APPENDIX B: CRITICAL AREAS REGULATIONS

CRITICAL AREAS CHAPTER

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SECTION 1.0 PURPOSE AND OBJECTIVES

The regulations of this chapter are intended to protect critical areas, and satisfy the requirements of the Shoreline Management Act for critical areas protection as provided in WAC 173-26-221, in accordance with the Growth Management Act and through the application of the best available science, as determined according to WAC 365-195-900 through 365-195-925, and in consultation with state and federal agencies and other qualified professionals.

This chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards.¹

The City's enactment or enforcement of this chapter shall not be construed for the benefit of any individual person or group of persons other than the general public.

SECTION 2.0 ESTABLISHMENT OF CRITICAL AREAS: PROVISION FOR DATA MAPS

2.1 List of Critical Areas

The incorporated area of the City of Wenatchee is hereby divided into the following critical areas, where appropriate, consistent with the best available science and the provisions herein:

- A. Wetlands
- B. Critical aquifer recharge areas

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¹ See RCW 36.70A.020(12).

- C. Fish and wildlife conservation areas
- D. Frequently flooded areas
- E. Geologically hazardous areas

All areas within the City of Wenatchee's shoreline jurisdiction meeting the definition of one or more critical areas, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.

2.2 Data Maps

Critical areas are hereby designated on a series of data maps maintained at the business office of the Community and Economic Development Department. These maps contain the best available graphic depiction of critical areas and will be continuously updated as reliable data becomes available. These maps are for information and illustrative purposes only and are not regulatory in nature.

The critical areas data maps are intended to alert the development community, appraisers, and current or prospective property owners of a potential encounter with a use or development limiting factor based on the natural systems. The presence of a critical area designation on the data maps is sufficient foundation for the Administrator to order an analysis for the factor(s) identified prior to acceptance of a development application as being complete.

Data maps and inventories include:

- A. City of Wenatchee Fish and Wildlife Habitat Conservation Areas, 2018 as amended;
- B. City of Wenatchee Geologically Hazardous Areas, 2018 as amended;
- C. Flood Insurance Rate Maps, as amended;
- D. Flood Boundary and Floodway Maps, as amended;
- E. U.S. Fish and Wildlife Service National Wetlands Inventory, as amended;
- F. WDFW Priority Habitats and Species Maps, as amended;
- G. Natural Resources Conservation Service Soil Survey Chelan County Soils Survey, as amended;
- H. Management Recommendations for Washington's Priority Habitats and Species, as amended;
- I. Management Recommendations for Washington's Priority Habitats Riparian, as amended; and

J. Priority Habitat and Species list, as amended. (Ord. 2018-16 § 2 (Exh. B))

SECTION 3.0 INTERPRETATION OF DATA MAPS

3.1 Interpretation of Data Maps

The official charged with the administration of the Shoreline Master Program is hereby declared the Administrator of these regulations for the purpose of interpreting data maps. An affected property owner or other party with standing has a right to appeal the administrative determination to the Hearing Examiner using the procedure for appeals found in Chapter 7 of this Shoreline Master Program.

The data maps are to be used as a general guide to the location and extent of critical areas. Critical areas indicated on the data maps are presumed to exist in the locations shown and these critical areas and any associated buffers are protected under the provisions of this chapter and all other applicable provisions of the SMP. The exact location of critical areas shall be determined by the applicant as a result of field investigations performed by qualified professionals using the standards and definitions found in this SMP. All development applications are required to show the boundary(s) of all critical areas and any applicable buffers on a scaled drawing prior to the development application being considered "complete" for processing purposes.

SECTION 4.0 EFFECT OF DATA MAPS: APPLICABILITY

4.1 Effect of Data Maps

The conclusion by the Administrator that a parcel of land or a part of parcel of land that is the subject of a proposed development application is within the boundary(s) of one or more designated critical areas, as shown on the data maps, shall serve as cause for additional investigation and analysis to be conducted by the applicant. Development adjacent to an identified critical area will require additional investigation and analysis when the critical area is a fish and wildlife habitat conservation area or wetland and may require further review for other critical areas when there is sufficient information to determine a potential impact to or from the critical area for the development. The site specific analysis may be limited to those critical areas indicated on the data maps. In the event of multiple designations, each subject matter will be addressed independently and collectively for the purpose of determining development limitations and appropriate mitigating measures.

4.2 Applicability

A. When a chapter reference is used, it shall be inclusive of all of Appendix B.

- B. This chapter classifies and designates critical areas in the City and establishes a process to apply appropriate protection measures for these critical areas in concert with all applicable provisions of the SMP. Any development authorized to alter the condition of any land, water or vegetation; or to alter or construct any building, structure or improvement shall be in compliance with the requirements of this chapter.
 - (1) This chapter applies to all real property, all land uses and development activity, and all structures and facilities within the corporate limits of the City of Wenatchee, Washington, as it is now configured or may, from time to time, be altered, whether or not a permit or authorization is required, and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns, leases, or administers land within the City of Wenatchee. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the purposes and requirements of these regulations.
 - (2) Any individual critical area adjoined by another type of critical area within the shoreline jurisdiction shall apply the buffer standards and meet the requirements that provide the most protection of shoreline resources, when consistent with SMA policy.

SECTION 5.0 GENERAL PROVISIONS

- 5.1 The City shall not approve any permit or issue any authorization to alter the condition of any land, water or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first ensuring compliance with the requirements of this chapter.
- 5.2 No site analysis/report required by Section 6 of this chapter will be considered complete without a detailed resume of the principal author(s) which disclose(s) their technical training and experience and demonstrate their stature as a qualified professional(s).
- A. Critical area site analysis/reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat.²2
- B. Any action taken pursuant to this chapter shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. Applicants must first demonstrate an inability to avoid or reduce impacts, before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the ecological functions or values of critical areas, including lost time when the critical area does not perform impacted functions.

² See RCW 36.70A.172(1).

- 5.3 Surety. If a development proposal is subject to mitigation, maintenance or monitoring plans, an assurance device or surety may be required by the Administrator in accordance with Chapter 7 of the SMP.
- 5.4 The preparation of site analysis/reports or information and materials required by this Chapter are the responsibility of the applicant.
- Prior to accepting any application or issuing any authorization to alter the condition of any land, water or vegetation, or to construct or alter any structure or improvement, the data maps shall be consulted for the purposes of determining whether or not the property subject to the application is within any area shown as a critical area or associated buffer. The Administrator shall make available to applicants resources and information on the type(s) of critical areas and/or buffers that may be present. Information shall be provided to the applicant on the type of evaluation and site-specific analysis that will be required as a supplement to the application materials necessary to bring the application up to a standard that can be characterized as "complete" and eligible for processing.

If the subject property does not lie within or partly within the critical areas or associated buffers as depicted on the data maps, the application will be considered complete, provided the application requirements of the Shoreline Master Program or other ordinances governing the process at issue are satisfied.

- 5.6 Fees. The City of Wenatchee shall establish fees for filing of a critical area review processing, and other services provided by the City of Wenatchee as required by this chapter. These fees shall be based on the anticipated sum of direct costs incurred by the City for any individual development or action and may be established as a sliding scale that will recover all of the costs including the enforcement of these code provisions. Basis for these fees shall include, but not be limited to, the cost of engineering and planning review time, cost of inspection time, costs for administration, and any other special costs attributable to the critical area review process.
- 5.7 Administrative Procedures. The administrative procedures followed during the critical area review process shall conform to the standards and requirements of the associated application type in the Shoreline Master Program as provided in Chapter 7 of the SMP. When no other application review process is required, final site analysis/reports or analysis and information required for development by this Chapter shall be reviewed and approved pursuant to the permitting process as provided for in Sections 7.5.4-5 of Chapter 7 of the SMP.

SECTION 6 CRITICAL AREAS; STANDARDS FOR SITE-SPECIFIC ANALYSIS: DEVELOPMENT STANDARDS

6.1 Critical Areas. Critical areas identified pursuant to the provisions of this Program are subject to the following minimum requirements as categorized for each applicable critical area below.

A. Wetlands

- (1) Wetlands, as defined within Chapter 8 of this SMP, shall be identified and delineated in the City of Wenatchee to reflect the relative function, value and uniqueness of the wetland using the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1987, as amended); and the US Army Corps of Engineers, (2006), and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), U.S. Army Corps of Engineers, September 2008. The City of Wenatchee may use the following information sources as guidance in identifying the presence of wetlands and the subsequent need for a wetland delineation study in addition to the provisions for data maps identified in Sections 2-4 of this Chapter:
 - (a) Hydric soils, soils with significant soil inclusions, and "wet spots" identified within the Chelan County soil survey;
 - (b) National Wetlands Inventory;
 - (c) Previous wetland rating evaluation; and
 - (d) On-site inspection.
- (2) A Site analysis/Report required for the purpose of establishing an exact wetland boundary where development is associated with wetlands or a wetland buffer identified by this Chapter. Field delineation of the boundary is required and a scaled map must be produced. The *Washington State Wetland Rating System for Eastern Washington* (Ecology Publication #04-06-030, or as revised and approved by Ecology) must then be applied to the wetlands area to establish the category(s) of wetlands in evidence. The analysis required by this subsection shall be done by qualified professional or the Washington Department of Ecology.
- (3) A Wetland Analysis is required for wetlands identified by this Chapter, addressing the following *minimum* requirements:
 - (a) Categorize the wetland/s per the 'Washington State Wetland Rating System for Eastern Washington', as amended.
 - (b) Establish the wetland buffers based upon Department of Ecology's Wetland guidance in Alternative 3 in Wetlands in Washington State, Volume 2, as amended. More specifically found in Appendix 8-D 'Buffer Alternative 3' attached to this chapter as Exhibit "A" of this Appendix.
 - (c) If impacts to the wetland or buffers are to occur, provide a mitigation plan identifying the impacts and associated mitigation consistent with Department

- of Ecology's guidance in 'Guidance on Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans (Version 1)', Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised.
- (d) Flexibility in mitigation is allowed provided that the mitigation is consistent with Department of Ecology's guidance in 'Wetlands in Washington State Volume 1: A Synthesis of the Science' (Washington State Department of Ecology Publication #05-06-006, Olympia, WA, March 2005); 'Wetlands in Washington State Volume 2: Guidance for Protecting and Managing Wetlands' (Washington State Department of Ecology Publication # 05-06-008, Olympia, WA, April 2005); 'Selecting Wetland Mitigation Sites Using a Watershed Approach' (Washington Department of Ecology Publication # 10-06-007, Olympia, WA, November 2010) or can be supported by Best Available Science.
- (e) Wetland analysis must ensure that "No net loss of wetland area and functions including lost time when wetland does not perform the function" is met.
- (f) Mitigation ratios are found in the following table (Table 8D-11 Mitigation ratios for projects in Eastern Washington, Wetlands in Washington State, Volume 2):

Category and Type of Wetland Impacts	Re-establishment or Creation	Rehabilitation Only1	Re-establishment or Creation (R/C) and Rehabilitation (RH)1	Re-establishment or Creation (R/C) and Enhancement (E)1	Enhancement Only1
All Category IV	1.5:1	3:1	1:1 R/C and 1:1 RH	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1 R/C and 2:1 RH	1:1 R/C and 4:1 E	8:1
Category II Forested	4:1	8:1	1:1 R/C and 4:1 RH	1:1 R/C and 6:1 E	16:1
Category II Vernal pool	2:1 Replacement has to be seasonally ponded wetland	4:1 Replacement has to be seasonally ponded wetland	1:1 R/C and 2:1 RH	Case-by-case	Case-by- case
All other Category II	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	12:1
Category I Forested	6:1	12:1	1:1 R/C and 10:1 RH	1:1 R/C and 20:1 E	24:1
Category I based on score for functions	4:1	8:1	1:1 R/C and 6:1 RH	1:1 R/C and 12:1 E	16:1
Category I Natural Heritage site	Not considered possible2	6:1 Rehabilitation of a Natural Heritage site	R/C Not considered possible2	R/C Not considered possible2	Case-by- case
Category I Alkali	Not considered possible2	6:1 rehabilitation of an alkali wetland	R/C Not considered possible2	R/C Not considered possible2	Case-by- case
Category I Bog	Not considered possible2	6:1 Rehabilitation of a bog	R/C Not considered possible2	R/C Not considered possible2	Case-by- case

¹These ratios are based on the assumption that the rehabilitation or enhancement actions implemented represent the average degree of improvement possible for the site. Proposals to implement more effective rehabilitation or enhancement actions may result in a lower ratio, while less effective actions may result in a higher ratio. The distinction between rehabilitation and enhancement is not clear-cut. Instead, rehabilitation and enhancement actions span a continuum. Proposals that fall within the gray area between rehabilitation and enhancement will result in a ratio that lies between the ratios for rehabilitation and the ratios for enhancement.

²Natural Heritage sites, alkali wetland, and bogs are considered irreplaceable wetlands because they perform some special functions that cannot be replaced through compensatory mitigation. Impacts to such wetlands would therefore result in a net loss of some functions no matter what kind of compensation is proposed

- (4) Buffer Standards
 - (a) Wetland buffer zones shall be retained in their natural condition. Where buffer disturbance is unavoidable during adjacent construction, re- vegetation will be required with native plant materials preferred.
 - (b) A Buffer zone shall be required adjacent to, and outside of, all regulated wetlands, including any wetland restored, relocated, replaced or enhanced because of wetlands alterations.
 - (c) All buffers shall be measured from the wetland edge as delineated in the field. The buffer zone depths may be reduced up to no more than 25% or averaged if a special site analysis/report demonstrates to the satisfaction of the Administrator, or if the Administrator otherwise determines, that the adjacent land is, and will remain, extensively vegetated, is topographically remote from the wetland, and that no direct or indirect adverse impacts on the regulated wetlands is reasonably likely as a result of the buffer reduction.
 - (d) Buffer averaging may not be used in conjunction with any other buffer reduction methods.
 - (e) Buffer averaging may be used under the following conditions:
 - (i) Averaging to improve wetland protection may be permitted when all of the following conditions are met:
 - (A) The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a "dual-rated" wetland with a Category I area adjacent to a lower rated area.
 - (B) The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower functioning or less sensitive portion.
 - (C) The total area of the buffer after averaging is equal to the area required without averaging.
 - (D) The buffer at its narrowest point is never less than 3/4 of the required width
 - (ii) Averaging to accommodate otherwise allowed development of a parcel may be permitted when all of the following are met:
 - (A) There are no feasible alternatives to the site design that could be accomplished without buffer averaging.
 - (B) The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a report from a qualified wetland professional.
 - (C) The total buffer area after averaging is equal to the area required without averaging.

(D) The buffer at its narrowest point is never less than 3/4 of the required width.

(5) Development

- (a) The following activities are allowed to occur on wetlands and wetland buffer zones: passive outdoor recreational activities, existing and ongoing agricultural activities (provided no additional area is added beyond demonstrable historic levels), maintenance of existing facilities, structures, ditches, roads and utility systems.
- (b) A legally established use or structure established prior to the effective date of this SMP which does not conform to standards set forth herein, is allowed to continue and be reasonably maintained provided that such activity or structure shall not be expanded or enlarged in any manner that increases the extent of its nonconformity.

B. Critical Aquifer Recharge Areas

- (1) Site analysis/Report required for the purpose of delineating the recharge areas on a scaled development plan and provided detailed information on the following items:
 - (a) hydro-geological susceptibility to contamination and contamination loading potential
 - (b) depth to groundwater
 - (c) hydraulic conductivity and gradient
 - (d) soil permeability and contamination attenuation
 - (e) a vadose zone analysis including permeability and attenuation properties
 - (f) an analysis of the recharge area's toleration for impervious surfaces in terms of both aquifer recharge and the effect on water quality degradation
 - (g) a summary of the proposed development's effect on the recharge area concentrating on items "d" and "f"
 - (h) existing aquifer water quality analysis

(2) Development Standards

- (a) The site analysis will create a water quality baseline which will serve as a minimum standard that shall not be further degraded by proposed development.
- (b) The creation of additional impervious surfaces shall be limited to that amount described in the site analysis that will ensure adequate aquifer recharge and water quality protection.
- (c) Development approvals shall ensure that all best management practices are employed to avoid introducing pollutants into the aquifer. This includes the complete collection and disposal of storm water outside of the aquifer recharge area for all development impervious surfaces.

- C. Frequently Flooded Areas. The flood insurance rate maps (FIRM) and floodway maps along with the Flood Insurance Study prepared by the National Flood Insurance Program (NFIP) are adopted as the formal designation for frequently flooded areas, specifically FIRM Panel #5300200005C and FIRM Panel #5300150625D as maintained by NFIP. When base flood elevation data is not available from the above information to designate frequently flooded areas, the Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from federal and state governmental agencies or other sources including but not limited to historical data, high water marks or photographs of past flooding to make the appropriate designations.
 - (1) Site analysis/Report required to identify the location of the development in proximity to the one hundred year floodplain, and floodways where applicable.
 - (2) Development Standards-The City of Wenatchee maintains flood hazard reduction standards administered under ordinances adopted under the building codes. The provisions of this Master Program provide additional standards for flood hazard that must be reviewed in concert with locally adopted building codes, and may be more restrictive or alter the design, location or nature of a development from the local standards. These policies and regulations are addressed specifically within Section 4.3 Flood Hazard Reduction of this SMP. Additional provisions within the SMP as a whole may also affect the design, location or nature of a development associated with frequently flooded areas, dependent upon the specific nature of the development.
- D. Geologically Hazardous Areas: Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard. Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices so that risks to public health and safety are minimized. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas must be avoided.

Areas that are susceptible to one or more of the following types of hazards shall be considered as a geologically hazardous area: erosion hazard; landslide hazard; seismic hazard; or areas subject to other geological events such as coal mine hazards and volcanic hazards including: mass wasting, debris flows, rock falls, and differential settlement.

- (1) Development. Uses and activities allowed within designated geologically hazardous areas are those uses permitted by the zoning district, where consistent with the provisions of this Program.
- (2) Classification. All geologically hazardous areas shall be classified by the City of Wenatchee according to the level of risk associated with the hazardous area as established through an approved geologic hazard risk assessment and/or a geotechnical report submitted by the applicant in accordance with this chapter. The administrator may use on-site inspections and the information sources identified in

Section 2.2 of this chapter as guidance in identifying the presence of potential geologically hazardous areas. Geologically hazardous areas in the City of Wenatchee shall be classified according to the following system:

- Known or suspected risk;
- No risk; and
- Risk unknown data are not available to determine the presence or absence of risk.
- (a) Any land containing soils, geology or slopes that meet any of the following criteria shall be classified as having a known or suspected risk of being geologically hazardous areas:
 - (i) Erosion hazard areas include areas likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils. Erosion hazard areas may also include coastal erosion areas. This information can be found in the Washington State Coastal Atlas available from the Department of Ecology. Counties and cities may consult with the United States Department of Agriculture Natural Resources Conservation Service for data to help identify erosion hazard areas.
 - (ii) Landslide hazard areas include areas subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible to landslide because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors, and include, at a minimum, the following:
 - (A) Areas of historic failures, such as:
 - Those areas delineated by the United States Department of Agriculture Natural Resources Conservation Service as having a significant limitation for building site development;
 - 2. Those coastal areas mapped as class u (unstable), uos (unstable old slides), and urs (unstable recent slides) in the Department of Ecology Washington Coastal Atlas; or
 - Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the United States Geological Survey or Washington Department of Natural Resources;
 - (B) Areas with all three of the following characteristics:
 - 1. Slopes steeper than 15 percent;
 - 2. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
 - 3. Springs or ground water seepage;

- (C) Areas that have shown movement during the Holocene epoch (from 10,000 years ago to the present) or which are underlain or covered by mass wastage debris of this epoch;
- (D) Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
- (E) Slopes having gradients steeper than 80 percent subject to rockfall during seismic shaking;
- (F) Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones;
- (G) Areas that show evidence of, or are at risk from, snow avalanches;
- (H) Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and
- (I) Any area with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.
- (iii) Seismic hazard areas must include areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, surface faulting, or tsunamis. Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow ground water table. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington, and ground settlement may occur with shaking. The strength of ground shaking is primarily affected by:
 - (A) The magnitude of an earthquake;
 - (B) The distance from the source of an earthquake;
 - (C) The type or thickness of geologic materials at the surface; and
 - (D) The type of subsurface geologic structure.
- (iv) Other Geological Hazard Areas.
 - (A) Volcanic hazard areas must include areas subject to pyroclastic flows, lava flows, debris avalanche, or inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.
 - (B) Mine hazard areas are those areas underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or air shafts. Factors which should be considered include: Proximity

to development, depth from ground surface to the mine working, and geologic material.

- (3) Designation. All existing areas within the City of Wenatchee classified as stated in subsection (2) of this section, as determined by the review authority, are designated as geologically hazardous areas.
- (4) Determination Process Geologically Hazardous Area. The administrator shall review each development permit application to determine if the provisions of this chapter shall be initiated. In making the determination, the administrator may use any resources identified in Section 2.2, Data Maps, of this chapter as well as any previously completed special reports conducted in the vicinity of the subject proposal. The following progressive steps shall occur upon a determination by the administrator that a geologically hazardous area may exist on a site proposed for a development permit:
 - (a) Step One. The administrator shall determine if there is any possible geologically hazardous areas on site designated by subsection (3) of this section. This determination shall be made following a review of information available and a site inspection if appropriate. If no hazard area is determined to be present, this section, Geologically hazardous areas, shall not apply to the review of the proposed development.
 - (b) Step Two Site Analysis Report. If it is determined that a geologically hazardous area may be present, the applicant shall submit a geologic hazard area risk assessment prepared by an engineer or a geologist, who meets the minimum definition as a qualified professional under this Program. The risk assessment shall include:
 - (i) A description of the geology of the site and the proposed development;
 - (ii) An assessment of the potential impact the project may have on the geologic hazard;
 - (iii) An assessment of what potential impact the geologic hazard may have on the project;
 - (iv) Appropriate mitigation measures, if any; and
 - (v) A conclusion as to whether further analysis is necessary.

The assessment shall be signed by and bear the seal of the engineer or geologist that prepared it. No further analysis shall be required if the geologic hazard area risk assessment concludes that there is no geologic hazard present on the site, nor will the project affect or be affected by any potential geologic hazards that may be nearby.

(c) Step Three. If the professional preparing the risk assessment in step two concludes that further analysis is necessary, the applicant shall submit a geotechnical report, in conformance with Section 8.2 of this chapter, prepared by a qualified professional.

- (d) The geotechnical report shall include their professional stamp and signature stating and certifying all of the following:
 - (i) The risk of damage from the project, both on and off site, is minimal;
 - (ii) The project will not materially increase the risk of occurrence of the hazard; and
 - (iii) The specific measures incorporated into the design and operational plan of the project to eliminate or reduce the risk of damage due to the hazard.

All mitigation measures, construction techniques, recommendations and technical specifications provided in the geotechnical report shall be applied during the implementation of the proposal. The qualified professional of record shall submit sealed verification at the conclusion of construction that development occurred in conformance with the approved plans.

- (e) A proposed development cannot be approved if it is determined by the geotechnical report that either the proposed development or adjacent properties will be at risk of damage from the geologic hazard, or that the project will increase the risk of occurrence of the hazard, and there are no adequate mitigation measures to alleviate the risks.
- E. Fish and Wildlife Habitat Conservation Areas: The provisions of this section provide for the maintenance of populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. This does not mean maintaining all individuals of all species at all times, but it does mean not degrading or reducing populations or habitats so that they are no longer viable over the long term.
 - (1) Development. Uses and activities allowed within designated habitat conservation areas are those uses permitted by the zoning district, where consistent with the provisions of this Program.
 - (2) Identification. Fish and wildlife habitat conservation areas include:
 - (a) Areas in which endangered, threatened, and sensitive species have a primary association;
 - (b) Habitats and species of local importance, as determined locally;
 - (c) Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat;
 - (d) Waters of the state;
 - (e) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;
 - (f) State natural area preserves, natural resource conservation areas and state wildlife areas;
 - (g) Riparian areas;

- (h) Intermittent and perennial streams; and
- (i) Priority habitats and species as identified by the Washington State Department of Fish and Wildlife Priority Habitats and Species Program.
- (3) Designation.
 - (a) All existing areas of the City of Wenatchee identified as stated in subsection (2) of this section, as determined by the administrator, are designated as fish and wildlife habitat conservation areas.
 - (b) In addition to existing fish and wildlife habitat conservation areas in Wenatchee identified as stated in subsection (2) of this section the City of Wenatchee may designate additional species, habitats of local importance, and/or wildlife corridors as follows:
 - (i) In order to nominate an area, species, or corridor to the category of locally important, an individual or organization must:
 - (A) Demonstrate a need for special consideration based on:
 - 1. Declining population;
 - 2. Sensitivity to habitat manipulation;
 - 3. Commercial, recreational, cultural, or other special value; or
 - 4. Maintenance of connectivity between habitat areas;
 - (B) Propose relevant management strategies considered effective and within the scope of this chapter;
 - (C) Identify effects on property ownership and use; and
 - (D) Provide a map showing the species or habitat location(s).
 - (ii) Submitted proposals shall be reviewed by the City and may be forwarded to the State Departments of Fish and Wildlife, Natural Resources, and/or other local, state, federal, and/or tribal agencies or experts for comments and recommendations regarding accuracy of data and effectiveness of proposed management strategies.
- (iii) If the proposal is found to be complete, accurate, and consistent with the purposes and intent of this chapter and the various goals and objectives of the current comprehensive plan, and the Growth Management Act, the city council will hold a public hearing to solicit comment. Approved nominations will become designated locally important habitats, species, or corridors and will be subject to the provisions of this chapter.
- (4) General Standards. The following minimum standards shall apply to all development activities occurring within designated habitat conservation areas and their associated buffers:
 - (a) The standards and requirements for the protection of riparian and aquatic habitat areas and their associated buffers are established under Sections 4.2 and 4.5 of the SMP and not subject to the general and specific standards identified below.

- (b) Habitat conservation areas will be left undisturbed, unless the development proposal involves appropriate mitigation and enhancement measures, as determined on a site-specific basis.
- (c) Habitat Conservation Area Buffers. Where buffers are specified as a requirement in this chapter or identified in an approved management and mitigation plan, the buffer areas shall be maintained between all permitted uses and activities and designated habitat conservation areas. Minimum standards for the maintenance of these buffers include but are not limited to:
 - (i) All buffers shall be measured from the habitat edge, as established by the mitigation and management plan or as provided by this chapter.
 - (ii) All buffer areas shall be temporarily fenced between the construction activity and the buffer with a highly visible and durable protective barrier during construction to prevent access and protect the designated habitat conservation area and associated buffer. The administrator may waive this requirement if an alternative to fencing which achieves the same objective is proposed and approved.
 - (iii) Except as otherwise allowed, buffers shall be retained in their natural condition. Any habitat created, restored or enhanced as compensation for approved habitat alterations shall have the standard buffer required for the category of the created, restored or enhanced habitat.
- (d) All developments processed according to Section 6.1.A, Wetlands, and Section 6.1.E, Fish and wildlife habitat conservation areas, of this chapter shall require the submittal and approval of a management and mitigation plan in conformance with Section 4.2 Ecological protection and critical areas of the SMP.
- (5) Specific Standards. The following additional standards shall apply to development associated with the specific habitat conservation areas identified below, in addition to the general standards outlined in subsection (4) of this section:
 - (a) Development occurring within a 1,000-foot radius of a state or federal threatened, endangered, or sensitive species den, nesting, or breeding site, migration corridors or feeding areas of terrestrial species shall require the submittal and approval of a mitigation and management plan in conformance with the City of Wenatchee critical areas ordinance.
 - (b) Rocky Mountain Mule Deer Habitat. Habitat connectivity and migration corridors for mule deer shall be considered in management and mitigation plans associated with proposed development, prepared consistent with the provisions of the City of Wenatchee critical areas ordinance. Per the Washington State Department of Fish and Wildlife (WDFW), effective management of mule deer in Washington requires ensuring that mule deer have adequate levels of quality habitat year-round. Development standards to avoid and minimize the potential impacts to mule deer winter range may include, but are not limited to:

- (i) Preservation of the existing high-quality mule deer winter range (sagebrush and bitterbrush habitat).
- (ii) Installation of a deer fence around the proposed development in order minimize human-deer interactions.
- (iii) Cluster development on properties in order to maintain the migration of mule deer through the property.
- (iv) Minimize overall disturbance of vegetation on the property and control invasive and noxious weed species.
- (v) Installation of native shrub steppe vegetation to provide a functional strip of habitat.
- (c) Bighorn Sheep Habitat. Bighorn sheep critical habitat is present on the steep slopes west of U.S. Highway 97A extending from Ohme Gardens to the northern extent of the city limits. Based on the steep slopes/cliffs within the western portion of these properties and the existing development on the eastern portion of the properties (generally east of the toe of the modified or unmodified slope), the likelihood of potential development is expected to be extremely low. Development west of the toe of the slope would likely require additional excavation at the toe of the slope, which would cut further west into designated geologically hazardous area requiring geotechnical review for potential rock fall and/or landslides. Overall, any development of these properties requires preservation of bighorn sheep migration along the steep slopes. Mitigation and management plans shall recognize and incorporate the following provisions for evaluating potential impacts to this habitat conservation area:
 - (i) Improvements/upgrades to existing development and new development located below the toe of the slope are not expected to result in any adverse impacts to bighorn sheep habitat.
 - (ii) Protection of bighorn sheep habitat will not require a buffer or setback from the toe of the slope.
 - (iii) Development should be limited to the portion of the property below the existing modified/unmodified toe of the slope. If development needs to occur west of the toe of the slope it must be demonstrated that the development will not result in any adverse impacts or cumulative adverse impacts to bighorn sheep habitat and migration routes. Due to the unique nature of the habitat (cliffs and bluffs) there is little opportunity for mitigation for disturbances to these steeper slopes.
- (f) Cliffs/Bluffs. Cliffs are identified as critical area when greater than 7.6 meters (25 feet high) and occurring below 1,524 meters (5,000 feet). The protection of these areas is based on the functions and values that these areas provide as: significant wildlife breeding habitat, providing habitat for specific dependent species, and that these areas have limited availability. In the City, the only area that currently contains (mapped) cliffs/bluffs is in the northern portion of the

City to the west of U.S. Highway 97A. The properties that contain these habitats have already been developed east of the existing modified/unmodified toe of the slope and in some areas have encroached within 50 feet of the cliffs and bluffs. Based on the current development on these properties, it is important to limit future development in these habitats in order to protect the ecological functions and values which cannot be replaced through compensatory mitigation.

It is proposed that no development occur within the mapped cliffs/bluffs habitat and that development of the properties be limited to the area east of the existing modified/unmodified toe of the slope. If development is proposed above (west) of the existing unmodified/modified toe of the slope, a 50-foot buffer must be established from the delineated edge of the cliffs or bluffs and would be reviewed under a mitigation and management plan prepared in conformance with Section 4.2 of this Program. Additional setbacks from these habitats may be required if determined to be necessary to protect the potential use of the properties, under a geologic hazard review pursuant to Section 6.1.D of this chapter.

SECTION 7.0 WARNING AND DISCLAIMER OF LIABILITY

7.1 Warning and Disclaimer of Liability

The degree of hazard protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations.

Catastrophic natural disasters can, and will, occur on rare occasions. This chapter does not imply that land outside the critical areas or activities permitted within such areas will be free from exposure or damage. This chapter shall not create liability on the part of the City of Wenatchee, and officers or employees thereof, for any damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

SECTION 8.0 REPORT AND PLAN REQUIREMENTS

8.1 Drainage and erosion control plan

During project development the following standards apply:

- (1) All drainage and erosion control plans shall be prepared by a professional engineer.
- (2) All drainage and erosion control plans shall address methods to minimize and contain soil within the project boundaries during construction and to provide for stormwater drainage from the site and its surroundings during and after construction.
- (3) All drainage and erosion control plans shall be prepared using the SCS Type 1A model, taking into account a storm event equal to or exceeding an SCS Type 1A, 100-year storm.

8.2 Geotechnical reports

- (1) All geotechnical reports shall be prepared by a qualified professional meeting the requirements established in Chapter 8 of the SMP.
- (2) A geotechnical report shall include an evaluation of the property by exploring subsurface conditions and shall meet the minimum criteria established in Chapter 8 of the SMP.
- (3) The geotechnical report shall include the qualified professional's stamp and signature stating and certifying all of the following:
 - (a) The risk of damage from the project, both on and off site, is minimal;
 - (b) The project will not materially increase the risk of occurrence of the hazard; and
 - (c) The specific measures incorporated into the design and operational plan of the project to eliminate or reduce the risk of damage due to the hazard.

- (4) All mitigation measures, construction techniques, recommendations and technical specifications provided in the geotechnical report shall be applied during the implementation of the proposal. The qualified professional of record shall submit sealed verification at the conclusion of construction that development occurred in conformance with the approved plans.
- (5) A proposed development cannot be approved if it is determined by the geotechnical report that either the proposed development or adjacent properties will be at risk of damage from the geologic hazard, or that the project will increase the risk of occurrence of the hazard, and there are no adequate mitigation measures to alleviate the risks.

8.3 Grading and excavation plan

All grading and excavation plans shall be prepared by an engineer, and shall contain the following information:

- (1) A cover sheet showing the general vicinity and specific location of work, the name and address of the owner and the licensed civil engineer who prepared the plans;
- (2) Property limits and accurate contours of existing ground and details of terrain and area drainage;
- (3) Limits of proposed excavation and fill sites, finished contours and proposed drainage systems and/or facilities, including any estimated runoff served by the systems and/or facilities;
- (4) Location of any buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent owners which is within 15 feet of the property;
- (5) Recommendations included in any soils engineering report and/or an engineering geology report shall be incorporated in the grading plans or specifications.

Exhibit A of Appendix B, City of Wenatchee Shoreline Master Program

8D.2.3 Buffer Alternative 3: Width Based on Wetland Category, Intensity of Impacts, Wetland Functions, or Special Characteristics

The third alternative provides the most flexibility by basing the widths of buffers on three factors: the wetland category, the intensity of the impacts (as used in Alternative 2), and the functions or special characteristics of the wetland that need to be protected as determined through the rating system. The recommended widths for buffers are shown in Tables 8D-4 to 8D-7. Using this alternative, a wetland may fall into more than one category in the table. For example, a forested, riparian, wetland may be rated a Category II wetland because it is a riparian forest, but it may be rated a Category I wetland based on its score for functions.

If a wetland meets more than one of the characteristics listed in Tables 8D-4 to 8D-7, the buffer recommended to protect the wetland is the widest one. For example, if a Category I wetland (Table 8D-7) scores 8 points for habitat and 7 points for water quality functions, a 200-foot buffer is needed for land uses with high impacts because the widths needed to protect habitat are wider than those needed for the other functions.

Table 8D-4. Width of buffers needed to protect Category IV wetlands in eastern Washington (Buffer Alternative 3 for wetlands scoring less than 16 points for all functions).

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use	Other Measures Recommended for Protection
Score for all 3 basic functions is less than 16 points	Low - 25 ft Moderate – 40 ft High – 50 ft	No recommendations at this time ¹

July 2018

Modified from Appendix 8-D: Guidance on Buffers and Ratios for Eastern Washington Wetlands in Washington State Volume 2 – Protecting and Managing Wetlands Ecology Publication No. 05-06-008

¹ No information on other measures for protection was available at the time this document was written. The Washington State Department of Ecology will continue to collect new information for future updates to this document.

July 2018 Modified Habitat Score Ranges

Table 8D-5. Width of buffers needed to protect Category III wetlands in eastern Washington (Buffer Alternative 3 for wetlands scoring 16 - 18 points for all functions or isolated vernal pools).

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use	Other Measures Recommended for Protection
Moderate level of function for habitat (score for habitat 6 - 7 points)* *If wetland scores 8-9 habitat points, use Table 8D-6 for Category II buffers	Low - 75 ft Moderate – 110 ft High – 150 ft	No recommendations at this time ¹
Score for habitat 3-4 points	Low - 40 ft Moderate – 60 ft High – 80 ft	No recommendations at this time ¹

July 2018 Modified Habitat Score Ranges

Table 8D-6. Width of buffers needed to protect Category II wetlands in eastern Washington (Buffer Alternative 3 for wetlands scoring 19 - 21 points for all functions or having the "Special Characteristics" identified in the rating system).

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use (apply most protective if more than one criterion is met)	Other Measures Recommended for Protection
High level of function for habitat (score for habitat 8 - 9 points)	Low - 100 ft Moderate – 150 ft High – 200 ft	Maintain connections to other habitat areas
Moderate level of function for habitat (score for habitat 6 - 7 points)	Low - 75 ft Moderate – 110 ft High – 150 ft	No recommendations at this time ²
High level of function for water quality improvement and low for habitat (score for water quality 8 - 9 points; habitat less than 6 points)	Low - 50 ft Moderate – 75 ft High – 100 ft	No additional surface discharges of untreated runoff
Vernal pool	Low - 100 ft Moderate - 150 ft High - 200 ft OR Develop a regional plan to protect the most important vernal pool complexes – buffers of vernal pools outside protection zones can then be reduced to: Low - 40 ft Moderate - 60 ft High - 80 ft	No intensive grazing or tilling in the wetland
Riparian forest	Buffer width to be based on score for habitat functions or water quality functions	Riparian forest wetlands need to be protected at a watershed or sub-basin scale (protection of the water regime in the watershed) Other protection based on needs to protect habitat and/or water quality functions
Not meeting above characteristics	Low - 50 ft Moderate - 75 ft High - 100 ft	No recommendations at this time ²

 $[\]overline{{}^{2}}$ See footnote on the previous page.

July 2018 Modified from Appendix 8-D: Guidance on Buffers and Ratios for Eastern Washington Wetlands in Washington State Volume 2 – Protecting and Managing Wetlands Ecology Publication No. 05-06-008

July 2018 Habitat Score Ranges

Table 8D-7. Width of buffers needed to protect Category I wetlands in eastern Washington (Buffer Alternative 3 for wetlands scoring 22 points or more for all functions or having the "Special Characteristics" identified in the rating system).

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use (apply most protective if more than one criterion is met)	Other Measures Recommended for Protection
Wetlands of High Conservation Value	Low - 125 ft Moderate – 190 ft High – 250 ft	No additional surface discharges to wetland or its tributaries No septic systems within 300 ft Restore degraded parts of buffer
Bogs	Low - 125 ft Moderate – 190 ft High – 250 ft	No additional surface discharges to wetland or its tributaries Restore degraded parts of buffer
Forested	Buffer size to be based on score for habitat functions or water quality functions	If forested wetland scores high for habitat, need to maintain connectivity to other natural areas Restore degraded parts of buffer
Alkali	Low – 100 ft Moderate – 150 ft High – 200 ft	No additional surface discharges to wetland or its tributaries Restore degraded parts of buffer
High level of function for habitat (score for habitat 8 – 9 points)	Low – 100 ft Moderate – 150 ft High – 200 ft	Maintain connections to other habitat areas Restore degraded parts of buffer
Moderate level of function for habitat (score for habitat 6 - 7 points)	Low – 75 ft Moderate – 110 ft High – 150 ft	No recommendations at this time ³
High level of function for water quality improvement (8 - 9 points) and low for habitat (less than 6 points)	Low – 50 ft Moderate – 75 ft High – 100 ft	No additional surface discharges of untreated runoff
Not meeting any of the above characteristics	Low – 50 ft Moderate – 75 ft High – 100 ft	No recommendations at this time ³

July 2018
Modified from Appendix 8-D: Guidance on Buffers and Ratios for Eastern Washington
Wetlands in Washington State Volume 2 – Protecting and Managing Wetlands
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³ See footnote on page 6.