior grade.
 - b. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four feet at any point.
 - c. The crawlspace must be equipped with a drainage system that removes floodwaters from the interior area of the crawlspace in a reasonable period of time after a base flood event.

9. Subdivisions.

- a. All subdivisions shall be designed:
 - i. To ensure that no residential structure or other structures for human habitation are located in the floodway even though lots may extend into the floodway;

- ii. To avoid placement of any structures in areas of special flood hazards and in CMZs;
- iii. Where it is not possible to design a subdivision in a manner to avoid placement of any structures in areas of special flood hazards or CMZs, the subdivision shall be designed to minimize or eliminate potential flood damage.
- b. All subdivisions shall have facilities such as sewer, gas, power, cable, fiber optic, telephone, stormwater and water systems located and constructed to minimize or eliminate flood damage. (See subsection (J)(2) of this section, Property Damage; subsection (J)(4) of this section, Water; subsection (J)(5) of this section, Waste; subsection (J)(6) of this section, Construction Materials and Methods; and subsection (J)(7) of this section, Anchoring.)
- c. All subdivisions shall have adequate drainage provided to reduce exposure to flood damage. (See subsection (J)(3) of this section, Drainage.)
- 10. Residential Construction (Including Manufactured Homes).
 - a. Residential Construction in the Floodway.
 - i. New construction and reconstruction of residential development including placement and replacement of all types of manufactured homes is prohibited in the floodway, unless sited as a temporary use in accordance with requirements listed in this section.
 - ii. Existing residential structures and manufactured homes in the floodway are nonconforming, but may be repaired or improved, provided:
 - A. The repair or improvement does not increase the ground floor area of the structure; and
 - B. The repair or improvement does not result in adverse impacts to other properties either upstream or downstream; and
 - C. The cost of the repair or improvement does not exceed 50 percent of the market value of the structure either:

- 1. Before the start of repair or improvement where there is no damage to the structure; or
- 2. Before flood or other damage to the structure occurred.
- D. Any project for improvement of a structure to correct existing violations of local health, sanitary, or safety code specifications which have been identified by the planning official and which are the minimum necessary to assure safe living conditions may be excluded from the 50 percent.
- E. Any project for improvement to a structure identified as a historic place may be excluded from the 50 percent.
- b. Residential Construction in Other Areas of Special Flood Hazards and CMZs. In areas of special flood hazards except the floodway and in channel migration zones:
 - i. New residential construction and reconstruction, including all types of manufactured homes and other structures for human habitation shall meet all the provisions of this chapter, including subsections (I)(8) and (I)(10)(c) through (I)(10)(d) of this section.
 - ii. New placement or replacement of all types of manufactured homes shall meet the standards of subsection ())(7) of this section, Anchoring.
 - iii. Repair or Substantial Improvement. All provisions of this chapter (including the elevation standards of subsections (I)(8), (I)(10)(c) and (I)(10)(d) of this section), all state and local health, sanitary, safety codes, and where applicable, historic preservation codes shall be met when the cost of repair or improvement of an existing residential structure exceeds 50 percent of the market value of the structure either:
 - A. Before the start of repair or improvement where there is no damage to the structure; or
 - B. Before flood or other damage to the structure occurred.
- c. Elevation.

i. BFE Established. The lowest floor (including basement) of new residential structures (including but not limited to reconstruction, substantial improvement, the placement or replacement of all types of manufactured homes) shall be elevated at least one foot above base flood elevation. Structures shall be elevated using means other than fill (such as extended foundation or other enclosure walls, piles, or columns) whenever feasible. Mechanical equipment and utilities shall be waterproofed or elevated at least one foot above the BFE.

ii. No BFE. In areas where the base flood elevation has not been provided or is not available from an authorized source (subsections <u>A</u> and <u>(I)(5)</u> of this section) and the critical areas report demonstrates to the satisfaction of the planning official that the proposed development would be reasonably safe from flooding, new residential construction (including but not limited to substantial improvement and the placement of manufactured homes) shall be elevated at least two feet above the highest adjacent grade. (Note: Failure to elevate at least two feet above the highest adjacent grade may result in higher insurance rates.)

d. Fully Enclosed Areas Below Lowest Floor. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited unless designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be certified by a qualified professional (in this case, a registered professional engineer or architect), or must meet or exceed the following minimum criteria:

- i. Contain a minimum of two openings having a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding;
- ii. The bottom of all openings are no higher than one foot above grade; and
- iii. Openings permit the automatic entry and exit of floodwaters even when equipped with screens, louvers, or other coverings or devices.

For guidance on flood openings, see FEMA Technical Bulletin 1-93, Openings in Foundation Walls.

iv. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for automatic entry and exit of floodwaters.

11. Nonresidential Construction. New construction and substantial improvement of any nonresidential structure shall either be elevated (subsection (J)(11)(a) or (J)(11)(b) of this section) or flood-proofed (subsection (J)(11)(c) of this section):

a. Be Elevated: BFE Established.

- i. Have the lowest floor, including basement, elevated at least one foot above the base flood elevation or elevated as required by ASCE 24, whichever is greater;
- ii. Meet the same standards for space below the lowest floor as described in subsections (J)(8)(d) and (J)(10)(d)(i) through (J)(10)(d)(iii) of this section; and
- iii. Have mechanical equipment and utilities waterproofed or elevated at least one foot above the BFE, or as required by ASCE 24, whichever is greater.

b. Be Elevated: No BFE.

- i. In areas where the base flood elevation has not been provided or is not available from mapped data from federal or state sources and the critical areas report demonstrates to the satisfaction of the planning official that the proposed development would be reasonably safe from flooding, new nonresidential construction shall be elevated at least two feet above the highest adjacent grade. Failure to elevate at least two feet above the highest adjacent grade may result in higher insurance rates; and
- ii. Meet the same standards for space below the lowest floor as described in subsections (I)(8)(d) and (I)(10)(d) of this section; or
- c. Be Flood-Proofed. Together with attendant utility and sanitary facilities shall:
 - i. Be flood-proofed so that below one foot (or more) above the base flood elevation, the structure is watertight with walls substantially impermeable to the passage of water or dry flood-proofed to the elevation required by ASCE 24, whichever is greater;

- ii. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- iii. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the planning official as set forth in subsection <u>L</u> of this section.

12. Critical Facilities.

- a. Critical facilities housing vulnerable populations and emergency services shall be prohibited in the floodway.
- b. In areas of special flood hazards except the floodway and in CMZs, construction of new critical facilities shall be prohibited unless the applicant demonstrates that:
 - i. No feasible alternative site is available; and either:
 - A. The lowest floor, entrances, egresses, and to the extent feasible access routes are elevated to three feet above the base flood elevation or to the elevation of the 500-year flood, whichever is higher; or
 - B. The applicant demonstrates that other measures would ensure that in the event of a flood, the facility would remain safe and fully operational and that potentially harmful materials would not be displaced by or released into floodwaters. Such measures shall be conditions of approval of the critical areas permit.

13. Recreational Vehicles.

- a. Recreational vehicles shall be located outside the floodway.
- b. Recreational vehicles in areas of special flood hazard except the floodway and in CMZs shall either:
 - i. Be on the site for fewer than 180 consecutive days;
 - ii. Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect-type water, sewer, stormwater, gas,

- power, cable, fiber optic, telephone, and security devices, and have no permanently attached additions; or
- iii. Meet the requirements of subsection (<u>J)(7</u>) of this section, Anchoring; subsection (<u>J)(8</u>) of this section, Enclosed Areas below the Base Flood Elevation; and subsection (<u>J)(10)(c)</u> of this section, Elevation.
- 14. Appurtenant Structures (Detached Garages and Small Storage Structures). For A zones:
 - a. Appurtenant structures used solely for parking of vehicles or limited storage may be constructed such that the floor is below the BFE, provided the structure is designed and constructed in accordance with the following requirements:
 - i. Use of the appurtenant structure must be limited to parking of vehicles or limited storage;
 - ii. The portions of the appurtenant structure located below the BFE must be built using flood-resistant materials;
 - iii. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement;
 - iv. Any machinery or equipment servicing the appurtenant structure must be elevated or flood-proofed to or above the BFE;
 - v. The appurtenant structure must comply with floodway encroachment provisions in Section 5.4-1;
 - vi. The appurtenant structure must be designed to allow for the automatic entry and exit of floodwaters in accordance with Section 5.2-1(5);
 - vii. The structure shall have low damage potential;
 - viii. If the structure is converted to another use, it must be brought into full compliance with the standards governing such use; and
 - ix. The structure shall not be used for human habitation.

- b. Detached garages, storage structures, and other appurtenant structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 5.2-1.
- c. Upon completion of the structure, certification that the requirements of this section have been satisfied shall be provided to the floodplain administrator for verification.

15. Alteration of Watercourse.

- a. The planning official shall notify adjacent communities and the state coordinating agency, Washington State Department of Ecology, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator.
- b. Alteration or relocation of a watercourse shall be allowed only after:
 - i. Certification by a qualified professional that the alteration or relocation:
 - A. Is the only feasible alternative or is part of a restoration project approved by the appropriate state or federal agencies;
 - B. Will not diminish the flood-carrying capacity of the watercourse;
 - C. Will not block side channels;
 - D. Will be accomplished using soft armoring techniques wherever possible;
 - E. Will avoid to the extent possible and then minimize and mitigate removal of vegetation including downed woody vegetation; and
 - F. Will not endanger development in the channel migration zone.
 - ii. The applicant provides assurance acceptable to the planning official of maintenance of the relocated channel such that the flood carrying capacity of the watercourse is not diminished.
- 16. Changes to Special Flood Hazard Area.
 - a. If a project will alter the BFE or boundaries of the SFHA, then the project proponent shall provide the community with engineering documentation and analysis regarding the proposed change. If the change to the BFE or boundaries of the SFHA would

normally require a letter of map change, then the project proponent shall initiate within 180 days of the information being made available, and receive approval of, a conditional letter of map revision (CLOMR) prior to approval of the development permit. The project shall be constructed in a manner consistent with the approved CLOMR.

b. If a CLOMR application is made, then the project proponent shall also supply the full CLOMR documentation package to the floodplain administrator to be attached to the floodplain development permit, including all required property owner notifications.

K. Variances and Minor Exceptions. Variances as interpreted in the National Flood Insurance Program are based on the principle that they pertain to a physical piece of property. They apply to the land and are not personal in nature, do not pertain to the structure, its inhabitants, or economic or financial circumstances. The development standards contained in this section are required by the Federal Emergency Management Agency (FEMA) under the National Flood Insurance Program (NFIP) to protect life and property from flood damage.

Variances from the NFIP standards of this section shall meet the approval criteria and other requirements of this subsection in addition to any other applicable variance criteria or requirements (e.g., Chapter 20.290 or 20.760 VMC). Variances from the NFIP standards of this section shall be processed as Type I or II variances or shoreline variances as appropriate, not as minor exceptions (VMC 20.740.070).

Variances or minor exceptions from other critical area standards (any standards of this chapter not in this section) shall meet the applicable criteria and follow the applicable procedures for the relief requested (VMC 20.740.070, or Chapter 20.290 or 20.760VMC).

1. NFIP variances may be allowed:

a. For historic structures. NFIP variances may be issued for the repair, reconstruction, rehabilitation or restoration of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure. This variance possibility is only available to those structures that are:

- i. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- ii. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- iii. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior;
- iv. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - A. By an approved state program as determined by the Secretary of the Interior; or
 - B. Directly by the Secretary of the Interior in states without approved programs.
- v. The proposed development will not preclude the structure's continued designation as a historic structure.
- b. From the elevation standard. An NFIP variance from the elevation standard may be issued for new construction and substantial improvements to be erected on a small or irregularly shaped lot contiguous to and surrounded by lots with existing structures constructed below the base flood elevation. As the lot size increases the technical justification required for issuing the variance increases.
- c. From the flood-proofing standard for nonresidential buildings. NFIP variances may be issued for nonresidential buildings to allow a lesser degree of flood-proofing than watertight or dry flood-proofing where it can be determined that such action:
 - i. Will have low damage potential;
 - ii. Complies with all other NFIP variance criteria except subsection (K)(1)(a)(ii) of this section;

- iii. Complies with subsection (<u>I)(4</u>) of this section, Water; subsection (<u>I)(5</u>) of this section, Waste; subsection (<u>I)(7</u>) of this section, Anchoring; and subsection (<u>I)(9</u>) of this section, Subdivisions.
- d. For allowed development within the floodway. NFIP variances may be issued for development within a floodway only when the requirements of subsection (J)(1)(b) of this section are met.
- 2. NFIP Variance Approval Criteria. NFIP variances from elevation and flood-proofing standards, and for development in the floodway (subsections (K)(1)(a)(ii) through (iv) of this section may be granted only if the applicant demonstrates that the requested action conforms to all of the following criteria:
 - a. The NFIP variance is the minimum necessary, considering the flood hazard, to afford relief.
 - b. The applicant has demonstrated good and sufficient cause.
 - c. Failure to grant the NFIP variance would result in exceptional hardship to the applicant. (Exceptional hardship for an NFIP variance is described in a FEMA memorandum dated July 22, 1986, entitled Resource Materials on NFIP Variance Criteria available from the planning official.)
 - d. Granting the NFIP variance will not result in increased flood heights or velocities, additional threats to public safety, significantly increased property damage potential, extraordinary public expense, or conflict with existing local laws or ordinances.
 - e. Demonstration that the following factors have been considered:
 - i. The danger that materials may be swept onto other lands to the injury of others;
 - ii. The danger to life and property due to flooding or erosion damage;
 - iii. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - iv. The importance of the services provided by the proposed facility to the community;

- v. The necessity to the facility of a waterfront location, where applicable;
- vi. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- vii. The compatibility of the proposed use with existing and anticipated development;
- viii. The relationship of the proposed use to the comprehensive plan;
- ix. The safety of access to the property in times of flood for ordinary and emergency vehicles;
- x. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
- xi. The costs of providing governmental services during and after flood conditions, including maintenance and repair of facilities such as sewer, gas, electrical, stormwater, and water systems, and streets and bridges.
- 3. Notices Required. A notice to the applicant is required whenever a variance is approved, approved with conditions, or denied. Such notice shall include the decision and the reasons for the decision. When a variance from the elevation standard is approved or approved with conditions, such notice shall state that the structure will be permitted to be built with a lowest floor elevation below that normally required with respect to the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- L. Information to Be Obtained and Maintained.
 - 1. For all new and substantially improved structures and development, the planning official shall complete Section B of a current elevation certificate and obtain and record on that certificate:
 - a. For elevated (rather than flood-proofed) structures and development, the actual (as-built) elevation in relation to mean sea level of the lowest floor (including basement), and whether or not the structure contains a basement.

- b. For nonresidential, flood-proofed structures, the elevation to which the structure was flood-proofed. All flood-proofing certifications shall also be maintained.
- c. Maintain all records pertaining to development in frequently flooded areas subject to the provisions of this chapter for public inspection.
- 2. Records of Variance Actions. The planning official shall keep records of all variance actions and report any approved variances to the Federal Insurance Administrator upon request.
- 3. Records of Appeal Actions. The planning official shall keep records of all appeal actions. (Ord. M-4438 § 4(J), 2023; Ord. M-4325 § 3, 2020; Ord. M-4020 § 2, 2012; Ord. M-4017 § 9, 2012; Ord. M-3844 § 2, 2007; Ord. M-3692 § 2, 2005)
 - 3. For land use and development-related activities on a site with PHS-designated priority Oregon white oak woodland habitat, the applicant shall be required to demonstrate compliance with WDFW's latest guidance: Best Management Practices for Mitigating Oregon White Oak Priority Habitat (January 2024) the Washington Department of Fish and Wildlife WDFW's latest guidance: Best Management Practices for Mitigating Oregon White Oak Priority Habitat (January 2024) and any subsequent revisions. The report shall include mapping and an evaluation of the habitat functions.
 - a. The critical areas report shall also identify protection and mitigation for the impacted Oregon white oaks on the site. In circumstances where it is demonstrated that preservation or mitigation of impacts on-site is not practicable, the applicant shall provide a minimum of two alternative site designs and layouts to demonstrate that impacts cannot be avoided or be reduced to result in less impacts. The planning director may approve reductions to numerical standards including parking and setbacks under the minor exception process in VMC 20.740.070 to avoid or reduce impacts.
 - b. If compensation is determined to be the only available option for the
 proposed impact, the report shall include the quantity and method of
 mitigation to compensate for permanent and temporal impacts in
 accordance with WDFW's Best Management Practices for Mitigating Impacts
 to Oregon White Oak Priority Habitat, including the following:

- i. Assessment of priority Oregon white oak woodlands and individuals to determine if they meet the designation criteria for priority habitat and species, the size of each woodland or individual, and the level of ecological function provided;
- <u>ii.</u> Analysis of the physical and temporal loss of the impacted Oregon white oak woodland habitat;
- iii. The corresponding mitigation ratios for both physical and temporal loss of the impacted Oregon white oak habitat and the location of such mitigation; and
- iv. Description of monitoring as outlined by WDFW's guidance.

20.740.130 Geologic Hazard Areas.

A. A. Designation. and Location.

- 1. Designated or potential Geologic Hazard Areas include Landslide, Seismic, and Erosion Hazard Areas. With the exception of bank erosion hazard areas and fault rupture hazard areasBank Erosion Hazard Areas and Fault Rupture Hazard Areas, their potential locations are shown on maps available from the planning official. City of Vancouver, Clark County, and the State of Washington. Final designations shall be based on site conditions and other available data or information [See VMC 20.740.020(C)(1)]. (see this chapter's General Provisions section).
- 1.—Landslide Hazard Areas. Potential These areas are subject to landslides due to a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible to landslide hazard areas are identified from the sources listed below.
 - a. Slopes greater than 25% on the property and adjacent areas within 100 feet, except engineered slopes such as cut and fill slopes along transportation routes (including trails), railroad and other berms, or dikes.
 - 2. b. Areas because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors as defined in VMC Chapter 20.150. Landslides are areas shown as "areas of historic or active landslides," "areas of potential instability, or," and "areas of older landslide debris identified on the 1975 map by

Allen Fiksdal of the Washington State Department of Natural Resources entitled, "on maps available from Clark County Maps Online ("Slope Stability: of Clark County-" report [1975] and "Geologic Map of Vancouver Quadrangle" map [1987]) and maps available through the DNR's Geologic Information Portal, including the "Washington as revised or superseded, or identified from other available data or in the field by a qualified professional and adjacent areas within 100 feet. Geologic Survey-Protocol Landslide Mapping" and "Other Compiled Landslide Mapping" layers.

- Seismic Hazard Areas. Seismic Hazard Areas include Liquefaction or Dynamic Settlement, Ground Shaking Amplification, and Fault Rupture Hazard Areas, as designated below and defined in VMC Chapter 20.150.
 - a. a. Liquefaction or Dynamic Settlement. Hazard Areas. Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow groundwater table. The following are designated Liquefaction or Dynamic Settlement Hazard Areas:
 - 1.—Areas with Low to Moderate, Moderate, Moderate to High, or High liquefaction susceptibility or Peat Deposits as indicated on the Alternative Liquefaction Susceptibility Map of Clark County, Washington based on Swanson's Groundwater Model by Stephen P. Palmer, Sammantha L. Magsino, James L. Poelstra, and Rebecca A. Niggemann, September, 2004, liquefaction susceptibility maps from the DNR Geologic Information Portal as revised or superseded.
 - 2. Areas of fill (Fn) identified by the 1972 USDA Soil Conservation Service Soil Survey of Clark County Washington and by the planning official, based on other reliable evidence.
 - b. __b.__Ground__Shaking Amplification <u>Areas</u>. The following are designated Ground
 Shaking Amplification Hazard Areas:

Site Classes C to D, D, D to E, E and F-as indicated on the Site Class Map of Clark County, Washington by Stephen P. Palmer, Sammantha L. Magsino, James L. Poelstra, and Rebecca A. Niggemann, September, 2004 as revised or superseded, as shown on the National Earthquake Hazard Reduction

<u>Program (NEHRP) Seismic Site Class layer available on the DNR Geologic Information Portal.</u>

- c. __c. __Fault Rupture Hazard Areas. Potential Fault Rupture Hazard Areas are faults identified on geological maps prepared and maintained by the Washington Department of Natural Resources (DNR), U.S. Geological Survey (Geologic Information Portal "Seismogenic Folds, Known or Suspected" and "Active Faults, Known or Suspected" layers: USGS), on geologic maps available from the Oregon Department of Geology and Mineral Industries (DOGAMI), Clark County, Washington Maps Online, or identified from other available data or in the field by a qualified professional and adjacent areas within 100 feet.
- 4. 3. Erosion Hazard Areas. Erosion Hazard Areas include Soil Erosion and Bank Erosion Hazard Areas and as defined in VMC Chapter 20.150. These are also areas that are likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils.
 - <u>a.</u> <u>a.</u> Soil Erosion Hazard Areas. The following are designated Soil Erosion Hazard Areas:
 - i. Severe or Very Severe Erosion Hazard Areas. Areas with soils identified as having a severe or very severe erosion hazard by the 1972 U.S. Department of Agriculture (USDA) Soil Conservation Service Soil Survey of Clark County, Washington.
 - ii. b. Bank Erosion Hazard Areas. Bank Erosion Hazard Areas are areas along lakes, streams, and rivers that are subject to regression or retreat due to lacustrine or fluvial processes and adjacent land within 100 feet.

B. Performance Standards.

- General Standards.
 - a. Critical facilities, as defined in VMC Chapter 20.150, are prohibited in the following areas unless there is no other location available, a mitigation proposal is included in the development plan, and a Critical Areas Report

prepared by a qualified professional for geologically hazardous areas establishes that the area is safe for development for the type of facility proposed and the type of hazard:

- i. Landslide Hazard Areas
- ii. Bank Erosion Hazard Areas B.
- iii. Fault Rupture Hazard Areas
- b. Buffer width shall be measured on a horizontal plane from a perpendicular line established at all edges of the geologic hazard area (see VMC Chapter 20.170).

The applicant shall demonstrate that, Additional Critical Areas Report Requirements. In addition to the requirements of VMC 20.740.050, the following are Critical Areas Report requirements for development proposals in potential geologic hazard areas. These requirements may be adjusted as appropriate by the planning official. The Critical Areas Report will result in a conclusion as to whether the potential geologic hazard area is an actual geologic hazard area (See VMC 20.740.130(B)(6)). If it is, the Critical Areas Report requires additional information, mapping, and analysis (See VMC 20.740.130(B)(7)).

- 1. Identification of the site and project area (defined at VMC 20.150), topography in 2-foot contours (or other increment at the discretion of the planning official), gas, power, cable, fiber optic, telephone, sewer, water, and stormwater management facilities, wells, on-site septic systems, dikes, levees, and existing structures on the site plan required by VMC 20.740.050; and
- 2. Detailed review of field investigations, published data and references, data and conclusions from past geologic studies or investigations, site specific measurements, tests, investigations, or studies, and the methods of data analysis and calculations that support the results, conclusions, and recommendations; and
- 3. Field investigation and evaluation of the areas on site for liquefaction or dynamic settlement, ground shaking amplification, fault rupture, and soil erosion hazards; and on or within 100 feet of the site for landslide and bank erosion hazards; and

- 4. A description of the surface and subsurface geology, hydrology, drainage patterns, soils, and vegetation on site for liquefaction or dynamic settlement, ground shaking amplification, fault rupture, and soil erosion hazards; and on or within 100 feet of the site for landslide and bank erosion hazards; and
- 5. Identification of the hazard area indicators that were found (if any) on site for liquefaction or dynamic settlement, ground shaking amplification, fault rupture, and soil erosion hazards; and on or within 100 feet of the site for landslide and bank erosion hazards; and
- 6. Conclusion as to whether there is a geologic hazard area on site or for landslide and bank erosion hazards on or within 100 feet of the site; and
- 7. If a liquefaction, dynamic settlement, ground shaking amplification, fault rupture, or soil erosion hazard is found to exist on site or if a landslide or bank erosion hazard is found to exist on or within 100 feet of the site:
 - a. Label and show on the site plan required by VMC 20.740.050:
 - 1. The location(s), extent, and type(s) of geologic hazard area(s) identified; and
 - 2. The location(s) and extent of any area(s) that must be left undisturbed to protect the proposed development from damage or destruction and to protect the hazard area(s) from the impacts of the proposed development; and
 - 3. The boundaries of the area that may be disturbed.
 - 4. The dimension of the closest distance(s) between the geologic hazard area(s) and the project area.
 - 5. The dimension of the closest distance(s) [See VMC <u>20.170.030(C)</u>] between any nondisturbance area [VMC <u>20.740.130(B)(7)(a)(2)</u>] and the project area.

For bank erosion hazard areas, show these areas, boundaries, and dimensions based upon natural processes and, if applicable, proposed bank stabilization measures.

b. Analysis of the erosion processes on site for soil erosion hazard areas and on or within 100 feet of the site for bank erosion hazard areas.

- c. Evaluation of the impact of the geologic hazard area(s) on the proposed development, other properties, and other critical areas.
 - <u>i.—1. Landslide hazard areas.</u> The impact of the run-out hazard of landslide debris from both upslope and downslope shall be included in the evaluation.
 - 2. Bank erosion hazard areas. Evaluation of impacts on other properties shall include properties both upstream and downstream of the subject property.
- d. Evaluation of the impact of the proposed development on the geologic hazard area(s).
 - a. Assessments and conclusions regarding geologic hazard(s) for both existing and proposed (post-development) site conditions. The ultimate build out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.
 - a. f. Written discussion of:
 - 1. The risk of damage or destruction from the geologic hazard(s) with respect to human health and safety; infrastructure; the proposed development; other properties (both upstream and downstream for bank erosion hazard areas); and other critical areas; and
 - <u>i.—2.</u> Whether and to what degree the proposed development would increase the risk from the geologic hazard(s), such as the occurrence of a landslide or the rate of regression.
- g. Recommendations for mitigation of impacts to protect:
 - i.__1. Human health and safety;
 - 2. Infrastructure;
 - 3. The proposed development;
 - 4. Other properties (both upstream and downstream for bank erosion hazard areas);

5. Other critical areas; and

i.—6. The hazard area during construction and for the anticipated life of the proposed development. The ultimate build-out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.

h. A demonstration of how the standards of VMC <u>20.740.130(C)</u> applicable to each geologic hazard area will be met.

C. Performance Standards.

- 1.—Landslide, Soil Erosion, and Bank Erosion Hazard Areas. Development in nondisturbance areas (VMC 20.740.130(B)(7)(a)(2)) shall be prohibited. In other areas, development in landslide, soil erosion, and bank erosion hazard areas and their buffers [VMC 20.740.130(C)(1)(j)] shall be prohibited except where the applicant has demonstrated compliance with or satisfaction of the following standards or requirements.
 - c. a. The applicant has demonstrated that during construction and for the anticipated life of the proposed development, the proposed use(s), activity(ies), and structure(s):
 - 1. Will not increase the threat of the geological hazard beyond pre-development conditions; and
 - 2. Will not adversely impact other critical areas wherever feasible given the type of critical areas involved and the characteristics of the site; and
 - 3. Are designed so that the hazard to the proposed project is eliminated or mitigated to a level equal to or less than predevelopment conditions; and
 - <u>ii.</u> 4. TheWill not adversely impact other critical areas, if avoidable, given the type of critical areas involved and the characteristics of the site:
 - <u>iii.</u> Are designed to minimize or eliminate life safety risk is minimal or eliminated; and

- <u>iv.</u> 5. Are certified by a qualified professional as safe as designed and under anticipated conditions.
- 2. Landslide hazardand Erosion Hazard Areas. Development in non-disturbance areas shall be prohibited. In other areas, development in Landslide and Erosion Hazard Areas and their buffers shall be prohibited except where the applicant has demonstrated compliance with the following standards or requirements.
 - a. Landslide Hazard Areas may be eliminatedable to be mitigated through grading based on a Critical Areas Report whichthat demonstrates that the slope will be stabilized prepared by a qualified professional (in this case a licensed Engineering Geologist or Professional Engineer). as described in Additional Critical Areas Report Requirements for Geologic Hazards.
 - i. The Critical Areas Permit shall be conditioned on a final inspection approval confirming that the grading and site are stable. At the applicant's expense, after site grading, (a) the qualified professional who prepared the Critical Areas Report shall provide inspection specifications; and (b) an inspector acceptable to the City Building Official shall inspect the grading and the site and submit a report to the City indicating whether the site is stable the applicant shall:
- b. A plan for revegetation and landscape maintenance to ensure soil stabilization shall be developed and implemented in accordance with the mitigation plan requirements of VMC 20.740.050(F).
 - (A) c. Provide inspection specifications from the qualified professional who prepared the Critical Areas Report; and
 - (B) Inspect the grading and the site using an inspector acceptable to the City Building Official and submit a report to the City indicating whether the site is stable.
 - <u>ii.</u> Clearing, grading, uprooting, or otherwise impairing the soil stabilizing function of vegetation shall be prohibited during the wet season (November 1st1 to May 1st1), except as authorized under a

valid state or federal permit or a City Type I permit [VMC 20.740.040(A)(2)(f)].

- <u>b.</u> <u>d.</u> Any required erosion mitigation work is to be performed by a certified erosion and sediment control lead in accordance with Ecology requirements.
- c. The requirements of VMC Chapter 14.24, Erosion Control, shall be met.
- d. Drainage patterns shall not be altered such that potential for damage or risk to the proposed project, the geologic hazard areaGeologic Hazard Area, or other critical areas or buffers is increased.
- e. The requirements of VMC 14.24, Erosion Control shall be met.
 - e. f. Trails shall be for pedestrian and nonmotorized vehicular use only and shall be the minimum width necessary to meet applicable regulations.
 - f. g. Roads in Landslide and Bank Erosion Hazard Areas. A road through or across a landslide and Bank Erosion hazard area Bank Erosion Hazard Area shall meet the standards of VMC 20.740.13020.740.130(C)(1)(a)-(fB)(2) and shall not be:
 - <u>i.</u> <u>1.</u> The sole access for a proposed subdivision (not including short subdivision) or critical facility;
 - ii. 2. Longer than 200 feet; or
 - iii. 3. Steeper than a 15% percent grade.
 - g. h. Markers and Signs in Landslide Hazard Areas.
 - i. 1.—The boundary at the outer edge of the furthest of the Landslide Hazard Area, non-disturbance area (see this chapter's additional Critical Areas Report requirements for Geologic Hazard Areas), or buffer shall be identified with temporary signs prior to any site alteration.
 - <u>ii.</u> The boundary at the outer edge of landslide area tracts and easements shall be delineated with permanent survey stakes, using iron or concrete markers as established by local survey standards.

- 2. The boundary at the outer edge of the furthest of the landslide hazard area, nondisturbance area [VMC 20.740.130(B)(7)(a)(2)], or buffer shall be identified with temporary signs prior to any site alteration. Such temporary signs shall be replaced with permanent signs prior to occupancy or use of the site.
 - <u>iii.</u> 3.—These provisions may be modified by the <u>planning official Planning</u>

 <u>Official</u> as necessary to ensure protection of <u>sensitive features or</u>

 <u>wildlife needspeople and structures from the hazard.</u>
- h. i. Bank-Stabilization for Existing Development in Bank Erosion Hazard Areas.
 - i. 1.—Bank stabilization measures may be employed to protect an existing structure when a Critical Areas Report conclusively demonstrates all of the following:
 - (A) a. Bank erosion threatens an established use or existing structure(s); and) within a three-year timeframe;
 - (B) b.—The threatened <u>use or</u> structure(s) cannot be relocated landward of any <u>nondisturbancenon-disturbance</u> area <u>{{VMC 20.740.130(B){7}(a){2}}; and 20.740.130(B){7}(a){2}};</u>
 - c. Where applicable, bank stabilization measures are necessary to the operation and location of water-dependent, water-related, or water enjoyment activities consistent with the City of Vancouver Shoreline Management Master Program; and
 - (C) d.—Bank stabilization measures will not cause a significant adverse impact on upstream or downstream properties or an impact that cannot be mitigated without developing bank stabilization measures for those properties; and
 - (D) e.—Bank stabilization measures will not cause a significant adverse impact on fish, wildlife, or their habitats a Fish and Wildlife Habitat Conservation Area protected by this chapter.
- i. 2. When bank stabilization is allowed, it shall be accomplished using beach nourishment, bioengineering (soft armoring) techniques, or a combination of

the two. Other techniques may be used when an approved Critical Areas Report demonstrates conclusively that beach nourishment, bioengineering (soft armoring) techniques, or a combination of the two will not provide sufficient protection for the remaining useful life of the structure(s) to be protected.

- 3. When bank stabilization is allowed, the pertinent policies and regulations of the City of Vancouver Shoreline Management Master Program shall apply in addition to the requirements of this section. The terms and conditions of any other required state or federal permit or approval shall also apply.
- j. j.—Buffer. The following regulations apply to landslide and bank erosion hazard areaBank Erosion Hazard Area buffers.—:

i. Buffer widths

- (A) No buffer is required for soil erosion hazard areas. Buffers may be included in nondisturbance areas [VMC 20.740.130(B)(7)(a)(2)] and required planting and maintenance activities may be undertaken within themSoil Erosion Hazard Areas.
- 1. Buffer width shall be measured on a horizontal plane from a perpendicular line established at all edges of the geologic hazard area [See VMC 20.170.030(B) and (K)].
- 2. A vegetated buffer shall be maintained around all landslide and bank erosion hazard areas. No alteration to the buffer shall be undertaken without an erosion control plan approved pursuant to the provisions of VMC 14.24, Erosion Control and this chapter. New plantings shall consist of native vegetation. Maintenance shall be the responsibility of the property owner.
- 3. The minimum buffer width for bank erosion hazard areas shall be the distance recommended in an approved Critical Areas Report.
- 4. The minimum buffer width for landslide hazard areas shall be the greatest of the following distances:

- a. from 50 feet from all edges of the landslide hazard area; or
- b. A distance of 1/3 the height of the slope at the top of the slope and a distance of 1/2 the height of the slope at the and bottom of the slope [See VMC 20.170.030(J)]; or
 - (B) c. The minimum distance(s) recommended in an approved Criticalslope for Landslide and Bank Erosion Hazard Areas Reportshall be equal to two times the slope height or as recommended by a qualified professional in a geotechnical report.
 - (C) 5.—A larger buffer width may be required for landslideLandslide and bank erosion hazard areasBank Erosion Hazard Areas at the discretion of the planning officialPlanning Official when:
 - (1) a. The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse impacts; or
 - (2) b. The area has a severe risk of slope failure or downslope stormwater drainage impacts; or
 - (3) _c.. The area is directly adjacent to a riparian management area or wetland; or
 - (4) d.—Recommended in an approved Critical Areas Report.
 - ii. Buffers may be included in non-disturbance areas (VMC 20.740.130(B)(7)(a)(2)) and required planting and maintenance activities may be undertaken within them.

The buffer around Landslide and Bank Erosion Hazard Areas shall be vegetated and shall be maintained by the property owner. New plantings shall consist of native vegetation. 6. The buffer width for landslide hazard areas may be reduced to as little as the smallest of the distances identified in VMC 20.740.130(C)(1)(j)(4) at the discretion of

the planning official when the dimensions of the landslide hazard area are smaller than those distances.

<u>iii. 2.</u>

iv. No alteration to the buffer that involves clearing of vegetation shall be undertaken without an erosion control plan approved pursuant to the provisions of VMC 14.24, Erosion Control and this chapter.

3. Seismic Hazard Areas.

a. Liquefaction or Dynamic Settlement Hazard Areas. All building structures in liquefaction or dynamic settlement hazard areas shall comply with the requirements of VMC Title 17, Building and Construction. No buffer is required for liquefaction or dynamic settlement hazard areas.

- a. b. Liquefaction or Dynamic Settlement and Ground Shaking Amplification Hazard Areas. All building structures in ground shaking amplification hazard areas Liquefaction or Ground Shaking Amplification Hazard Areas shall comply with the requirements of VMC Title 1717, Building and Construction applicable to the NEHRP soil classification of the subject property. No buffer is required for ground shaking amplification hazard areas Liquefaction or Ground Shaking Amplification Hazard Areas.
- b. ← Fault Rupture Hazard Areas.
 - <u>i.</u> 1. A road through or across a fault rupture hazard area shall not be:
 - (A) a. The sole access for a proposed subdivision (not including short subdivision) or critical facility;
 - (B) b. Longer than 200 feet'; feet; or
 - (C) c. Steeper than a 15% percent grade.
- 2. Structures for human habitation and critical facilities shall be prohibited within fault rupture hazard areas and buffers.

<u>ii.</u> 3.—Buffer.

- a. Buffer width shall be measured on a horizontal plane from a perpendicular line established at all edges of the geologic hazard area [See VMC 20.170.030(B)].
 - (A) b. The buffer width shall be the greater of the following distances:
 - (1) i.—50 feet from all edges of a fault rupture hazard areaFault Rupture Hazard Area, except where critical facilities are involved, the minimum buffer distance shall be 100 feet [See VMC 20.170.030(L)];(see VMC 20.170.030[L]); or
 - (2) ii. The minimum distance recommended in an approved Critical Areas Report.
 - (B) c.—A larger buffer width may be required when the planning official Planning Official determines that the buffer is not adequate to protect the proposed development. (Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)
 - iii. Structures for human habitation shall be prohibited within Fault Rupture Hazard Areas and buffers.
- C. Additional Critical Areas Report Requirements. In addition to the requirements of VMC 20.740.050, the following are Critical Areas Report requirements for development proposals in potential Geologic Hazard Areas. These requirements may be adjusted as appropriate by the Planning Official. The Critical Areas Report will result in a conclusion as to whether the potential geologic hazard area is an actual geologic hazard area (see VMC 20.740.130[B][6]). If it is, the Critical Areas Report requires the following additional information, mapping, and analysis (see VMC 20.740.130[B][7]):
 - Identification of the site and project area (defined at VMC 20.150); topography of the site in 2-foot contours (or other increment at the discretion of the Planning Official); planned gas, power, cable, fiber optic, telephone, sewer, water, and stormwater management facilities, wells, on-site septic systems, dikes, levees; and existing structures on the site plan required by VMC 20.740.050;

- Detailed review of field investigations, published data and references, data and conclusions from past geologic studies or investigations, site-specific measurements, tests, investigations, or studies, and the methods of data analysis and calculations that support the results, conclusions, and recommendations;
- 3. Field investigation and evaluation of the areas on Landslide, Erosion, Liquefaction or dynamic settlement, Ground Shaking Amplification, and Fault Rupture Hazard Areas on or within 100 feet of the site;
- 4. A description of the surface and subsurface geology, hydrology, drainage patterns, soils, and vegetation for Liquefaction or dynamic settlement, Ground Shaking Amplification, Fault Rupture, Soil Erosion Hazards, Landslide, and Bank Erosion Hazard Areas on or within 100 feet of the site;
- 5. Identification of any hazard area indicators that were found on site for Liquefaction or dynamic settlement, Ground Shaking Amplification, Fault Rupture, and Soil Erosion Hazards Areas and on or within 100 feet of the site for Landslide and Bank Erosion Hazard Areas:
- 6. Conclusion as to whether there is a geologic hazard area on site or within 100 feet of the site; and
- If a geologic hazard is found to exist on site or if a landslide or bank erosion hazard is found to exist on or within 100 feet of the site, the report must include the following:
 - a. Labeling and showing the following on the site plan required by VMC
 20.740.050:
 - i. The location(s), extent, and type(s) of geologic hazard area(s)
 identified;
 - ii. The location(s) and extent of any area(s) that must be left undisturbed to protect the proposed development from damage or destruction and to protect the hazard area(s) from the impacts of the proposed development;
 - iii. The boundaries of the area that may be disturbed;

- iv. The dimension of the closest distance(s) between the geologic hazard area(s) and non-disturbance area and the project area:
- v. For Bank Erosion Hazard Areas, show these areas, boundaries, and dimensions based upon natural processes and, if applicable, proposed bank stabilization measures; and
- vi. The recommended buffer for Bank Erosion Hazard Areas.
- b. Analysis of the erosion processes on site for Soil Erosion Hazard Areas and on or within 100 feet of the site for Bank Erosion Hazard Areas;
- c. Evaluation of the impact of the Geologic Hazard Area(s) on the proposed development, other properties, and other critical areas, as follows:
 - i. Landslide Hazard Areas. The impact of the run-out hazard of landslide debris from both upslope and downslope shall be included in the evaluation.
 - <u>Bank Erosion Hazard Areas.</u> Evaluation of impacts on other properties shall include properties both upstream and downstream of the subject property.
- d. Evaluation of the impact of the proposed development on the geologic hazard area(s);
- e. Assessments and conclusions regarding geologic hazard(s) for both existing and proposed (post-development) site conditions. The ultimate build-out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.
- f. Written discussion of:
 - i. The risk of damage or destruction from the geologic hazard(s) with respect to human health and safety; infrastructure; the proposed development; other properties (both upstream and downstream for Bank Erosion Hazard Areas); and other critical areas; and

- ii. Whether and to what degree the proposed development would increase the risk from the geologic hazard(s), such as the occurrence of a landslide or the rate of regression.
- g. Recommendations for mitigation of impacts to protect:
 - i. Human health and safety;
 - ii. Infrastructure;
 - iii. The proposed development;
 - iv. Other properties (both upstream and downstream for Bank Erosion Hazard Areas);
 - v. Other critical areas; and
 - vi. The hazard area during construction and for the anticipated life of the proposed development. The ultimate build-out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.
- h. A demonstration of how the standards of VMC 20.740.130(C) applicable to each geologic hazard area will be met.

20.740.140 Wetlands.

- A. A. Designating and Rating Wetlands.
 - 1.—Designating Wetlands. Wetlands are those-areas, that have been designated in accordance with the approved federal wetland delineation manual and applicable regional supplements, that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. 1987 Federal Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains Valleys and Coast Region Version 2.0 (2010 or as further updated) and are defined in VMC 20.150... Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificialare subject to a local government's

regulatory authority if they meet the definition of wetlands-intentionally created (but not as mitigation for impacts to wetlands) from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds and landscape amenities or those wetlands created after July 1990 that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands shall include those artificial wetlands intentionally created from nonwetland areas to mitigate conversion of wetlands.

- non-federally regulated (isolated) wetlands. Final designations shall be based on site
 conditions as documented in a Wetland Critical Areas Report, and other available
 data or information (see VMC 20.740.020(C)(1)).20.740.020[C][1]).
- 2. 2. Wetland Ratings. Wetlands shall be rated according to the Washington State Department of Ecology (Ecology) wetland rating system, Ecology Publication No. 23-06-009, Washington State Wetland Rating System for Western Washington—: 2014 Update, Ecology Publication No. 14-06-029, October 2014published July 2023, or as revised by Ecology. The rating system document contains the definitions and methods for determining if the criteria below are met. The most recent version of the rating system form must be used.
 - a. a. Wetland Rating Categories.
 - i. Category I. Category I wetlands Wetlands are:
 - A. Relatively undisturbed estuarine wetlands larger than one acre;
 - (A) B.—Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program of the Department of Natural Resources DNR;
 - (B) C. Bogs;
 - (C) D. Mature and old-growth forested wetlands larger than one acre;
 - (D) E.—Wetlands that perform many functions wellat a high level, scoring twenty three23 points or more. These wetlands are those that:

- 1. Represent unique or rare wetland types;
- 2. Are more sensitive to disturbance than most wetlands;
- 3. Are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or
- 4. Provide a high level of functions.
- <u>ii.</u> <u>ii.</u> <u>Category II.</u> Category II <u>wetlands Wetlands</u> function at a moderately high function <u>and are difficult, though not impossible to replace</u>, scoring between <u>twenty20</u> and <u>twenty two22</u> points.
- iii. Category III. Category III wetlands are:
 - <u>iii.</u> A.—Wetlands withhave generally been disturbed in some way and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. Category III wetlands:
 - (A) Have a moderate level of functions, scoring between sixteen16 and nineteen19 points; and
 - (B) B.—Can often be adequately replaced with a well_planned mitigation project.
 - iv. iv. Category IV. Category IV wetlandsWetlands have the lowest levels of functions (scoring fewer than sixteen16 points) 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.
- B. Additional Critical Areas Report Requirements. A critical areas report for wetlands shall be prepared according to the Washington State Wetland Rating System for Western Washington—2014 Update, Ecology Publication No. 14-06-029, October 2014 or as revised by Ecology. The critical areas report shall contain an analysis of the wetlands including the following site—and proposal-related information:

- 1. A written assessment, data sheets and accompanying maps of any wetlands or buffers on the site including the following information:
 - a.—a. Hydrogeomorphic (HGM) subclassification and Cowardin class;
 - b. Wetland category;
 - c. Wetland delineation and required buffers;
 - a. d. Existing wetland acreage;
 - a. e. Vegetative, faunal, and hydrologic characteristics;
 - f. Soil types and substrate conditions;
 - a.-g. Topographic elevations, at one-foot contours; and
 - h. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year drift lines, algal layers, moss lines, and sediment deposits).
- 2. Functional evaluation for the wetland and buffer using Ecology's most current approved method and including the reference of the method and all data sheets.
- 3. Proposed mitigation, if needed, including a discussion of alternatives and trade-offs inherent in the various alternatives (for example, where enhancement for one function would adversely affect another), a written description and accompanying maps of the mitigation area, including the following information:
 - a.—a. Existing and proposed wetland acreage;
 - a. b. Existing and proposed vegetative and faunal conditions;
 - c. Surface and subsurface hydrological conditions of existing and proposed wetlands and hydrologically associated wetlands including an analysis of existing hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;
 - d. Relationship to lakes, streams and rivers in the watershed;

- e. Soil type and substrate conditions;
 - a. f. Topographic elevations, at one-foot contours;
- g. Required wetland buffers including existing and proposed vegetation;
 - a. h. Identification of the wetland's contributing area; and
- i. A functional assessment of proposed mitigation to ensure no net loss of shoreline ecological function.
- B. C. Development activities that functionally or physically isolate the wetland buffer.

When existing impervious surfaces or other built structures, such as a levee or railroad corridor, functionally or physically isolate the wetland buffer from the waterbody or wetland, the regulated wetland buffer shall extend landward from the ordinary high water mark (OHWM) or channel migration zone (CMZ), whichever is greater and terminate at the waterward edge of the impervious surface or manmade structure. Development activities that occur within the area of functional isolation, or further landward, are exempt from the requirement to obtain a Critical Areas Permit.

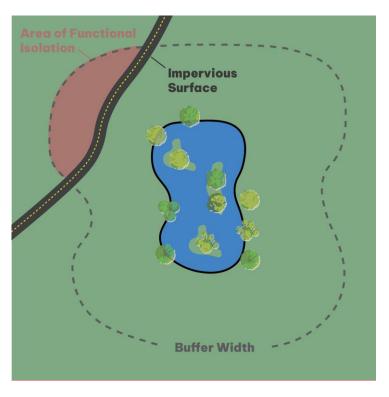


Figure 20.740.140-1: Functional Isolation

The Planning Official shall rely on a site visit, aerial photographs, or other evidence provided by the applicant or the applicant's qualified professional in making a determination to reduce the width of the wetland buffer based on functional and/or physical isolation.

C. Performance Standards.

1. __1. __General Requirements. Development or clearing activities shall protect the functions of wetlands and wetland buffers on the site. Activities shall result in no net loss of wetland or buffer functions. Protection may be provided by avoiding (the preferred-protection) or minimizing and mitigating as described in the general critical areas performance standards (VMC 20.740.06020.740.060).

a. a. Uses in Wetlands.

- i. i.—In Category I wetlands Wetlands, only the following activities may be allowed:
 - (A) A. A road, railroad, trail, dike, or levee or a water, sewer, stormwater conveyance, gas, power, cable, fiber optic or telephone facility that cannot feasibly be located outside of the wetland, that minimizes the impact, and that mitigates for any unavoidable impact to functions. Cost may be considered, but shall not be overriding; or;
 - (B) B.—Trails and wildlife viewing structures; provided, that the trails and structures minimize the impact and are constructed so that they do not interfere with wetland hydrology and do not result in increased sediment entering the wetland;
 - (C) #.—Enhancement and restoration activities aimed at protecting the soil, water, vegetation, or wildlife; and
 - (D) Repair and maintenance of legally established nonconforming uses or structures, provided they do not increase the degree of nonconformity.
- <u>ii.</u> In Category II <u>wetlands</u>, only the following activities may be allowed:
 - (A) A. Activities allowed in Category I wetlands pursuant to subsection (C)(1)(a)(i) of this section.
- B. Enhancement and restoration activities aimed at protecting the soil, water, vegetation or wildlife.
 - (B) C. Within shoreline jurisdiction (VMC 20.760.020), A water-dependent, water-related or water-enjoyment activities activity where there are nonot feasible alternatives that would have a less adverse impact on the wetland, its buffers and other critical areas; or

iii. D.—Where non-water_dependent, related, or enjoyment activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited unless the applicant demonstrates that the basic project purpose cannot reasonably be accomplished and successfully avoid or result in less adverse impacts on a wetland on another site or sites in the city of VancouverCity or Vancouver urban growth area. In Category III Wetlands, only the following activities may be allowed:

iii. In Category III wetlands only the following activities may be allowed:

- (A) A. Activities allowed in Category II wetlands Wetlands

 pursuant to subsection (C)(1)(a)(ii) of this section.
- (B) B.—Stormwater management facilities. A Category III wetland can be physically or hydrologically altered to meet the requirements of a Low Impact Development (LID) methodology or Flow Control BMP, if all of the following criteria are met:
 - (1) If proposed, an LID BMP is determined to be feasible through a site-specific characterization;
 - (2) The wetland has a habitat score of 3 to 5 points;
 - (3) There will be no net loss of functions and values of the wetland;
 - (4) The wetland does not contain a breeding population of any native amphibian species;
 - (5) The hydrologic functions of the wetland can be improved as outlined in questions 3, 4, and 5 of Chart 4 and questions 2, 3, and 4 of Chart 5 in Selecting Mitigation Sites Using a Watershed Approach, (Western Washington) (Ecology Publication [#09-06-032 or #10-06-007], or as revised); or the wetland is part of a restoration plan

- intended to achieve restoration goals identified in the City of Vancouver's Shoreline Master Program or a local or regional watershed plan;
- (6) The wetland lies in the natural routing of the runoff, and the discharge follows the natural routing.
- (7) All regulations regarding stormwater and wetland management are followed, including in this chapter and VMC 14.24, Erosion Control; and
- (8) Modifications that alter the structure of a wetland or its soils will require permits. Existing functions and values that are lost will need to be compensated for in accordance with the requirements of this chapter.
- (C) Other activities may be allowed if the applicant demonstrates that the basic project purpose cannot reasonably be accomplished and avoid or result in less adverse impacts on a wetland or its buffer than alternative uses or designs (including reduction in the size, scope, configuration or density of the project).
- iv. iv.—In Category IV wetlandsWetlands, activities and uses that result in impacts may be permitted in accordance with an approved critical areas reportCritical Areas Report and mitigation plan if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full mitigation for the loss of acreage and functions shall be provided under the terms established pursuant to subsection (C)(2)(C)(2) of this section.
 - (A) b.—If stormwater management facilities are proposed, they must meet the requirements of an LID or flow control BMP as specified for Category III Wetlands.

b. Wetland Buffers.

i. Standard Required Buffer Widths. Standard buffer widths are those determined by Ecologymeasured in feet from the edge of the wetland (see VMC 20.170.030[B]) and described in Freshwater Wetlands in Washington State, Volume 2: Managing and Protecting Wetlands, Ecology Publication No. 05-06-008, April 2005 or as revised by Ecology. Buffer[H]). Applicants are required to implement the wetland buffer widths are based on by wetland category, wetland characteristics and land use intensity.

A. Land use intensities are as follows:

- i. as shown in Table 20.740.140-1. LAND USE INTENSITIES.
- ii. If the applicant is unable to implement the full width buffers from

 Table 20.740.140-1 and avoid impacts as a result of proposed

 development, the planning director shall permit the applicant to use
 the alternative buffer widths in subsection (v)(B) and (v)(C) below, if
 the Applicant has first demonstrated they have met the following
 criteria:
 - (A) The applicant has met the mitigation sequencing in VMC 20.740.060 (A-E).
 - (B) The applicant shall provide a minimum of two alternative site designs and layouts to demonstrate that impacts cannot be avoided or be reduced to result in less impacts. The planning director may approve reductions to numerical standards including parking and setbacks under the minor exception process in VMC 20.740.070 to avoid or reduce impacts.
- iii. The required and alternative buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is un-vegetated, sparsely vegetated, and/or vegetated with invasive species that do not perform needed functions, the buffer must either be planted to create the appropriate native plant community or be widened to ensure that the buffer provides adequate functions to protect the wetland.

- iv. If the buffer is functionally isolated by an existing impervious surface or built structure, the remaining buffer area must be revegetated with native species, but the buffer does not need to be widened to exceed widths greater than those listed in Tables 20.740.140-1, 20.740-140-2, and 20.740.140-4.
 - (A) Required Buffers Based on Wetland Category see Table 20.740.140-1.

Table 20.740.140-1. WETLAND BUFFER WIDTH REQUIREMENTS

Land Use	VMC Title 20 Zoning
Intensity Wetland	DistrictsBuffer Width
High <u>l</u>	All Residential,
<u>Moderatell</u>	Open Space Park or
Low III	Open Space Greenway:
<u>IV</u>	<u>50</u>

B. Level of function for habitat based on the Washington State Wetland Rating System is as follows:

Table 20.740.140-2. RATING SYSTEM

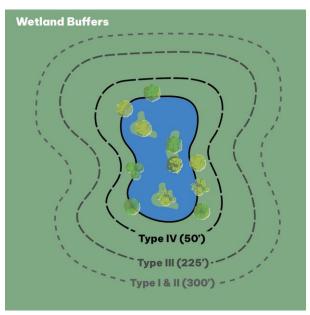


Figure 20.740.140-2. WETLAND BUFFER WIDTH REQUIREMENTS

- (B) Alternative 1 Wetland Buffers: Buffers based on wetland category, wetland type, and habitat score and providing a habitat corridor and implementing minimization measures.
 - (1) In order for an applicant to use the buffer widths of

 Table 20.740.140-2, the applicant must provide a
 habitat corridor as outlined in this subsection and
 implement the impact minimization measures listed
 in Table 20.740.140-3. Not all impact minimization
 measures are applicable. An undisturbed vegetated
 corridor at least 100 feet wide must be provided
 between the wetland and another priority area for
 preservation that meets the following:
 - (a) A legally protected, high-functioning
 vegetated area (priority habitats; other
 compensation sites; wildlife areas/refuges; or
 national, county, and state parks that have

- management plans with identified areas designated as Natural, Natural Forest, or Natural Area Preserve);
- (b) An area that is the site of a Watershed Project identified within and fully consistent with a Watershed Plan, as these terms are defined by RCW 89-08-460;
- (c) An area where development is prohibited under the provisions of the local shoreline master program;
- (d) An area with equivalent habitat quality that has conservation status in perpetuity, in consultation with WDFW;
- (e) The corridor is permanently protected for the entire distance between the wetland and the legally protected area by a conservation easement, deed restriction, or other legal means;
- (f) Presence of the shoreline or Priority Habitat must be confirmed by a qualified biologist or the Planning Official;
- (g) If a wetland scores five or fewer habitat points, only the impact minimization measures listed in Table 20.740.140-3 are required, in order to use the buffers in Table 20.740.140-2; or
- (h) If an applicant does not apply the mitigation measures in Table 20.740.140-3 and is unable to provide a protected corridor, then the

buffers in Tables 20.740.140-1 or 20.740.140-4 shall be used.

Table 20.740.140-2. ALTERNATIVE 1: WETLAND BUFFER WIDTH REQUIREMENTS

LevelCategor y of FunctionWet land	Habitat Score in Rating System3 to 5 Points (corridor not required)	Habitat Score 6 to 7 Points	Habitat Score of 8 to 9 Points	Buffer width Based on Special Characteristics
HighCategory I: Bogs and Wetlands of High Conservation Value	<u>8—9NA</u>	NA	225 feet	<u>190 feet</u>
ModerateCat egory I: Forested	6 – 775 feet	110 feet	225 feet	NA
LowCategory I or II: Based on Rating of Wetland Functions (and not listed above)	3 – 575 feet	110 feet	225 feet	NA
Category III: All Types	60 feet	<u>110 feet</u>	<u>225 feet</u>	NA

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Category IV:	40 feet	40 feet	40 feet	NA
All Types				

C. Buffer widths are measured horizontally from the edge of the wetland (see VMC 20.170.030(B) and (H)) and are as follows:

1. Category I Wetlands.

Note: Special characteristics are defined in the Washington State Wetland Rating System for Western Washington: 2014 Update, published July 2023 or as revised by Ecology.

Table 20.740.140-3. <u>CATEGORY I IMPACT MINIMIZATION MEASURES REQUIRED</u> TO IMPLEMENT ALTERNATIVE 1 WETLAND <u>BUFFER WIDTHSBUFFERS.</u>

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
Wetland CharacteristicsLights	Land Use IntensityParking lots, warehouses, manufacturing, residential, recreational	Buffer Width Direct lights away from wetland. Only use lighting where necessary for public safety and keep lights off when not needed. Use motion-activated lights. Use full cut-off filters to cover light bulbs and direct light only where needed. Limit use of blue-white colored lights in favor of red-amber hues. Use lower-intensity LED lighting. Dim light to the lowest acceptable intensity.
Noise	Manufacturing and other industrial, residential, commercial, recreational	Locate activity that generates noise away from wetland.

Examples of	Uses and Activities that	Examples of Measures to Minimize
<u>Disturbance</u>	Cause the Disturbance	<u>Impacts</u>
		Construct a fence to reduce noise impacts on adjacent wetland and buffer. Plant a strip of dense shrub vegetation adjacent to wetland buffer.
Wetlands of High Conservation ValueToxic runoff	High Moderate LowParking lots, roads, manufacturing, residential, application of agricultural or landscaping chemicals, landscaping	250' 190' 125'Route only treated runoff to a wetland and route untreated runoff away from wetland while ensuring wetland is not dewatered. Establish covenants limiting use of toxic chemicals within 150 feet of wetland. Apply integrated pest management.
Forested Wetlands High Habitat FunctionStormwater runoff	High Moderate LowParking lots, roads, residential, commercial/industrial, recreational, landscaping/lawns, and other impermeable surfaces/compacted soils	225' 150'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.

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
Moderate Habitat FunctionChange in	High	150'
water regime	Moderate	110'
	LowImpervious surfaces, lawns, tilling	75'Infiltrate or treat, detain, and disperse new runoff into buffer.
Low Habitat Function Pets and	High	100'
human disturbance	Moderate	75'
	LowResidential, recreational, commercial, industrial	50'Plant dense vegetation around buffer, such as rose or hawthorn, to delineate buffer edge and discourage disturbance.
		Place wetland and its buffer in a separate tract.
		Place signs around the wetland buffer every 50 to 200 feet and for subdivisions place signs at the back of each residential lot.
		When platting new subdivisions, locate greenbelts, stormwater facilities, and other lower intensity uses adjacent to wetland buffers.
Other Category I	High	300'
Wetlands	Moderate	225'
High Habitat FunctionHuman disturbance	LowResidential, commercial, industrial	150'Plant dense vegetation around buffer, such as rose or hawthorn

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
Moderate Habitat FunctionDust	High Moderate	150' 110'
	Wouerate	110
	LowTilled fields, roads	75'Utilize best management practices BMPs to control dust.
Low Habitat Function	High	100'
	Moderate	75'
	Low	50'

2. Category II Wetlands.

Table 20.740.140-4. CATEGORY II

(C) Alternative 2 Wetland Buffer Widths: Buffers based on
 wetland category wetland type, and habitat score (see Table
 20.740.140-4) without providing a habitat corridor or
 minimization measures as outlined in subsection (B) above.

<u>Table 20.740.140-4. ALTERNATIVE 2</u> WETLAND BUFFER WIDTHS REQUIREMENTS

<u>Category of</u> <u>Wetland</u>	Habitat Score 3 to 5 Points (corridor not required)	Habitat Score 6 to 7 Points	Habitat Score of 8 to 9 Points	WetlandBuffer width Based on Special Characteristics	Land Use Intensity	Buffer Width
High Habitat FunctionCategory I: Bogs and Wetlands of High Conservation Value	High Moderate LowNA	300' 225' 150' <u>NA</u>	300 feet	<u>250 feet</u>		
Moderate Habitat FunctionCategory I: Forested	High Moderate Low100 feet	150' 110' -75'150 feet	300 feet	NA		
Low Habitat FunctionCategory I or II: Based on rating of wetland	High Moderate Low100 feet	100' -75' -50'150 feet	300 feet	NA		

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The Vancouver Municipal Code is current through Ordinance M-4438<u>4416</u>, passed <u>December 18July 3</u>, 2023.

<u>Category of</u> Wetland	Habitat Score 3 to 5 Points (corridor not required)	Habitat Score 6 to 7 Points	Habitat Score of 8 to 9 Points	WetlandBuffer width Based on Special Characteristics	Land Use Intensity	Buffer Width
functions (and not listed above)						
Category III: All types	80 feet	150 feet	300 feet	NA		
Category IV: All Types	50 feet	50 feet	50 feet	50 feet		

3. Category III Wetlands.

Table 20.740.140-5. CATEGORY III WETLAND BUFFER WIDTHS

Wetland Characteristics	Land Use Intensity	Buffer Width
Moderate Habitat Function	High	150'
	Moderate	110'
	Low	75 ′
Low Habitat Function	High	80'
	Moderate	60'

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Wetland Characteristics	Land Use Intensity	Buffer Width		
	Low	40'		

4. Category IV Wetlands.

Table 20.740.140-6. CATEGORY IV WETLAND BUFFER WIDTHS

Wetland Characteristics	Land Use Intensity	Buffer Width		
All Category IV Wetlands	High	50'		
	Moderate	40'		
	Low	25 ′		

D. All buffers shall be measured from the wetland boundary as surveyed in the field.

E. Areas which are completely functionally separated from a wetland and do not protect the wetland from adverse impacts may be excluded from buffers otherwise required.

v. ii. Wetland Buffer Width Averaging. The shoreline administrator Planning Official may allow modification of the standard wetland buffer width in accordance with an approved critical areas report on a case-by-case basis Critical Areas Report by averaging buffer widths. Buffer width averaging shall not be used in combination with buffer width reduction or a minor exception (VMC 20.740.070). Averaging of buffer widths (see VMC 20.170.080(B)(2).0.170.080(B)(2)) may only be allowed when implementing the impact minimization measures, as applicable, in Table 20.740.140-3 and where a qualified professional wetland scientist demonstrates that:

- (A) A.—Such averaging will not reduce wetland functions or functional performance; and
- (B) B.—The wetland varies in sensitivity due to existing physical characteristics, or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places; and
- (C) C.—The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
- D. The buffer width is <u>not</u> reduced <u>at any point</u> by no more than <u>twenty-five25</u> percent of the standard width and <u>atis</u> no <u>point to</u> less than <u>twenty-five feet</u>.
- iii. Buffer Width Reduction Based on Reducing the Intensity of Impacts from Land Uses.
 Buffer widths required for high intensity land uses may be reduced to those required for moderate land use intensity under the following conditions:
 - A. For wetlands with moderate or high habitat function:
 - (D) 1. A relatively undisturbed vegetated corridor at least one hundred 30 feet wide is protected between the wetland and any other priority habitats and areas associated with priority species (VMC 20.740.110(A)(1)(b); and.
 - 2. Measures to minimize the impacts of different land uses on wetlands are applied, as approved by the shoreline administrator. Such measures include, but are not limited to, the examples summarized below.

Table 20.740.140-7. EXAMPLES OF MEASURES TO MINIMIZE LAND USE IMPACTS

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts				
Lights	Parking lots, warehouses, manufacturing, residential	Direct lights away from wetland				
Noise	Manufacturing, residential, commercial	Locate activity that generates noise away from wetland				
Toxic runoff	Parking lots, roads, manufacturing, residential, application of agricultural or landscaping chemicals	Route only treated runoff to a wetland Establish covenants limiting use of toxic chemicals within 150' of wetland Apply integrated pest management				
Change in water regime	Impervious surfaces, lawns, tilling	Infiltrate or treat, detain, and disperse new runoff into buffer				
Pets	Residential	Plant dense vegetation around buffer, such as rose or hawthorn				
Human disturbance	Residential, commercial, industrial	Plant dense vegetation around buffer, such as rose or hawthorn				
Dust	Tilled fields	Utilize best management practices to control dust				

- B. For wetlands with low habitat function measures to minimize the impacts of different land uses on wetlands (subsection (C)(1)(b)(iii)(A)(2) of this section) are applied.
- C. Buffer width reduction shall not be used in combination with buffer width averaging (subsection (C)(1)(b)(ii) of this section) or a minor exception (VMC 20.740.070).
 - vi. iv.—Buffer Maintenance. Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be maintained and fully vegetated according to the approved critical areas permitCritical Areas Permit.
 - vii. v.—Buffer Uses. The following uses may be permitted within a wetland buffer in accordance with the review procedures of this chapter; provided; they are not prohibited by any other applicable lawlaws or regulationregulations and they are conducted in a manner so as to minimize impacts to the buffer and the wetland:
 - (A) A. Activities allowed under the same terms and conditions as in the associated wetlands pursuant to subsection (C)(1)(a) of this section, provided trails shall be located in the outer twenty-five percent to fifty percent of the buffer when feasible and consistent with the public access provisions of this program.(C)(1)(a) of this section;
 - (B) B. Enhancement and restoration activities aimed at protecting the soil, water, vegetation or wildlife.
 - (1) C. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the City's Noxious Weed list should be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is

allowed in conjunction with removal of invasive plant species.

- (C) Passive recreation facilities, including trails and wildlife viewing structures; provided, that the trails and structures are constructed with a surface that does not interfere with wetland hydrology,
 - (1) D.—Trails shall be located in the outer 25 to 50 percent of the buffer, when feasible.
- (D) Stormwater management facilities are not allowed in buffers of Category I or II wetlands. Wetland buffers. Stormwater management facilities, limited to detention must meet the requirements of an LID or flow control BMP as specified for uses in Category III wetlands.
- (E) Educational and scientific research activities:
- (F) Normal and routine maintenance and repair of any existing public or private facilities, constructed wetlands, stormwater dispersion outfalls and bioswales, may be constructed in accordance with an approved critical areas report within the buffers of Category III or IV wetlands; an existing right-of-way, provided, that; that the maintenance or repair does not increase the footprint or use of the facility or right-of-way;
- 1. No other location is feasible; and
- 2. The location of such facilities will not degrade the functions of the wetland or buffer.
- c. Signs and Fencing of Wetlands.
 - i. The location of the outer perimeter of the wetland and buffer shall be marked in the field, and such marking shall be approved by the shoreline administrator prior to the commencement of permitted activities. Such field markings shall be maintained throughout the duration of the permit.

ii. A permanent physical demarcation along the upland boundary of the wetland buffer shall be installed and thereafter maintained. Such demarcation may consist of fencing, hedging or other prominent physical marking that allows wildlife passage, blends with the wetland environment, and is approved by the shoreline administrator.

iii. Permanent fencing of the wetland buffer on the outer perimeter shall be erected and thereafter maintained when there is a substantial likelihood of the presence of domestic grazing animals within the property unless the shoreline administrator determines that the animals would not degrade the functions of the wetland or buffer.

iv. Permanent signs shall be posted at an interval of one per lot for single family residential uses or at a maximum interval of two hundred feet, or as otherwise determined by the shoreline administrator, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the shoreline administrator: "The area beyond this sign is a wetland or wetland buffer. Alteration or disturbance is prohibited by law. Please call the City of Vancouver for more information."

- (G) 2.—The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided that the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources; and
- (H) Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, provided that the drilling does not alter the ground water connection to the wetland or percolation of surface water down through the soil column.
 - (1) Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column would be disturbed.

- c. Temporary and permanent markers and signs for wetlands.
 - i. Temporary and permanent markers and signs are installed in compliance with the requirements of VMC 20.740.020, General Provisions.
- 2. Compensatory Mitigation. Compensatory mitigation for impacts to wetlands shall be provided pursuant to VMC 20.740.06020.740.060 and shall be consistent with the Department of EcologyEcology's Wetland Mitigation in Washington State, Part 1: Agency Policies and Guidance, Version 2, Ecology Publication No. 21-06-003 April 2021, and Part 2: Developing Mitigation Plans, Version 1, Ecology Publication No. 06-06-011a06-011b, March 2006, or as revised by Ecology. Watersheds are defined in VMC 20.740.020(C)(2)20.740.020(C)(2) and Chapter 20.15020.150 VMC.
 - a. a. Mitigation for Lost or Affected Functions. Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide similar wetland or buffer functions assimilar to those lost, except when:
 - i. —i.—The lost wetland or buffer provides minimal functions as determined by a site-specific functionfunctional assessment, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limited within a watershed through a formal Washington State watershed assessment plan or protocol; or
 - <u>ii.</u>—Out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.

b. Mitigation Actions.

b. i.—Compensatory Mitigation Actions. If, through mitigation sequencing in accordance with VMC 20.740.060, it is determined that compensatory mitigation is necessary, the applicant must provide an alternative approach to compensation. Compensation is prioritized as follows:

- Mitigation bank credits: Allows applicants to compensate for wetland loss by purchasing credits from a bank that is commissioned to restore, create, enhance, or preserve wetland areas in providing compensatory mitigation for authorized impacts to wetlands;
- ii. In-lieu fee program credits: Allows applicants to compensate for wetland losses by paying a fee to a third party, such as a government agency or conservation organization, where the fee is used to ensure protection, creation, and enhancement of wetlands;
- iii. Permittee-responsible mitigation (PRM) under a watershed approach;
- iv. PRM that is on site and in-kind;
- v. PRM that is off site and/or out-of-kind.
- c. PRM includes the following approaches:
 - i. Creation. The manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site where a biological wetland did not previously exist. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species. Creation results in a gain in wetland acres and functions.
 - ii. ii. Reestablishment. The manipulation of the physical, chemical or biological characteristics of a site with the goal of returning natural or historic functions and environmental processes to a former wetland. Activities could include removing fill material, plugging ditches or breaking drain tiles. Reestablishment results in a gain in wetland acres and functions.
 - <u>iii.</u> <u>iii.</u> Rehabilitation. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes of a degraded wetland. Activities could involve breaching a dike to reconnect wetlands to a floodplain, restoring tidal influence to a wetland, or breaking drain tiles and

plugging drainage ditches. Rehabilitation results in a gain in wetland functions but not in wetland acres.

- iv. iv. Preservation. The removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms (such as recording conservation easements and providing structural protection like fences and signs).
 Preservation does not result in a gain of wetland area and functions (but may result in a gain in functions over the long term).
- v. Enhancement. The manipulation of the physical, chemical, or biological characteristics of a biological wetland to increase or improve specific functions or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention or wildlife habitat. Activities typically consist of planting vegetation, controlling nonnative or invasive species, modifying site elevations to result in open water ponds, or some combination of these.
 Enhancement results in a change in certain wetland functions and can lead to a decline in other wetland functions. It does not result in a gain in wetland acres.
- <u>vi.</u> <u>c.</u> <u>Type and Location of Mixed Compensatory Mitigation.</u> Involves more than one of the listed types of compensatory mitigation.

Mitigation. Compensatory mitigation for ecological functions shall be in kind.

Compensatory mitigation shall be on site or within the impacted wetland's: (i)

contributing area; (ii) stream reach; (iii) sub-watershed; or (iv) watershed. (Sub-watersheds and watersheds are identified on the Clark County Digital Atlas.) The mitigation site shall be where the greatest level of wetland functions can be achieved. Mitigation actions may be conducted in a different watershed when:

i. Based on a determination of the natural capacity of the potential mitigation sites to mitigate for the impacts, there are no reasonable on-site or in-watershed opportunities, or those opportunities do not have a high likelihood of success.

Consideration shall include: anticipated wetland mitigation replacement ratios, buffer conditions and proposed widths, hydrogeomorphic classes of on-site wetlands when restored, proposed flood storage capacity, and potential to impact riparian fish and wildlife habitat including connectivity; or

ii. Watershed goals for water quality, flood or conveyance, habitat or other wetland functions have been established and strongly justify location of mitigation at another site; or

iii. Credits from a certified wetland mitigation bank are used as mitigation and the use of credits is consistent with the terms of the bank's certification.

d. d. Mitigation Ratios.

i. i. Replacement Ratios.

- (A) A.—The replacement ratios shall apply to wetland mitigation that: (1) is for the same hydrogeomorphic subclass (e.g., riverine flow-through, depressional outflow, or flats), and Cowardin class (e.g., palustrine emergent, palustrine forested or estuarine wetlands); (2) is on site; (3) is in the same category; (4) is implemented prior to or concurrent with alteration; and (5) has a high probability of success.
- B. The replacement ratios are based on replacing the affected wetland with a compensation wetland of the same category, and hydogeomorphic (HGM) subclass and Cowardin class.
- C. The replacement 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.
 - (B) D. Mitigation Ratios. Mitigation ratios are as follows (see subsection (C)(2)(b) of this section for definitions of mitigation actions):

Table 20.740.140-85. MITIGATION REPLACEMENT RATIOS

(Wetland Category and Type Reestablishmer or Creation			Rehabilita tion		Reestablish ment or Creation (R/C) plus Rehabilitation (RH)Preserve		Reestablish ment or Creation (R/C) plus Enhanceme nt (E)	Enhance ment Only	
Cate Bog	egory I	C	onsidere Possible	6:1 Rehabilitat on of a Bog	nabilitati Possible		onsidered	Ce	C Not onsidered ossible	Case-by- Case
Natural		€	Not 6:1 Considere Rehabili d Possible on of a Natural Heritage Site		R/C Not Coati Possible		4		C Not ensidered essible	Case-by- Case
Fo	Category I Forestedfor ested		6:1		1	2:1	1:1 R/C and 10:1 RH24:1		1:1 R/C and 20:1 E24:1	24:1
Bo	Bog NA		NA	<u>N</u>		JA	24:1	NA		
Wetlands of Co High Conservatio n Value		Consult with DNR			Consult vith DNR			Consult with DNR		

Deleted Cells

Deleted Cells

Wetland Category and Type		olishment reation	Rehabilita tion	Reestablish ment or Creation (R/C) plus Rehabilitatio n (RH)Preserva tion		Reestablish ment or Creation (R/C) plus Enhanceme nt (E)	Enhance ment Only	Deleted Cell
Category I Based on Score for Functions	4 <u>3</u> :1	8:1	1:1 R/C and 6:1 RH	1:1 R/C and 12:1-E	!	1612 :1		Deleted Cell
Category II	3:1	6:1	1:1 R/C an	l d 4:1 RH	1: ′	L 1 R/C and 8:1	12:1	
Category III	2:1		4:1	1:1 R/C and 2:1 RH8:1	1:1 R/ C an d 4:1	8:1		Deleted Cell
Category IV	1.5:1		3:1	1:1 R/C and 1:1 RH6:1	1:1 R/ C an d 2:1	6:1		

The Vancouver Municipal Code is current through Ordinance M-4438<u>4416</u>, passed <u>December 18July 3</u>, 2023.

- <u>ii.</u> Adjustment of Replacement Ratios. The <u>shoreline administratorPlanning</u> <u>Official</u> may adjust the replacement ratios to compensate for deviations from the requirements under <u>subsection (C)(2)(d)(i)(A) of</u> this section, subject to the following:
 - (A) A.—In most cases, adjustments to the replacement ratios will increase the required amount of mitigation. The required mitigation may be decreased under exceptional circumstances,—for example, if programmatic out-of-kind mitigation yields watershed-scale benefits that would not be realized from in-kind mitigation, or if out-of-kind mitigation would protect irreplaceable wetlands.
- e. e. Mitigation Timing. The mitigation shall be implemented prior to or concurrent with alterations. If mitigation is implemented after alteration is allowed, the planning official Planning Official may require additional mitigation to compensate for temporal losses of wetland functions.
- f.__Buffers for Mitigation Wetlands. Refer to Wetland Buffer Tables 20.7470.140-1, 20.740.140-31, 20.740.140-2, and through 20.740.140-64.
- g. g. Wetland Mitigation Banks.
 - i. Credits from a wetland mitigation bank may be approved for use as mitigation for unavoidable impacts to wetlands when:
 - (A) A.—The bank is certified under Chapter <u>173-700</u>173-700 WAC;
 - (B) B. The shoreline administrator Planning Official determines that the wetland mitigation bank provides appropriate mitigation for the authorized impacts; and
 - (C) C. The proposed use of credits is consistent with the terms and conditions of the bank's certification.

- <u>ii.</u> Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.
- <u>iii.</u>—Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions.
- E. Additional Critical Areas Report Requirements. A Critical Areas Report for wetlands shall be prepared according to the Washington State Wetland Rating System for Western Washington 2014 Update, Ecology Publication No. 14-06-02923-06-009, Washington State Wetland Rating System For Western Washington: 2014 Update, published July 2023October 2014 or as revised by Ecology. The Critical Areas Report shall contain an analysis of the wetlands including the following site- and proposal-related information:
 - 1. A written assessment, data sheets, and accompanying maps of any wetlands or buffers on the site, including the following information:
 - a. Hydrogeomorphic (HGM) subclassification and Cowardin class;
 - b. Wetland category;
 - c. Wetland delineation and required buffers;
 - d. Existing wetland acreage;
 - e. Vegetative, faunal, and hydrologic characteristics;
 - f. Soil types and substrate conditions;
 - g. Topographic elevations, at one-foot contours; and
 - h. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, or evidence of water depths throughout the year, including drift lines, algal layers, moss lines, and sediment deposits).

- Functional evaluation for the wetland and buffer using Ecology's most current approved data sheets. method and including the reference of the method and all data sheets.
- 3. Proposed mitigation, if needed, including a discussion of alternatives and trade-offs of the various alternatives (for example, where enhancement for one function would adversely affect another) and a written description and accompanying maps of the mitigation area, including the following information:
 - a. Existing and proposed wetland acreage;
 - b. Existing and proposed vegetative and faunal conditions;
 - Surface and subsurface hydrological conditions of existing and proposed
 wetlands and hydrologically associated wetlands, including an analysis of
 existing hydrologic regime and proposed hydrologic regime for enhanced,
 created, or restored mitigation areas;
 - d. Relationship to lakes, streams, and rivers in the watershed;
 - e. Soil type and substrate conditions;
 - f. Topographic elevations, at one-foot contours;
 - g. Required wetland buffers including existing and proposed vegetation;
 - h. Identification of the wetland's contributing area; and

The Vancouver Municipal Code is current through Ordinance M-4438, passed December 18, 2023.

Disclaimer: The city clerk's office has the official version of the Vancouver Municipal Code. Users should contact the city clerk's office for ordinances passed subsequent to the ordinance cited above.

City Website: www.cityofvancouver.us

City Telephone: (360) 487-8711

i. Hosted by Code Publishing Company. A General Code Company. A functional assessment of proposed mitigation to ensure no net loss of shoreline ecological function.