

ORDINANCE NO. 16-21

AN ORDINANCE of the City of Richland amending Chapter 22.10 of the Richland Municipal Code related to critical areas.

WHEREAS, the City has need, from time to time, to update the Richland Municipal Code (RMC) to eliminate ambiguities or to come into compliance with state or federal law; and

WHEREAS, the subject matter experts from the Department of Health recently provided recommended edits to the City's existing critical areas regulations to ensure compliance with state law; and

WHEREAS, the best interests of the City and its citizens are served by implementing the recommendations from the Department of Health.

NOW, THEREFORE, BE IT ORDAINED by the City of Richland as follows:

Section 1. Chapter 22.10 of the Richland Municipal Code, entitled Critical Areas, as first enacted by Ordinance No. 48-93, and last amended by Ordinance No. 63-19, is hereby amended as follows:

**Chapter 22.10
CRITICAL AREAS**

Sections:

Article I. General Introduction

- 22.10.010 General purpose and intent.**
- 22.10.020 General applicability of these regulations.**
- 22.10.030 General relationship of regulations of one type of critical area protection to other regulations.**

Article II. Definitions

- 22.10.040 Definitions.**

Article III. Wetlands

- 22.10.050 Reserved.**
- 22.10.060 Reserved.**
- 22.10.070 Regulated activities in wetlands.**
- 22.10.080 Exemptions and allowed uses in wetlands.**
- 22.10.090 Wetland inventory maps.**
- 22.10.100 Rating – Categories of wetland.**

- 22.10.110 Wetland buffer areas.
- 22.10.115 Buffer modifications.
- 22.10.120 Wetland alteration and mitigation.
- 22.10.125 Stormwater runoff.
- 22.10.130 Mitigation standards, criteria, and plan requirements.
- 22.10.140 Wetland mitigation plan requirements.
- 22.10.150 Design standards for wetlands mitigation planning.
- 22.10.160 Wetland monitoring program and contingency plan.

Article IV. Fish and Wildlife Habitat Conservation Areas

- 22.10.170 Reserved.
- 22.10.180 Exemption from fish and wildlife habitat conservation area regulations.
- 22.10.185 Fish and wildlife habitat conservation areas.
- 22.10.190 Fish and wildlife habitat conservation area inventory maps.
- 22.10.200 Requirements for habitat conservation area reports.
- 22.10.210 Fish and wildlife habitat conservation area – Performance standards.
- 22.10.220 Fish and wildlife habitat conservation area alteration.
- 22.10.230 Repealed.

Article V. Geologically Hazardous Areas

- 22.10.240 Identification and definition.
- 22.10.250 Applicability to geologically hazardous areas.
- 22.10.260 Geologically hazardous area inventory maps.
- 22.10.270 Preliminary assessment.
- 22.10.280 Geologic reports and studies.
- 22.10.290 Administrative evaluation of geologic reports and studies.
- 22.10.295 Assurance.

Article VI. Critical Aquifer Recharge Areas Protection

- 22.10.300 Identification and definition.
- 22.10.310 Critical aquifer recharge area maps.
- 22.10.320 Exemptions from critical aquifer recharge area regulations.
- 22.10.330 Reports and studies.
- 22.10.340 Performance standards.
- 22.10.350 Uses prohibited in critical aquifer recharge areas.

Article VII. General Standards Information

- 22.10.360 General exemptions.
- 22.10.370 Permit process and application requirements.
- 22.10.380 Requirements of qualified professional.
- 22.10.385 Notice on title.
- 22.10.390 Land divisions.

- 22.10.400 On-site density transfer for critical areas.
- 22.10.405 Density bonus for increased buffers.
- 22.10.410 Interpretations and appeals.
- 22.10.415 Penalties.
- 22.10.420 General savings provision – Reasonable economic use.
- 22.10.430 No special duty created.
- 22.10.435 Unauthorized alterations and enforcement.
- 22.10.440 Severability.
- 22.10.450 Critical area map.

Article I. General Introduction

22.10.010 General purpose and intent.

A. Critical areas perform many important biological and physical functions and values that benefit the city of Richland and its residents. These functions include, but are not limited to, the following (by type):

(1.) ~~w~~Wetlands: helping to maintain water quality; storing and conveying stormwater and floodwater; recharging and discharging ground water; contributing to stream flow during low flow periods; stabilizing stream banks and shorelines; providing important wildlife habitat providing food, breeding, nesting and/or rearing habitat for fish and wildlife; improving water quality through biofiltration, adsorption and retention and transformation of sediments, nutrients and toxicants and serving as areas for recreation, educational and scientific study, and aesthetic appreciation; such beneficial functions are widely known as ecosystem services. ~~;~~and

(2.) ~~f~~Fish and wildlife habitat conservation areas: maintaining species diversity and genetic diversity of local flora and fauna; providing opportunities for food, cover, nesting, breeding and movement for fish and wildlife; serving as areas for recreation, educational and scientific study and aesthetic appreciation; helping to maintain air and water quality; controlling erosion; and providing neighborhood separation and visual diversity within urban areas.

(3.) ~~In addition, c~~Certain portions of the city of Richland are characterized by geologically hazardous areas that pose a risk to public and private property, to human life and safety and to the natural systems that make up the environment of the city of Richland. These lands are affected by natural processes that make them susceptible to landslides, seismic activity, and/or severe erosion. The city of Richland maintains that protection of critical areas is necessary to protect the public health, safety, and welfare.

(4.) ~~In addition, c~~Certain portions of the city are located within critical aquifer recharge areas whose potential contamination poses a risk to public health and safety. These lands are susceptible to the degradation of ground water quality and quantity that could potentially impact potable water systems.

(5.) Certain portions of the city are subject to frequent flooding. Areas that are subject to flooding perform important hydrologic functions and may present risks to persons and property. Floodplains are regulated by the city ~~in~~ under Chapter 22.16 RMC.

B. This chapter contains standards, guidelines, criteria and requirements intended to identify, analyze, avoid and mitigate probable impacts to the city of Richland's critical areas and to enhance and restore them when possible. The intent of these regulations is to protect ecological functions, and to avoid environmental impacts where such avoidance is feasible and reasonable. In appropriate circumstances, impacts to critical areas that result from regulated activities may be minimized, rectified, reduced and/or compensated for, consistent with the requirements of this chapter. The city of Richland's goal shall be to achieve no net loss of wetlands and to avoid probable impacts, to the extent practical, to other critical areas.

C. It is the intent of this chapter to:

1. Implement the goals and policies of the city of Richland's comprehensive plan, including those goals and policies that pertain to natural features and environmental protection;
2. Recognize and protect the beneficial functions of critical areas through the application of the most current, accurate, and complete scientific or technical information available as determined according to Chapter 365-195 WAC (Best Available Science) and in consultation with state and federal agencies and other qualified professionals and integrate the full spectrum of state, tribal, and federal programs;
3. Serve as a basis for exercise of the city of Richland's substantive authority under the State Environmental Policy Act (SEPA) and the city of Richland's SEPA rules;
4. Comply with the requirements of the Growth Management Act (Chapter 36.70A RCW) and implementing rules; and
5. Coordinate environmental review and permitting of proposals to avoid duplication and delay.

D. The city of Richland further notes that Benton County, the U.S. ~~Department of~~ Fish and Wildlife Service and, ~~the U.S.~~ Department of Energy, and the Washington State Departments of Fish and Wildlife, ~~and the Washington State Department of~~ Ecology, and Health have identified and mapped some portions of the city of Richland – based on topographic, geologic, hydrologic, and habitat characteristics – where the conditions indicate that critical areas or geologic hazards may exist. Additional study and mapping are needed to verify that such conditions do prevail and are needed to identify other areas that are potentially critical areas. Mapping will enable the city of Richland to provide notice of the potential presence of critical areas or the risks associated with developing lands subject to geologically hazardous areas to the public. It should be noted that the

boundaries of the critical areas and geologically hazardous areas displayed on these maps are approximate and are not intended to be used for individual site assessment. When differences occur between what is illustrated on these maps and current site conditions, the actual presence or absence of environmentally critical areas or geologically hazardous areas on the site shall determine the action to be taken.

E. Compliance with the provisions of this chapter does not constitute compliance with other federal, state and local regulations. Other permits, including but not limited to HPA permits, Army Corps of Engineers Section 404 permits, and/or NPDES permits, may be required. It is the responsibility of the applicant to comply with other requirements apart from the provisions of this chapter.

22.10.020 General applicability of these regulations.

A. The provisions of these regulations shall apply to any activity that affects critical areas or their established buffers unless otherwise exempt.

B. To avoid duplication, the following permits and approvals shall be subject to and coordinated with the requirements of these regulations: grading; subdivision or short subdivision; building permit; planned unit development; shoreline substantial development; variance; special use permits; and other permits leading to the development or alteration of land. The city shall not approve any permit or otherwise 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 assuring compliance with the requirements of this chapter.

22.10.030 General relationship of regulations of one type of critical area protection to other regulations.

These [critical area](#) regulations shall apply as an overlay and in addition to zoning, land use and other regulations, ~~including critical areas regulations~~, established by the city of Richland. The provisions of this chapter apply whether or not a permit or other type of city approval is being sought.

Areas characterized as critical may also be subject to other regulations established by this chapter due to the overlap or multiple functions of some sensitive or critical areas. For example, some landslide hazard areas (e.g., steep slopes) adjacent to wetlands may be regulated by buffering requirements according to the wetland management provisions of this chapter. Wetlands may be defined and regulated according to the wetland section and habitat management provisions of this chapter. In the event of any conflict among regulations in this chapter or with any other regulations of the city of Richland for a particular critical area, those regulations that provide greater protection to the critical area shall apply.

Article II. Definitions

22.10.040 Definitions.

For purposes of this chapter, the following definitions shall apply:

“Adjacent” shall mean any activity located:

A. On a site immediately adjoining a critical area;

B. A distance equal to or less than the required critical area buffer width and building setback, or, where the buffer width has yet to be determined, a distance equal to a buffer and setback that would typically be required for the present habitat or species;

C. A distance equal to or less than 250 feet* from a stream, wetland, channel migration zone or water body;

D. Within the floodway or floodplain; or

E. A distance equal to or less than 200 feet** from a critical aquifer recharge area.

“Administrator” means such person as the city manager of the city of Richland shall designate to administer and enforce the provisions of this title.

“Agricultural activities, existing and ongoing” includes those activities conducted on lands defined in RCW 84.34.020(2), and those activities involved in the production of crops and livestock, including, but not limited to, operation and maintenance of farm and stock ponds or drainage ditches, irrigation systems, changes between agricultural activities, and normal operation, maintenance or repair of existing serviceable structures, facilities or improved areas. Activities that bring a previously nonagricultural area into agricultural use are not part of an ongoing activity. An operation ceases to be ongoing when the area on which it was conducted is proposed for conversion to a nonagricultural use or has lain idle for a period of longer than five years, unless the idle land is registered in a federal or state soils conservation program.

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

“Best available science” means current scientific information used in the process to designate, protect, or restore critical areas that is derived from a valid scientific process as defined by WAC 365-195-900 through 365-195-925.

“Best management practices (BMPs)” are current and evolving conservation practices, or systems of practices, management or operational measures, or design and construction techniques; or normal and accepted industry standards that are applied to land use activity in a manner which:

A. Controls soil loss and reduces water surface and ground water quality degradation caused by nutrients, wastes, toxics, and sediment;

B. Minimizes and mitigates adverse impacts to the natural chemical, physical and biological environment of the city;

C. Utilizes the city's natural resources on a long-term, sustainable yield basis;

D. Protects trees, vegetation, and soils designated to be retained during and following site construction and use native plant species appropriate to the site for revegetation of disturbed areas; and

E. Prevents contamination of surface and ground water resources, and protects from impacts to native and other desirable vegetation with BMPs for chemical pesticide, herbicide, and fertilizer applications.

"Buffer" means an area adjacent to a critical area that functions to avoid loss or diminution of the ecologic functions and values of the critical area. Specifically, a buffer may:

A. Preserve the ecologic functions and values of a system including, but not limited to, providing microclimate conditions, shading, input of organic material, and sediments; room for variation and changes in natural wetland, river, or stream characteristics; providing for habitat for life cycle stages of species normally associated with the resource;

B. Physically isolate a critical area such as a wetland, river, or stream from potential disturbance and harmful intrusion from surrounding uses using distance, height, visual, and/or sound barriers, and generally including dense native vegetation, but also may include human-made features such as wildlife friendly fences and other barriers; and

C. Act to minimize risk to the public from loss of life, well-being, or property damage resulting from natural disasters such as from landslide or flooding.

"Channel migration zone" means the area along a river within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings. For the purpose of this chapter, the channel migration zone excludes areas separated from the active river channel by legally existing artificial structures that are likely to restrain channel migration, including, but not limited to, flood control facilities, transportation facilities, and structures built above or constructed to remain intact through the 100-year flood.

"Clearing" means the removal of trees, brush, grass, ground cover, or other vegetative matter from a site which exposes the earth's surface of the site.

"Creation" (wetland) means the manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site, where a wetland did not previously exist. Creation results in a gain in wetland acreage [and function]. A typical action is the excavation of upland soils to elevations that will produce a wetland hydroperiod and hydric soils, and support the growth of hydrophytic plant species.

"Critical aquifer recharge areas" are areas with a critical recharging effect on aquifers

~~needed~~ used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water or is susceptible to reduced recharge.

“Critical areas” are areas ~~defined~~ listed in RCW 36.70A.030(5) including any of the following areas or ecosystems: wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas and geologically hazardous areas.

“Earth/earth material” means naturally occurring rock, soil, stone, sediment, or combination thereof.

“Enhancement” (habitats in general) means the improvement of existing habitat such as by increasing plant density or structural diversity, or by removing nonindigenous or noxious species.

“Enhancement” (wetlands) means the manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific function(s) 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. Enhancement results in a change in wetland function(s) and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. [Examples are planting vegetation, controlling nonnative or invasive species, and modifying site elevations to alter hydroperiods.] Activities typically consist of planting vegetation, controlling nonnative or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these activities.

“Erosion” means wearing away of rock or soil by the gradual detachment of soil and rock fragments by water, wind, ice, or gravity, ~~and other mechanical and chemical forces~~.

“Erosion hazard areas” are areas identified by the United States Department of Agriculture Soil Conservation Service as having a severe rill and inter-rill erosion hazard.

“Excavation” means the mechanical removal of earth material.

“Federal manual” or “federal methodology” means the methodology for identifying wetlands in the field as described in the current Federal Manual for Identifying and Delineating Jurisdictional Wetlands.

“Fill” means earth or any other substance or material placed in or on the ground, including earth-retaining structures. In wetlands, it includes any action that raises the elevation or creates dry land.

“Filling” means the act of transporting or placing (by any manner or mechanism) fill material from, to, or on any soil surface, sediment surface, or other fill material.

“Fish and wildlife habitat conservation area” means areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range and movement corridors; and areas with high relative population density or species richness. “Fish and wildlife habitat conservation areas” does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

“Frequently flooded areas” are lands in the floodplain subject to at least a one percent or greater chance of flooding in any given year or within areas subject to flooding due to high ground water. These areas include, but are not limited to, streams, rivers, and wetland areas where high ground water ponds on the ground surface.

“Functions and values” means the beneficial roles served by critical areas including, but not limited to, water quality protection and enhancement; fish and wildlife habitat; food chain support; flood storage, conveyance and attenuation; ground water recharge and discharge; erosion control; wave attenuation; protection from hazards; historical, archaeological and aesthetic value protection; educational opportunities and recreation.

“Geologically hazardous areas” are areas that because of their susceptibility to erosion, sliding, earthquakes or other geological events are not suited to siting commercial, residential or industrial development consistent with public health or safety concerns.

“Grading” means the movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.

“Habitat management” means management of land to maintain species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. This does not imply maintaining all habitat or individuals of all species in all cases.

“High impact land use” means land uses that are generally associated with relatively high levels of human activity or disturbance, development of structures, or substantial wetland habitat impacts. Depending on their context, high impact land uses can include, but are not limited to, residential buildings and structures, active recreation areas and facilities, commercial and industrial land uses, buildings and structures, and similar uses and activities which create a significant potential for impacts to wetlands. The context for determining the impact of a land use includes the sensitivity of the wetland, the density and intensity of adjacent development, the amount of impervious surface, the orientation of proposed buildings and structures and other relevant factors as determined in an individual case.

“In-kind mitigation” means replacement of wetlands with substitute wetlands whose

characteristics closely approximate those destroyed or degraded by a regulated activity.

“Isolated wetlands” means those wetlands that are outside of and not contiguous to any 100-year floodplain of a lake, river, or stream and have no contiguous hydric soil or hydrophytic vegetation between the wetland and any surface water.

“Landslide hazard areas” are areas that are potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Landslide hazard areas include, but are not limited to, the following types of areas:

A. Areas delineated by the United States Department of Agriculture Soil Conservation Service as having a severe limitation for building site development;

B. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the United States Geological Survey or Department of Natural Resources Division of Geology and Earth Resources;

C. Areas with all three of the following characteristics:

1. Areas with slope 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;

D. 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 that epoch;

E. Areas with slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

F. Areas with slopes having gradients steeper than 80 percent subject to rockfall during seismic shaking;

G. Areas potentially unstable as a result of rapid stream incision, stream bank erosion and undercutting by wave action;

H. Areas that show evidence of, or on, an active alluvial fan presently or potentially subject to inundation by debris flows or catastrophic flooding; or

I. Areas with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.

“Low impact land use” means land uses that are typically associated with relatively low levels of human activity, disturbance or development and that are conducted in a manner as to minimize impacts to the buffer. Low impact land uses may include:

- A. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife;
- B. Passive recreation, including walkways or trails located in the outer 25 percent of the buffer area;
- C. Educational and scientific research activities, provided prior approval is obtained from the approval authority;
- D. Normal and routine maintenance and repair of any existing public or private facilities, provided appropriate measures are undertaken to minimize impacts to the wetland and its buffer and that disturbed areas are restored immediately to a natural condition; or
- E. Agricultural land uses that do not create a probable wetland impact.

“Mitigation” means a series of prioritized actions that when achieved in full ensures project impacts will result in no net loss of habitat value or fish and wildlife populations.

“Mitigation” involves actions that proceed in sequence from the highest to the lowest priority as follows:

- A. Avoiding impacts to **environmentally** critical areas by not taking action or parts of actions.
- B. Minimizing impact by limiting the degree or magnitude of the action and its implementation.
- C. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- D. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- E. Compensating for the impact by replacing or providing substitute resources or environments.

While monitoring alone is not considered mitigation for purposes of these regulations, it may be part of a comprehensive mitigation program.

- F. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

“Native vegetation” means vegetation indigenous to the area in question.

“Preservation” (wetlands) means the removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This term includes the purchase of land or easements, repairing water control structures or fences, or structural protection. Preservation does not result in a gain of wetland acres [but may result in a gain in functions over the long term].

“Priority habitat” means a habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes:

- A. Comparatively high fish or wildlife density;
- B. Comparatively high fish or wildlife species diversity;
- C. Fish spawning habitat;
- D. Important wildlife habitat;
- E. Important fish or wildlife seasonal range;
- F. Important fish or wildlife movement corridor;
- G. Rearing and foraging habitat;
- H. Important marine mammal haul-out;
- I. Refugia habitat;
- J. Limited availability;
- K. High vulnerability to habitat alteration;
- L. Unique or dependent species; or
- M. Shellfish bed.

A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife (such as oak woodlands or eelgrass meadows or shrub steppe habitat). A priority habitat may also be described by a successional stage (such as old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as a consolidated marine/estuarine shoreline, talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or nonpriority fish and wildlife.

“Priority habitat and species list” means a list published by the Washington Department of Fish and Wildlife, which is a catalog of habitats and species considered to be priorities

for conservation and management. Priority species require protective measures for their survival due to their population status, sensitivity to habitat alteration, and/or recreational, commercial or tribal importance. Priority species include state endangered, threatened, sensitive and candidate species; animal aggregations (e.g., heron colonies, bat colonies) considered vulnerable; and species of recreational, commercial or tribal importance that are vulnerable. Priority habitats are habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type (e.g., shrub-steppe) or dominant plant species (e.g., juniper savannah), a described successional stage (e.g., old-growth forest) or a specific habitat feature (e.g., cliffs).

“Priority habitat and species map” means maps of plant cover types/communities. Considered by Washington State Department of Fish and Wildlife to contain priority habitat or wildlife species. PHS is a source of best available science that informs local planning activities and land use applications.

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

A. A qualified professional for habitats or wetlands must have a degree in biology, ecology or related field and professional experience related to the subject species. A “qualified wetland specialist” is further defined below.

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

C. A qualified professional for critical aquifer recharge areas must be a currently licensed Washington State geologist holding a current specialty license in hydrology. ~~means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.~~

“Qualified wetland specialist” means a person or firm with experience and training in wetland issues, and with experience in performing delineations, analyzing wetland impacts, and recommending wetland mitigation and restoration. Qualifications include:

A. A Bachelor of Science or Bachelor of Arts or equivalent degree in biology, botany, ecology, environmental studies, fisheries, soil science, wildlife or related field, and two years of related work experience, including a minimum of one year of experience delineating wetlands using the Federal Delineation Manual preparing wetland reports. Additional education may substitute for one year of related work experience; or

B. Four years of related work experience and training, with a minimum of two years’

experience delineating wetlands with the Federal Delineation Manual and preparing wetland reports.

“Reestablishment” means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Reestablishment results in a gain in wetland acres (and functions). Activities could include removing fill material, plugging ditches, or breaking drain tiles.

“Regulated activity” means activities generally including, but not limited to, filling, dredging, dumping, stockpiling, draining, excavation, flooding, construction or reconstruction, driving pilings, obstructing, shading, clearing or harvesting, or any other activity that may impact the functions and values of the nearby critical area as determined by the administrator.

“Rehabilitation” (wetland) means 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. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. [Activities could involve breaching a dike to reconnect wetlands to a floodplain or returning tidal influence to a wetland.]

“Restore,” “restoration” or “ecological restoration” means the reestablishment or upgrading of impaired natural or enhanced ecological processes or functions. This may be accomplished through measures including but not limited to revegetation, removal of intrusive structures and removal or treatment of toxic materials. Restoration does not imply a requirement for returning the area to pre-Columbia Basin Project, aboriginal or pre-European settlement conditions.

“Riparian ecosystem” means the area alongside a water body that significantly influences exchanges of energy and matter among terrestrial and aquatic ecosystems. Along streams and rivers, it includes the active channel, channel migration zone, floodplain, and portions of the adjacent uplands that contribute organic matter and shade, provide space for nutrient cycling, and keep pollutants from entering the stream.

“Riparian management zone” (RMZ) means the fish and wildlife habitat conservation area adjacent to all rivers and streams delineated to protect riparian ecosystem functions and values. Its inner point of measure is the wider of (A) the ordinary high water mark or (B) the outer extent of the channel migration zone. Its width is the greater of (A) 100 feet, (B) one site-potential tree height of a 200-year old tree, and (C) the width needed to reliably remove pollutants as determined through a habitat conservation report.

“Seismic hazard areas” are areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, or surface faulting. 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. The strength of ground shaking is primarily affected by: (A) magnitude of an earthquake; (B) distance from the source of an earthquake; (C) type of thickness of

geologic materials at the surface; and (D) type of subsurface geologic structure.

“Site” means any parcel or combination of contiguous parcels where the proposed project impacts a wetland(s) or other critical area.

“Site-potential tree height” (SPTH) means the average maximum height of the tallest dominant trees (200 years or more) for a given site class. For most of the city of Richland, soils do not support trees that grow in excess of 100 feet. For the few sites that may grow trees taller than 100 feet, SPTH is determined through a habitat conservation report.

“Slope” means an inclined earth surface, the inclination of which is expressed as the ratio of horizontal distance to vertical distance.

“Stormwater” means runoff during and following precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes and other features of a stormwater drainage system into a defined surface water body or a constructed treatment, evaporation or infiltration facility.

“Structural diversity” means the relative degree of diversity or complexity of vegetation in a habitat area as indicated by the stratification or layering of different plant communities (e.g., ground cover, shrub layer, and tree canopy); the variety of plant species; and the spacing or pattern of vegetation.

“Structure” means a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels.

“Substrate” means the soil, sediment, decomposing organic matter or combination of those located on the bottom surface of the wetland.

“Wetland” or “wetlands” refers to areas that are inundated or saturated by surface water 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. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created 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 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands or wetland areas preserved as mitigation for the conversion of wetlands.

“Wetland buffer area” means a naturally vegetated and undisturbed, enhanced or revegetated zone surrounding a natural, restored or newly created wetland that is an integral part of a wetland ecosystem, and protects a wetland from adverse impacts to the

integrity and value of the wetland. Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment, chemical nutrient and toxic pollutants; provide shading to maintain desirable water temperatures; provide habitat for wildlife; and protect wetland resources from harmful intrusion.

“Wetland delineation” means a delineation done in accordance with the approved federal wetland delineation manual and applicable regional supplements as provided for in WAC 173-22-035.

“Wetland determination” means a report prepared by a qualified professional that identifies, characterizes and analyzes potential impacts to wetlands consistent with applicable provisions of these regulations. A determination does not include a formal delineation.

Footnotes to Definitions.

* “Adjacent,” subsection (C) – The distance of 250 feet is based on maximum wetland buffer.

** “Adjacent,” subsection (E) – The distance of 200 feet is a suggested distance to ensure that activities within the critical aquifer recharge area are included under this chapter, even when the exact boundaries of the critical aquifer recharge area are not known at the time of application.

Article III. Wetlands

22.10.050 Reserved.

22.10.060 Reserved.

22.10.070 Regulated activities in wetlands.

The following activities which occur within a wetland and its associated buffer, or outside a wetland or buffer, but affecting the wetland or buffer, shall be regulated pursuant to the standards of this chapter:

- A. Removing, excavating, disturbing or dredging soil, sand, gravel, minerals, organic matter or materials of any kind;
- B. Dumping, discharging or filling with any material;
- C. Draining, flooding or disturbing the water level or water table;
- D. Driving, piling or placing obstructions;
- E. Constructing, reconstructing, demolishing or altering any structure or infrastructure if the activity results in greater impervious surface coverage;

F. Destroying or altering vegetation including through clearing, harvesting, intentional burning, shading or planting vegetation that would alter the character of wetland;

G. Activities that result in significant changes in water temperature, physical or chemical characteristics of wetland water sources, introduction of pollutants, including water quantity and quality as stated in Chapter 90.03 RCW and Chapter 173-201 WAC;

H. Alteration of natural drainage patterns or any activity that results in a discharge of stormwater runoff into a wetland; and

I. Any other activities affecting a wetland or wetland buffer not otherwise exempt from the provisions of this section.

22.10.080 Exemptions and allowed uses in wetlands.

A. See RMC 22.10.360 for general exemptions to all critical areas.

B. Wetlands. The following wetlands are exempt from the buffer provisions contained in this chapter and may be filled if impacts are fully mitigated based on provisions in RMC 22.10.120, Wetland alteration and mitigation. In order to verify the following conditions, a critical area report for wetlands must be submitted.

1. All isolated Category III and IV wetlands less than 1,000 square feet that:
 - a. Are not associated with riparian areas or buffer.
 - b. Are not part of a wetland mosaic.
 - c. Do not contain habitat identified as essential for local populations of priority species identified by Washington Department of Fish and Wildlife or species of local importance.
 - d. Are not a vernal pool.
 - e. Are not an alkali wetland.
 - f. Do not contain aspen stands.

C. Activities Allowed in Wetlands. The activities listed below are allowed in wetlands. These activities do not require submission of a critical area report, except where such activities result in a loss of the functions and values of a wetland or wetland buffer. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.
2. The harvesting of wild crops in a manner that is not injurious to natural reproduction

of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

3. Agricultural activities that are existing and ongoing; provided, that they implement applicable best management practices (BMPs) contained in the latest editions of the USDA Natural Resources Conservation Services Field Office Technical Guide; or develop a farm conservation plan in coordination with the local conservation district. BMPs and/or farm plans should address potential impacts to wetlands from livestock, nutrient and farm chemicals, soil erosion and sediment control and agricultural drainage infrastructure. BMPs and/or farm plans should ensure that ongoing agricultural activities minimize their effects on water quality, riparian ecology, salmonid populations and wildlife habitat.

4. Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. 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 will be disturbed.

5. Enhancement of a wetland through the removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities shall occur in conjunction with removal of invasive plant species.

6. Educational and scientific research activities.

7. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not expand the footprint or use of the facility or right-of-way.

D. Notwithstanding the exemptions provided by this chapter, any otherwise exempt activities occurring in or near wetlands shall comply with the intent of these standards and shall consider on-site alternatives that achieve no net loss of ecological wetland functions.

22.10.090 Wetland inventory maps.

The approximate location and extent of wetlands within the city of Richland's planning area are shown on the critical areas maps adopted as part of this section. These maps shall be used only as a general guide for the assistance of property owners and the public, as the boundaries are generalized. The actual type, extent and boundaries of wetlands

shall be determined in the field by a qualified professional according to the procedures, definitions and criteria established by this chapter. In the event of any conflict between the wetland location or designation shown on the city of Richland’s maps and the criteria or standards of this chapter, the results of applying the criteria and standards during the field investigation shall control.

Additional guidance may be obtained from a Department of Ecology publication “Focus on Irrigation Influenced Wetlands, Publication No. 10-06-015.”

22.10.100 Rating – Categories of wetland.

Wetlands shall be designated Category I, Category II, Category III, or Category IV according to the following:

As set forth in the Washington State Department of Ecology’s Wetland Rating System for Eastern Washington, Publication No. 14-06-030, as may be amended in the future (hereinafter referred to as the Ecology Wetlands Rating System).

22.10.110 Wetland buffer areas.

A. The establishment of wetland buffer areas shall be required for all development proposals and activities adjacent to wetlands to protect the integrity, function and value of the wetland. Buffers shall consist of an undisturbed area of vegetation established to protect the functions and values of the wetland. The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided. Buffers shall be determined in conjunction with considerations of wetland type and quality, approved wetland alterations, and required mitigation measures. Buffers are not intended to be established or to function independently of the wetland they are established to protect; the establishment of a buffer shall not operate to prevent a use or activity that would otherwise be permitted in the wetland subject to mitigation.

B. Buffers shall be measured from the wetland edge as delineated using the 1987 Army Corps of Engineers Wetlands Delineation Manual and the Arid West Regional Supplement, as may be amended. Buffers shall be marked in the field. Required buffer widths shall be determined according to the proposed land use (Table 22.10.110(C) below) and the wetland category in Table 22.10.110(D).

C. The following table describes the types of land use:

Table 22.10.110(C) – Types of Land Uses

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations
High	<ul style="list-style-type: none"> • Commercial • Urban

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations
	<ul style="list-style-type: none"> • Industrial • Institutional • Retail sales • Residential (more than 1 unit/acre) • High-intensity recreation (golf courses, ball fields, etc.) • Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc.) • Hobby farms
Moderate	<ul style="list-style-type: none"> • Residential (1 unit/acre or less) • Moderate-intensity open space (parks with biking, jogging, etc.) • Paved driveways and gravel driveways serving 3 or more residences • Paved trails • Conversion to moderate-intensity agriculture (orchards, hay fields, etc.) • Utility corridor or right-of-way shared by several utilities and including access/maintenance road
Low	<ul style="list-style-type: none"> • Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.) • Timber management (cutting of trees only) • Gravel driveways serving 2 or fewer residences • Unpaved trails • Utility corridor without a maintenance road and little or no vegetation management

D. The following buffer widths are established:

Table 22.10.110(D) – Buffer Widths

Wetland Characteristics	Buffer Width by Impact of Proposed Land Use	Other Measures Recommended for Protection
Category IV Wetlands (For wetlands scoring less than 16 points for all functions)		
Score for all 3 basic functions is less than 16 points	Low – 25 ft. Moderate – 40 ft. High – 50 ft.	None
Category III Wetlands (For wetlands scoring 16 – 18 points for all functions)		
Moderate level of function for habitat (score for habitat 5 – 7 points)	Low – 75 ft. Moderate – 110 ft. High – 150 ft.	None
Score for habitat 3 – 4 points	Low – 40 ft. Moderate – 60 ft. High – 80 ft.	None
Category II Wetlands (For wetlands that score 19 – 21 points or more for all functions or having the “special characteristics” identified in the rating system)		
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 5 – 7 points)	Low – 75 ft. Moderate – 110 ft.	None

Wetland Characteristics	Buffer Width by Impact of Proposed Land Use	Other Measures Recommended for Protection
	High – 150 ft.	
High level of function for water quality improvement and low for habitat (score for water quality 8 – 9 points; habitat less than 5 points)	Low – 50 ft. Moderate – 75 ft. High – 100 ft.	No additional surface discharges of untreated runoff
Vernal pool	200 ft.	None
Riparian forest	Low – 75 ft. Moderate – 110 ft. High – 150 ft.	Riparian forest wetlands need to be protected at a watershed or subbasin scale Other protection based on needs to protect habitat and/or water quality functions
Not meeting above characteristic	Low – 50 ft. Moderate – 75 ft. High – 100 ft.	None
Category I Wetlands (For wetlands that score 22 points or more for all functions or having the “special characteristics” identified in the rating system)		
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. of wetland 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.	Restore degraded parts of buffer Maintain connections to other habitat areas
Moderate level of function for habitat (score for habitat 5 – 7 points)	Low – 75 ft. Moderate – 110 ft. High – 150 ft.	None
High level of function for water quality improvement (8 – 9 points) and low for habitat (less than 5 points)	Low – 50 ft. Moderate – 75 ft. High – 100 ft.	No additional surface discharges of untreated runoff
Not meeting above characteristics	Low – 50 ft. Moderate – 75 ft. High – 100 ft.	None

22.10.115 Buffer modifications.

A. Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:

1. 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.
2. 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 as demonstrated by a critical areas report from a qualified wetland professional.

3. The total area of the buffer after averaging is equal to the area required without averaging.

4. The buffer at its narrowest point is never less than either three-quarters of the required width or 75 feet for Categories I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater.

B. Averaging to allow reasonable use may be allowed when all of the following are met:

1. There are no feasible alternatives to the site design that could be accomplished without buffer averaging.

2. The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report from a qualified wetland professional.

3. The total buffer area after averaging is equal to the area required without averaging.

4. The buffer at its narrowest point is never less than either three-quarters of the required width or 75 feet for Categories I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater.

C. Reduction in Buffer Width Based on Reducing the Intensity of Impacts from Proposed Land Uses.

1. The buffer widths recommended for proposed land uses with high-intensity impacts to wetlands can be reduced to those recommended for moderate-intensity impacts under the following conditions:

a. For wetlands that score moderate or high for habitat (five points or more for the habitat functions), the width of the buffer can be reduced if all three of the following criteria are met:

i. A relatively undisturbed, vegetated corridor at least 100 feet wide is protected between the wetland and any other priority habitats as defined by the Washington State Department of Fish and Wildlife ("relatively undisturbed" and "vegetated corridor" are defined in the Washington State Wetland Rating System for Eastern Washington – 2014 Update, or latest update). Priority habitats in Eastern Washington include:

(A) Wetlands;

(B) Riparian zones;

(C) Cliffs;

(D) Urban natural open space;

(E) Shrub-steppe habitat.

ii. The corridor must be protected for the entire distance between the wetland and the priority habitat by some type of legal protection such as a conservation easement.

iii. Measures to minimize the impacts of different land uses on wetlands, as applicable in Table 22.10.110(D), are applied.

b. For wetlands that score fewer than five points for habitat, the buffer width can be reduced to that required for moderate land-use impacts by applying applicable measures to minimize the impacts of the proposed land uses (see examples in Table 22.10.115(D)).

D. Required Mitigation to Minimize Impacts to Wetlands from Changes in Land Uses with High Impacts.

Table 22.10.115(D)

Types of Disturbance	Examples of Activities and Uses That Cause Disturbances	Required Mitigation
Lights	<ul style="list-style-type: none"> • Parking lots • Warehouses • Manufacturing • Residential areas 	<ul style="list-style-type: none"> • Direct lights away from wetland
Noise	<ul style="list-style-type: none"> • Manufacturing • Residential areas 	<ul style="list-style-type: none"> • Locate activity that generates noise away from wetland • If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source • For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10-ft. heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic runoff*	<ul style="list-style-type: none"> • Parking lots • Roads • Manufacturing • Residential areas • Application of agricultural pesticides • Landscaping 	<ul style="list-style-type: none"> • Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150 ft. of wetland • Apply integrated pest management
Stormwater runoff	<ul style="list-style-type: none"> • Parking lots • Roads • Manufacturing • Residential areas • Commercial • Landscaping 	<ul style="list-style-type: none"> • Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns that directly enters the buffer • Use low-intensity development techniques

Types of Disturbance	Examples of Activities and Uses That Cause Disturbances	Required Mitigation
Change in water regime	<ul style="list-style-type: none"> • Impermeable surfaces • Lawns • Tilling 	<ul style="list-style-type: none"> • Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	<ul style="list-style-type: none"> • Residential areas 	<ul style="list-style-type: none"> • Use privacy fencing; plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion; place wetland and its buffer in a separate tract
Dust	<ul style="list-style-type: none"> • Tilled fields 	<ul style="list-style-type: none"> • Use BMPs to control dust
<p>* These examples are not necessarily adequate for minimizing toxic runoff if sensitive, threatened or endangered species are present at the site.</p>		

E. The minimum buffer width stated in Table 22.10.110(D), Buffer Widths, shall be increased when the qualified professional determines, based upon a site-specific wetland analysis, that impacts on the wetland from a proposed development can only be mitigated by a greater buffer width. The standard wetland buffer width shall be increased:

1. When the adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse wetland impacts; or
2. When the standard buffer has minimal or degraded vegetative cover that cannot be improved through enhancement; or
3. When the wetland provides habitat for a species that is particularly sensitive to disturbance (listed by the federal government or the state as endangered, threatened, candidate, monitored or documented priority species or habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees), the width of the buffer should be increased to provide adequate protection for the species based on its particular life-history needs; or
4. When the minimum buffer for a wetland extends into an area with a slope of greater than 25 percent, the buffer shall be the greater of:
 - a. The minimum buffer for that particular wetland; or
 - b. Twenty-five feet beyond the point where the slope becomes 25 percent or less.

F. Low impact uses and activities (see Table 22.10.110(C)) that are consistent with the purpose and function of the wetland buffer and do not detract from its integrity may be permitted within the buffer depending on the sensitivity of the wetland. Examples of uses and activities that may be permitted in appropriate cases, based on guidance in Wetlands Guidance for CAO Updates, June 2016, Publication No. 16-06-002 and as amended in the future, include pervious pedestrian trails, viewing platforms, normal and routine maintenance of existing facilities within an existing right-of-way and utility easements. Uses permitted within the buffer shall be located in the outer portion of the buffer as far

as possible from the wetland.

G. A variance from buffer width requirements may be granted by the city of Richland hearing examiner following Type II permit procedures and payment of a fee as set forth in RMC Title 19 upon a demonstration by the applicant that the following criteria are met:

1. That the strict application of the bulk, dimensional or performance standards set forth in this title preclude, or significantly interfere with, reasonable use of the property;
2. That the hardship described in subsection (G)(1) of this section is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of this title, and not, for example, from deed restrictions or the applicant's own actions;
3. That the design of the project is compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and applicable development regulations and will not cause adverse impacts to the wetland;
4. That the variance will not constitute a grant of special privilege not enjoyed by the other properties in the area;
5. That the variance requested is the minimum necessary to afford relief; and
6. That the public interest will suffer no substantial detrimental effect.

H. Signs and Fencing of Wetlands and Buffers.

1. Temporary Markers. The outer perimeter of the wetland buffer and the clearing limits identified in an approved permit or land use approval shall be marked in the field with temporary "clearing limits" fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the administrator prior to the commencement of permitted activities. Temporary marking shall be maintained throughout completion of all construction activities.
2. Permanent Signs. As a condition of any permit or land use approval, the administrator may require the applicant to install permanent signs along the boundary of a wetland or its buffer. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post. Signs, when required, shall be posted at an interval of one every 50 feet or one per lot if a lot is less than 50 feet wide and must be maintained by the property owner in perpetuity. Wording of the sign shall note the presence of a protected wetland area and/or wildlife habitat. Specific wording of the sign shall be approved by the administrator.
3. Fencing.
 - a. The applicant shall be required to install a permanent fence around the wetland

or its buffer when domestic grazing animals are present or may be introduced on site.

b. Fencing installed as part of a proposed activity or as required by the administrator shall be designed so as not to interfere with species migration and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.

22.10.120 Wetland alteration and mitigation.

A. All adverse impacts to wetland functions and values shall be mitigated. Mitigation actions by an applicant or property owner shall occur in the following priority sequence:

1. Avoiding the impact by not taking a certain action or parts of actions or moving the action;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology and engineering, or by taking affirmative steps to avoid or reduce adverse impacts;
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
5. Compensating for the impact by replacing or providing substitute resources or environments. Preference shall be given to measures that replace the impacted functions on site or in the immediate vicinity of the impact. However, alternative compensatory mitigation within the watershed that addresses limiting factors or identifies critical needs based on watershed or comprehensive resource management plans may be authorized;
6. Monitoring the adverse impact and taking appropriate corrective measures.

B. Where impacts cannot be avoided, the applicant or property owner shall seek to implement other appropriate mitigation actions in compliance with the intent, standards and criteria of this section. These shall include consideration of alternative site plans and building layouts and/or reduction in the density or scope of the proposal.

C. Alteration of wetlands and/or their buffers may be permitted by the administrator subject to the following criteria:

1. Category I Wetlands. Alterations of Type I wetlands shall be avoided.
2. Category II, III and IV Wetlands.

- a. Any proposed alteration and mitigation shall comply with the requirements of this section through RMC 22.10.150; and
- b. Where enhancement is proposed, replacement ratios comply with the requirements of RMC 22.10.130(C); and
- c. No net loss of wetland function and value will occur due to the alteration; and
- d. Avoids alterations of wetlands previously enhanced or created as mitigation.

22.10.125 Stormwater runoff.

New development within 150 feet of a wetland buffer shall contain stormwater runoff within the developed portions of the site. No stormwater runoff shall drain into the wetland. Deviations from this standard may be approved by the administrator; provided, that a study undertaken by a qualified professional in accordance with the provisions of RMC 22.10.140 indicates that the potential discharge of stormwater runoff from a development site into a wetland is adequately mitigated to protect the functions and values of the wetland. In the case of a Category III or Category IV wetland, stormwater management facilities may be located within the outer 25 percent of the required wetland buffer; provided, that a determination is made that no other location is feasible and the location of such facilities will not have an adverse impact on the functions and values of the wetland.

Streamflows that are influenced by irrigation practices are not considered stormwater runoff for the purposes of this chapter.

22.10.130 Mitigation standards, criteria, and plan requirements.

A. Types of Compensatory Mitigation. Mitigation for lost or diminished wetland and buffer functions shall rely on a type listed below in order of preference. A lower preference form of mitigation shall be used only if the applicant's qualified wetland professional demonstrates to the satisfaction of the administrator that all higher-ranked types of mitigation are not viable, consistent with the criteria in this section.

1. Restoration. Restoration is divided into:

- a. Reestablishment.
- b. Rehabilitation.

2. Creation (Establishment). If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the administrator may authorize creation of a wetland and buffer upon demonstration by the applicant's qualified wetland professional that:

- a. The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that creation of a wetland at the site will

not likely cause hydrologic problems elsewhere;

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

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

3. Enhancement. Applications proposing to enhance wetland or associated buffers shall demonstrate how the proposed enhancement will increase the wetland's buffer's functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.

4. Protection/Maintenance (Preservation). Permanent protection of a Category I or II wetland and associated buffer at risk of degradation can be used only if:

a. The administrator determines that the proposed preservation is the best mitigation option;

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

c. The area proposed for preservation is of high quality or critical for the health of the watershed or basin due to its location. Some of the following features may be indicative of high-quality sites:

i. Category I or II wetland rating (using the wetland rating system for Eastern Washington);

ii. Rare or irreplaceable wetland type or aquatic habitat that is rare or a limited resource in the area;

iii. The presence of habitat for priority or locally important wildlife species;

iv. Provides biological and/or hydrological connectivity;

v. Priority sites in an adopted watershed plan.

d. Permanent preservation of the wetland and buffer will be provided through a conservation easement or tract held by an appropriate natural land resource manager, such as a land trust;

e. The administrator may approve other legal and administrative mechanisms in lieu of a conservation easement if determined to be adequate to protect the site;

f. Ratios for preservation in combination with other forms of mitigation generally range from 10:1 to 20:1, as determined on a case-by-case basis, depending on the quality of the wetlands being impacted and the quality of the wetlands being preserved. Ratios for preservation as the sole means of mitigation generally start at 20:1.

B. Location and Timing of Mitigation.

1. Location of Compensatory Mitigation. Compensatory mitigation actions shall be conducted within the same subdrainage basin and on the site of the alteration except when all of subsections (B)(1)(a) through (d) of this section apply. In that case, mitigation may be allowed off site within the subwatershed of the impact site. When considering off-site mitigation, preference should be given to using alternative mitigation, such as a mitigation bank, an in-lieu fee program, or advanced mitigation.

a. There are no reasonable opportunities on site or within the subdrainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the subdrainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity).

b. On-site mitigation would require elimination of high-quality upland habitat.

c. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the altered wetland.

d. Off-site locations shall be in the same subdrainage basin unless:

i. Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the city and strongly justify location of mitigation at another site.

ii. The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source[s] and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing seasonally saturated or inundated

wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.

2. Timing of Compensatory Mitigation. It is preferred that compensatory mitigation projects be completed prior to activities that will disturb wetlands. At the least, compensatory mitigation shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

3. The administrator may authorize a one-time, temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified wetland professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the administrator.

C. Mitigation Performance Standards.

1. Adverse impacts to wetlands functions and values shall be mitigated. Mitigation actions shall be implemented in the preferred sequence identified in RMC 22.10.120(A). Proposals which include less preferred and/or compensatory mitigation shall demonstrate that:

a. All feasible and reasonable measures will be taken to reduce impacts and losses to the original wetland, including a description of how preferred order of wetlands mitigation was followed: (i) restoration (including reestablishment and rehabilitation); (ii) creation (establishment); (iii) enhancement in combination with restoration or creation; and (iv) preservation of high quality, at-risk wetlands;

b. Compensatory mitigation shall be allowed only after mitigation sequencing is applied and higher priority means of mitigation are determined to be infeasible, and shall achieve equivalent or greater wetland ecological functions;

c. No overall net loss will occur in wetland functions and values; and

d. The restored, created or enhanced wetland will be as persistent and sustainable as the wetland it replaces.

D. Wetland Replacement Ratios.

1. Where wetlands alterations are permitted by the administrator, the applicant shall restore or create equivalent areas of wetlands in order to compensate for wetland losses. Equivalent areas shall be determined according to acreage, function, type, location, timing factors, and projected success of restoration or creation.

2. The following acreage replacement ratios shall be applied:

Table 22.10.130(C) Mitigation Ratios for Eastern Washington¹

Category and Type of Wetland Impacts	Reestablishment or Creation	Rehabilitation Only ²	Reestablishment or Creation (R/C) and Rehabilitation (RH) ²	Reestablishment or Creation (R, C) and Enhancement (E) ²	Enhancement Only ²
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	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	12:1
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 possible ³	Case-by-case	R/C not considered possible ³	R/C not considered possible ³	Case-by-case

¹ Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or reestablishment. See Table 1b, Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance – Version 1, (Ecology Publication No. 06-06-011a, Olympia, WA, March 2006 or as revised).

² These 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.

³ Natural Heritage sites, alkali wetland, and bogs are considered irreplaceable wetlands because they perform some 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.

Reference: Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10. March 2006. Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance (Version 1). Washington State Department of Ecology Publication No. 06-06-011a. Olympia, WA.

3. Credit/Debit Method. To more fully protect functions and values, and as an alternative to the mitigation ratios found in the joint guidance “Wetland Mitigation in Washington State Parts I and II” (Ecology Publication No. 06-06-011a-b, Olympia, WA, March 2006, or as revised), the administrator may allow mitigation based on the “credit/debit” method developed by the Department of Ecology in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report” (Ecology Publication No. 11-06-015, August 2012, or as revised).

22.10.140 Wetland mitigation plan requirements.

Where it is determined by the administrator that compensatory wetland mitigation is required or appropriate, a mitigation plan shall be prepared consistent with the provisions below and shall also meet the minimum requirements contained in the Wetlands Guidance for CAO Updates, June 2016, Publication No. 16-06-002 and as amended in the future). The purpose of the plan is to prescribe mitigation to compensate for impacts to the wetland functions, values and acreage as a result of the proposed action. This plan shall consider the chemical, physical, and biological impacts on the wetland system using a recognized wetlands assessment methodology and/or best professional judgment. The mitigation plan shall be prepared in two phases, a conceptual phase and a detailed phase.

A. Conceptual Plan – Standards and Criteria. The applicant shall prepare a conceptual mitigation plan for submission to the administrator at a premitigation conference. The conceptual mitigation plan shall include:

1. General goals of the mitigation plan;
2. A review of literature or experience to date in restoring or creating the type of wetland proposed;
3. Location of proposed wetland compensation area;
4. General hydrologic patterns on the site following construction;
5. Nature of compensation, including wetland types (in-kind), general plant selection and justification, approximate project sequencing and schedule, and approximate size of the new wetland buffer;
6. A conceptual maintenance plan; and
7. Conceptual monitoring and contingency plan.

B. Detailed Plan – Standards and Criteria. Following acceptance of the conceptual mitigation plan by the administrator, the applicant will prepare a detailed mitigation plan. Each detailed plan shall contain, at a minimum, the following seven components, and shall be consistent with the standards in RMC 22.10.100 through 22.10.130:

1. A clear statement of the objectives of the mitigation. The goals of the mitigation plan should be stated in terms of the new wetland functions and values compared to the functions and values of the original wetland. Objectives should include:
 - a. Qualitative and quantitative standards for success of the project, including hydrologic characteristics (water depths, water quality, hydroperiod/hydrocycle characteristics, flood storage capacity); vegetative characteristics (community types, species composition, density, and spacing); faunal characteristics, and final topographic elevations.

b. An ecological assessment of the wetland values and wetland buffers that will be lost as a result of the activities, and of the replacement wetlands and buffers, including but not limited to the following:

- i. Acreage of project;
- ii. Existing functions and values;
- iii. Sizes of wetlands, wetland buffers, and areas to be altered;
- iv. Vegetative characteristics, including community type, areal coverage, species composition, and density;
- v. Habitat type(s) to be enhanced, restored, or created; and
- vi. Dates for beginning and completion of the mitigation project, and sequence of construction activities.

2. A statement of the location, elevation, and hydrology of the new site, including the following:

- a. Relationship of the project to the watershed and existing water bodies;
- b. Topography of site using the smallest readily available intervals, preferably one-foot contour intervals but two-foot are acceptable;
- c. Water level data, including depth and duration of seasonally high water table;
- d. Water flow patterns;
- e. Grading, filling and excavation, including a description of imported soils;
- f. Irrigation requirements, if any;
- g. Water pollution mitigation measures during construction;
- h. Areal coverage of planted areas to open water areas (if any open water is to be present); and
- i. Appropriate buffers.

3. A planting plan, describing what will be planted, and where and when the planting will occur, as follows:

- a. Soils and substrate characteristics;

- b. Specify substrate stockpiling techniques; and
 - c. Planting instructions, including species, stock type and size, density or spacing of plants, and water and nutrient requirements.
4. A monitoring and maintenance plan, consistent with RMC 22.10.160.
- a. Specify procedures for monitoring and site maintenance including control of invasive species; and
 - b. Submit monitoring reports to the administrator.
5. A contingency plan, consistent with these regulations.
6. A detailed budget for implementation of the mitigation plan, including monitoring, maintenance and contingency phases.
7. A guarantee, in the form of a bond or other security device in a form and amount acceptable to the city attorney, assuring that the work will be performed as planned and approved, consistent with these regulations, including monitoring, maintenance and contingency.

22.10.150 Design standards for wetlands mitigation planning.

A. The following performance standards shall be incorporated into mitigation plans submitted to the city of Richland:

- 1. Plants should be indigenous to the region (not introduced or foreign species);
- 2. Plants should be adaptable to a broad range of water depths;
- 3. Plants should be commercially available or available from local sources;
- 4. Plant species high in food and cover value for fish and wildlife are recommended, when possible;
- 5. Plants should be mostly perennial species;
- 6. Avoid committing significant areas of site to species that have questionable potential for successful establishment;
- 7. Plant selection must be approved by wetlands biologist/ecologist;
- 8. Water depth is not to exceed six and one-half feet (two meters);
- 9. The grade or slope that water flows through the wetland is not to exceed six percent;

10. Slopes within the wetland basin and the buffer zone should not be steeper than 3:1 (horizontal to vertical);

11. The substrate should consist of a minimum of one foot, in depth, of clean (uncontaminated with chemicals, or solid/hazardous wastes) inorganic/organic materials;

12. Planting densities and placement of plants should be determined by a qualified professional and shown on the design plans;

13. The wetland (excluding the buffer area) should not contain more than 60 percent open water as measured at the seasonal high water mark;

14. Minimum buffer widths should extend from the wetland boundary in accordance with buffer requirements in Table 22.10.110(D), Buffer Widths, for the proposed category rating of the wetland that will be created;

15. The planting plan must be approved by the community development administrator or qualified professional acting on behalf of the city;

16. Stockpiling should be confined to upland areas and contract specifications should limit stockpile durations to less than four weeks. Any area designated as open space shall not be used to stockpile material;

17. Planting instructions which describe proper placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;

18. Apply controlled-release fertilizer, if reasonable and prudent, at the time of planting and afterward only as plant conditions warrant (determined during the monitoring process);

19. Install an irrigation system, if necessary, for initial establishment period; and

20. Construction specifications and methods must be approved by a qualified professional and the administrator.

B. On completion of construction, the wetland mitigation project must be signed off by the applicant's qualified professional and the administrator. Signature will indicate that the construction has been completed as planned and all design elements have been fully and correctly implemented. If there have been changes in the implementation of the plan, a written explanation from the qualified professional must be included.

22.10.160 Wetland monitoring program and contingency plan.

A. A monitoring program shall be implemented to determine the success of the mitigation project and any necessary corrective actions. This chapter shall determine if the original goals and objectives are being met.

B. A contingency plan shall be established for compensation in the event that the mitigation project is inadequate or fails. A performance and maintenance bond or other acceptable security device is required to ensure the applicant's compliance with the terms of the mitigation agreement. The amount of the performance and maintenance bond shall equal 125 percent of the cost of the mitigation project for a period of five years. The administrator may agree to reduce the bond in phases in proportion to work successfully completed over the period of the bond.

1. During monitoring, scientific procedures for establishing the success or failure of the project must be used and shall be identified in the monitoring plan;
2. For vegetation determinations, permanent monitoring transects or plots shall be established that adequately represent the compensatory mitigation site;
3. Vegetative success in the compensatory mitigation wetland will be defined as:
 - a. An average density of at least four plants per 100 square feet in the scrub-shrub and forested communities in year one;
 - b. A cover of native wetland trees and shrubs combined (planted and volunteer) of at least 10 percent in year three; 25 percent in year five; 40 percent in year seven; 50 percent in year 10;
 - c. A cover of native wetland herbaceous plant species (planted and volunteer) of at least 25 percent in year five; 40 percent in year seven and 50 percent in year 10;
 - d. Nonnative invasive species must be controlled per site-specific specifications and shall not exceed the maximum amount as identified in the approved monitoring plan;
 - e. Buffer vegetation shall be maintained in the amount as identified in the approved monitoring plan;
4. Submit monitoring reports on the current status of the mitigation project to the administrator. The reports are to be prepared by a qualified professional and reviewed by the administrator and should include monitoring information on wildlife, vegetation, water quality, water flow, stormwater storage and conveyance, and existing or potential degradation, and shall be produced for years one, two, three, four, seven and 10. Monitoring reports shall incorporate hydrology standards to ensure the required wetland habitat and buffer areas are established and functioning and shall detail the minimum number of days during the growing season when soils must remain inundated or saturated to the ground surface;
5. Monitor for 10 growing seasons. If the mitigation goals are obtained within the initial five-year period, no further monitoring will be required;

6. If necessary, correct for failures in the mitigation project;
7. Replace dead or undesirable vegetation with appropriate plantings, based on the approved planting plan or RMC 22.10.150;
8. Repair damages caused by erosion, settling, or other geomorphological processes;
9. Redesign mitigation project (if necessary) and implement the new design;
10. Correction procedures shall be approved by a qualified professional and the administrator; and
11. The area where the mitigation occurred and any associated buffer shall be located in a critical area tract, a conservation easement or similar legal instrument as approved by the administrator to ensure the future protection of the mitigation site.

Article IV. Fish and Wildlife Habitat Conservation Areas

22.10.170 Reserved.

22.10.180 Exemption from fish and wildlife habitat conservation area regulations.

A. See RMC 22.10.360 for general exemptions to all critical areas.

B. The following activities shall be exempt from the provisions of this chapter related to fish and wildlife habitat conservation areas, provided they are conducted using best management practices:

1. Activities involving artificially created habitat, including but not limited to grass-lined swales, irrigation and drainage ditches, detention facilities such as reservoirs, ponds, and landscape features, except for habitat areas created as mitigation.

C. Notwithstanding the exemption provided by this section, any otherwise exempt activities occurring in or near critical habitat areas shall comply with the intent of these standards and shall consider on-site alternatives that avoid or minimize potential habitat impacts and shall consider the timing of exempt work to minimize disturbances to wildlife including disturbance to migratory bird nesting sites.

22.10.185 Fish and wildlife habitat conservation areas.

A. Fish and wildlife habitat conservation areas include the following:

1. Areas where state or federal designated endangered, threatened, and sensitive species have a primary association.
 - a. Federal designated endangered and threatened species are those fish, wildlife and plant species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become

endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted as necessary for current listing status.

b. State designated endangered, threatened and sensitive species are those fish, wildlife and plant species native to the state of Washington identified by the State Department of Fish and Wildlife and/or State of Washington Natural Heritage Program that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. The state of Washington's Department of Fish and Wildlife and/or Natural Heritage Program maintains the most current listings and should be consulted as necessary for current state listing status;

2. State priority habitats and areas associated with state priority species.

a. State of Washington priority habitats and species are considered priorities for conservation and management. The state of Washington's Department of Fish and Wildlife should be consulted for current listing of priority habitats and species;

3. Habitats and species of local importance. The city of Richland hereby adopts by reference those priority habitats and species considered priorities for conservation and management identified by the State Department of Fish and Wildlife and State of Washington Natural Heritage Program as now exist or as may be amended;

4. In addition to the priority habitats and species recognized by WDFW and/or State of Washington Natural Heritage Program, a process is provided for listing other habitats and species that are important locally to the people of Richland. This action may be initiated at the request of the Washington State Department of Fish and Wildlife, other government agency, city staff, nonprofit organization or interested citizen. Any such request shall be in writing and shall include:

a. The common and scientific name for a species under consideration;

b. Habitat location on a map (scale 1:24,000);

c. Demonstrate a need for special consideration based upon best available science and considering:

i. Declining or increasing population;

ii. Sensitivity to habitat manipulation; or

iii. Commercial or game value or other special value, such as public appeal;

d. Habitat management recommendations, including potential uses and restrictions of the habitat areas, seasonally sensitive areas and other guidelines necessary for

the protection of the species;

e. Reasons for the species/habitat to be designated;

f. Name and address of the nominator, along with a list of property owners and mailing addresses for each property mapped as containing habitat and/or species;

g. Other supporting documentation (as determined by the administrator);

h. SEPA checklist;

i. Fee as established by the city of Richland fee schedule.

Submitted proposals shall be reviewed by city staff as a Type IV legislative action pursuant to RMC 19.20.010(D)(2) and Chapter 19.90 RMC. Suggested amendments to this section of the critical areas regulations shall result in amendment no more often than once each calendar year with the deadline for submittal being January 31st. Copies of the proposal shall be submitted to WDFW and/or other local, state or federal agencies or experts for comments and recommendations regarding accuracy of the data and effectiveness of proposed management strategies as part of the public comment period. Approved nominations will be designated priority habitats/species as appropriate and will be given all protection under this chapter afforded other priority habitats and species;

5. The areas listed as a national wildlife refuge, national park, natural area preserve or any preserve or reserve designated under WAC 332-30-151;

6. The Yakima River Delta area, including Lake Wallula wildlife habitat areas currently managed by the U.S. Army Corps of Engineers, the Chamna Natural Preserve, Bateman Island;

7. The Hanford Islands in the Columbia River managed by the U.S. Fish and Wildlife Service;

8. Amon Creek Natural Preserve;

9. Badger Mountain Natural Preserve;

10. Category I wetlands as defined in RMC 22.10.100;

11. State nature area preserves or natural resource conservation areas and state wildlife areas;

12. Documented habitat, other than accidental presence, of threatened or endangered species;

13. Documented habitat, other than accidental presence, of regional or national

significance for migrating birds;

14. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat;

15. Waters of the state;

16. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.

B. Fish and wildlife habitat conservation areas are intended to:

1. Create a system of fish and wildlife habitat with connections between larger habitat blocks and open spaces, integrating with open space corridor planning where appropriate;

2. Limit the level of human activity within such areas that is appropriate for certain areas and habitats, including presence of roads and level of recreation type (passive or active recreation);

3. Protect riparian ecosystems including potential for restoring lost or impaired salmonid habitat;

4. Evaluate land uses that may negatively impact these areas, or conversely, that may contribute positively to their function;

5. Establish buffer zones around these areas to separate incompatible uses from habitat areas;

6. Establish or enhance nonregulatory approaches in addition to regulatory methods to protect fish and wildlife habitat conservation areas.

22.10.190 Fish and wildlife habitat conservation area inventory maps.

To determine the location and extent of fish and wildlife habitat conservation areas, the city shall use best available science, including current information contained in priority habitats and species maps as maintained by the Washington State Department of Fish and Wildlife. These maps shall be used as a general guide only for the assistance of property owners and other interested parties; boundaries are generalized. The actual type, extent, and boundaries of habitat areas shall be determined by a qualified professional according to the procedures, definitions, and criteria established by this article. In the event of any conflict between the habitat location or type shown on maps and the criteria or standards of this article, the criteria and standards resulting from the field investigation shall control.

Recovery plans and management recommendations for many of these species are available from the United States Fish and Wildlife Service, the National Marine Fisheries

Service and the Washington State Department of Fish and Wildlife. Additional information is also available from the Washington State Department of Natural Resources, Natural Heritage Program, and Aquatic Resources Program.

It is also possible that unmapped areas may include priority habitats or species (PHS), endangered, threatened or sensitive (ETS) species, or habitats and species of local importance (HSLI). If such a species is known to exist within an unmapped area, the type, extent and boundaries of this area shall be determined by a qualified professional.

22.10.200 Requirements for habitat conservation area reports.

When development is proposed within a fish and wildlife habitat conservation area or its buffer, or where development is proposed to be located adjacent to a fish and wildlife habitat conservation area or its buffer or close enough to the FWHCA so as to likely impact critical area ecosystem functions and values, a habitat conservation report shall be prepared consisting of the following:

A. The report shall be prepared by a qualified professional using the best available science;

B. The area addressed in any report for a fish and wildlife habitat conservation area shall include the project area and adjacent lands within 300 feet of the project boundaries to account for potential buffers that may not be accurately mapped at the time of application. Further the report shall identify all habitat conservation areas, shorelines, floodplains, other critical areas and related buffers;

C. A habitat conservation report shall include an assessment to evaluate the presence or absence of priority habitat. At a minimum the habitat assessment shall include:

1. Detailed description of vegetation on and adjacent to the project area, including the existence or nonexistence of plant species native to the state of Washington identified by the State of Washington Natural Heritage Program that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats;

2. Identification of any priority species and habitats (PHS) or any endangered, threatened, sensitive or candidate species and any habitat or species of local concern that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the protected habitat or use of the site by the species;

3. A discussion of any federal, state or local special management recommendations, including Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;

4. A discussion of measures, including avoidance, minimization and mitigation

proposed to preserve existing habitats or restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with RMC 22.10.220 (mitigation sequencing);

5. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs;

6. When warranted, the administrator may require detailed surface and subsurface hydrologic features both on and adjacent to the site;

D. Habitat conservation area reports shall be forwarded to the Washington Department of Fish and Wildlife and local Native American Indian tribes to provide them with an opportunity to comment on the adequacy and accuracy of the report;

E. The administrator may waive the requirement for the preparation of a habitat conservation area report upon a determination that by reason of previous development that the proposed project site does not provide functional habitat. Such waiver shall be made in writing and a copy shall be provided to the Washington State Department of Fish and Wildlife.

22.10.210 Fish and wildlife habitat conservation area – Performance standards.

Development or any regulated activity occurring within a designated habitat conservation area or within its respective protection buffer, or development or any regulated activity proposed to occur adjacent to, or close enough to, a habitat conservation area so as to likely impact critical area ecosystem functions and values, shall only be permitted in accordance with the conditions of an approved habitat conservation area report. Such report shall be based on the following standards using the best available science:

A. Consider habitat in site planning and design;

B. Locate buildings and structures in a manner that preserves and minimizes adverse impacts to important habitat areas, including use of bird-friendly building design and use of dark sky lighting standards;

C. Integrate retained habitat into open space and native plantings, consistent with the provisions of all open space and landscaping requirements;

D. Activity within or close to a habitat conservation area shall not result in the degradation of the functions and values of the habitat;

E. Nonindigenous species shall not be introduced into a habitat conservation area;

F. Contiguous corridors through a project area shall be maintained. Measures necessary to mitigate impacts within a habitat conservation area shall attempt to achieve contiguous functioning habitat corridors in order to minimize the isolating effects of development on

habitat;

G. Identify habitat contiguous to other habitat areas, open space or landscape areas to contribute to a continuous system or corridor that provides connections to adjacent habitat areas and allows movement of wildlife;

H. Use native species in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat areas;

I. Emphasize heterogeneity and structural diversity of vegetation in landscaping and food producing plants beneficial to wildlife;

J. Width of riparian corridors shall be in accordance with buffer widths suggested by BAS, including WDFW publication Riparian Ecosystems, Volume 2: Management Recommendations, May 2018, or as revised. Riparian corridors shall also meet the minimum requirements as established in RMC Title 26 and wetland buffer requirements as established in RMC 22.10.110;

K. Activities within a habitat conservation area shall be conditioned as identified in the habitat conservation area report to avoid, minimize, or mitigate potential adverse impacts. Conditions shall include protective buffers based on the State of Washington Department of Fish and Wildlife management recommendations for Washington's priority species modified for local conditions and the recommendations of the Department of Fish and Wildlife biologists and may include, but are not limited to, the following measures:

1. Establishment of undisturbed habitat areas;
2. Staking of undisturbed habitat areas prior to any construction, including clearing, grading and filling taking place on site;
3. Fencing of undisturbed habitat areas in a manner consistent with the provisions of RMC 22.10.115(H);
4. Temporary erosion and sedimentation controls, pursuant to an approved plan, shall be implemented during construction;
5. Preservation of critically important vegetation;
6. Supplemental planting of native tree or shrub cover;
7. Removal and/or control of any noxious or undesirable species of plants and animals;
8. Preservation of significant trees and/or snags, preferably in groups, consistent with achieving the objectives of these standards;

9. Replanting of disturbed areas and/or areas where noxious weed species were removed with native vegetation types, including ongoing plans for weed control and irrigation as appropriate;
10. Limitation of access to an identified habitat area, including fencing to deter unauthorized access;
11. Seasonal restriction on construction activities;
12. Implementation of a schedule for periodic review of completed mitigation measures for a specified time period;
13. Posting of a bond or other financial surety to ensure completion and success of proposed mitigation measures. Such bond or other security device shall be required to assure successful establishment of required planting for an appropriate monitoring period. The amount of the bond or other security device shall equal 125 percent of the cost of the mitigation project for a period of five years. The administrator may agree to reduce the bond in phases in proportion to work successfully completed over the period of the bond.

22.10.220 Fish and wildlife habitat conservation area alteration.

A. Adverse impacts to habitat functions and values shall be mitigated to the extent feasible and reasonable. Mitigation actions by an applicant or property owner shall occur in the following preferred sequence:

1. Avoiding the impact altogether by not taking a certain action or parts of actions;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology and engineering, or by taking affirmative steps to avoid or reduce adverse impacts;
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
5. Compensating for the impact by replacing, enhancing, or providing similar substitute resources or environments. Preference shall be given to measures that replace the impacted functions on site or in the immediate vicinity of the impact;
6. Monitoring the impact over time and taking corrective measures to minimize additional impacts.

B. Where impacts cannot be avoided, the applicant or property owner shall seek to implement other appropriate mitigation actions in compliance with the intent, standards

and criteria of this section. In an individual case, these actions may include consideration of alternative site plans and layouts, reductions in the density or scope of the proposal, and/or implementation of the performance standards listed in RMC 22.10.210.

22.10.230 Fish and wildlife habitat performance standards and incentives.

Repealed by Ord. 40-17.

Article V. Geologically Hazardous Areas

22.10.240 Identification and definition.

A. Geologically hazardous areas identification and designation shall be consistent with the minimum guideline classifications established in WAC 365-190-120 which includes any future amendments to the code. Areas that are susceptible to one or more of the following types of hazards shall be classified as a geologically hazardous area:

1. Erosion hazard;
2. Landslide hazard;
3. Seismic hazard; and
4. Mine hazard.

B. Erosion Hazard Areas. Those areas that are identified by the United States Department of Agriculture Soil Conservation Service as having a severe rill and inter-rill erosion hazard.

C. Landslide Hazard Areas. Those areas that are potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Landslide hazard areas include, but are not limited to, the following types of areas:

1. Areas delineated by the United States Department of Agriculture Soil Conservation Service as having a severe limitation for building site development;
2. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the United States Geological Survey or Department of Natural Resources Division of Geology and Earth Resources;
3. Areas with all three of the following characteristics:
 - a. Areas with slope steeper than 15 percent;
 - b. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

c. Springs or ground water seepage;

4. 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 that epoch;

5. Areas with slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

6. Areas with slopes having gradients steeper than 80 percent subject to rockfall during seismic shaking;

7. Areas potentially unstable as a result of rapid stream incision, stream bank erosion and undercutting by wave action;

8. Areas that show evidence of, or on, an active alluvial fan presently or potentially subject to inundation by debris flows or catastrophic flooding; or

9. Areas with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.

D. Seismic Hazard Areas. Those areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, or surface faulting. 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. The strength of ground shaking is primarily affected by: (1) magnitude of an earthquake; (2) distance from the source of an earthquake; (3) type of thickness of geologic materials at the surface; and (4) type of subsurface geologic structure.

E. Mine Hazard Areas. Those areas underlain by, adjacent to, or affected by mine working areas as designated by the Washington State Department of Natural Resources.

22.10.250 Applicability to geologically hazardous areas.

The provisions of this article shall apply to any activity that occurs in or within 200 feet of a geologically hazardous area unless otherwise exempt. These activities include but are not limited to the following:

A. Removing, excavating, disturbing or dredging soil, sand, gravel, minerals, organic matter or materials of any kind;

B. Dumping, discharging or filling with any material;

C. Driving piling or placing obstructions;

D. Constructing, reconstructing, demolishing or altering the size of any structure or infrastructure which has an adverse effect on a geologically hazardous area; destroying or altering vegetation through clearing or harvesting; road construction; utility installation; and any project permit established in Chapter 19.20 RMC.

22.10.260 Geologically hazardous area inventory maps.

The approximate location and extent of geologically hazardous areas within the city of Richland's planning area are shown on the critical areas maps adopted as part of this chapter. These maps should be used as a general guide only for the assistance of property owners and the city of Richland to identify and designate geologically hazardous areas.

22.10.270 Preliminary assessment.

A. The administrator shall conduct a preliminary assessment of the proposed activity. The preliminary assessment shall consist of reviewing geologically hazardous inventory maps, conducting an on-site evaluation, and, if necessary, consulting with state and/or federal agencies to determine whether there is a reasonable belief that a proposed activity may be present within 200 feet of a geologically hazardous area. In the event there is a disagreement as to whether the activity is within 200 feet of a geologically hazardous area, a geologic report prepared by a qualified professional as defined in RMC 22.10.380 shall be required, at the property owner or applicant's expense, to determine this issue.

B. If it is determined that there is a reasonable belief that a proposed activity may be present within 200 feet of a geologically hazardous area, then geologic reports and studies are required at the property owner's or applicant's expense.

22.10.280 Geologic reports and studies.

Geologic studies and reports shall comply with the requirements established in RMC 22.10.370(B)(6), permit process and application requirements.

22.10.290 Administrative evaluation of geologic reports and studies.

The administrator shall review the geologic reports and studies to determine the significant risks posed by the activity to life and property on and off the project site. The city of Richland may approve, conditionally approve or deny an activity, as appropriate, based on the degree to which significant risks are posed to public and private property and to the health and safety of the community. Conditional approval of the activity may include mitigation measures based on the geologic reports and studies. Where potential impacts of the activity cannot be effectively mitigated, or where the risk to public health, safety and welfare of the community is significant notwithstanding mitigation, the activity shall be denied.

22.10.295 Assurance.

The administrator may require assurance from the owner or applicant and/or qualified professional that the activity creates a minimal risk of danger to life or property on or off the project site. Such assurance may include the following:

A. A letter from the qualified professional who prepared the required study and report stating that the activity creates a minimal risk of danger to life or property on or off the project site; or

B. A letter from the owner or applicant stating its understanding and acceptance of any risk of injury or damage associated with the activity and agreeing to notify any future purchasers of the site, portions of the site, or structures located on the site of the geologic hazard.

Article VI. Critical Aquifer Recharge Areas Protection

22.10.300 Identification and definition.

Critical aquifer recharge areas (CARAs) are defined as those areas having a critical recharging effect on aquifer use for potable water in community systems. CARAs are classified and designated as follows:

A. Those areas designated as “wellhead protection areas” pursuant to WAC 246-290-135(3) and the ground water contribution area in WAC 246-291-125. Wellhead protection areas shall, for the purpose of this regulation, include the identified recharge areas associated with either Group A ~~public water supply wells and those~~ or Group B ~~public water supplies wells with a wellhead protection plan filed with the city and/or Benton Franklin Health District~~; and

B. Any land identified in the soil survey of Benton County as having high potential for aquifer recharge, as determined by the administrator.

In order to protect the public health and safety, prevent degradation of ground water and for potentially usable potable water, and to provide for regulations that prevent and control risks to the degradation of ground water quality and quantity, development in CARAs shall be subject to the standards described in this section.

22.10.310 Critical aquifer recharge area maps.

The approximate location and extent of aquifer recharge areas are shown on the critical areas maps. Wellhead protection areas are shown in the ~~state Department of Health’s Source Water Assessment Program mapping city’s adopted wellhead protection plan as presented in the city’s 2017 Water System Plan~~. These maps should be used as a general guide only for the assistance of property owners and the city of Richland to identify and designate critical aquifer recharge areas.

22.10.320 Exemptions from critical aquifer recharge area regulations.

A. See RMC 22.10.360 for general exemptions to all critical areas.

B. The following activities shall be exempt from the CARA provisions of this section, provided they are conducted using best management practices for protecting surface and ground water quality:

1. Single-family residential development.
2. Development and improvement of parks, recreation facilities, open space, or conservation areas resulting in less than five percent total site impervious surface area that do not increase the use of a hazardous substance.
3. Group A [and Group B](#) public water system source development and associated infrastructure.
4. Public water supply aquifer storage and recovery (ASR) facilities.
5. Public water pipelines and supply storage structures.
6. The following underground storage tank (UST) systems, including any piping connected thereto:
 - a. Any UST system holding hazardous wastes subject to Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances;
 - b. Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act;
 - c. Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks;
 - d. Any UST system whose capacity is 110 gallons or less;
 - e. Any UST system that contains a de minimis concentration of regulated substances;
 - f. Any emergency spill or overflow containment UST system that is expeditiously emptied after use;
 - g. UST systems used for storing heating oil for consumptive use on the premises where stored; except that such systems which store in excess of 1,100 gallons are subject to the release reporting requirements of WAC 173-360-372;
 - h. Any pipeline facility (including gathering lines) regulated under:
 - i. The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.), or
 - ii. The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.), or
 - iii. Which is an intrastate pipeline facility regulated under state laws comparable

to the provisions of the law referred to in subsection (B)(6)(h)(i) or (ii) of this section;

i. Surface impoundments, pits, ponds, or lagoons;

j. Stormwater or wastewater collection systems;

k. Flow-through process tanks;

l. Storage tanks situated in an underground area (such as a basement, cellar, vault, mineworking drift, shaft, or tunnel), if the storage tank is situated upon or above the surface of the floor.

22.10.330 Reports and studies.

Reports for CARAs shall be submitted to the administrator by the applicant when a development proposal activity not otherwise exempted as provided in RMC 22.10.320 is proposed on a parcel within an aquifer recharge area. Requirements for a ~~hydrogeologic assessment~~ [critical aquifer recharge area report](#) are found in RMC 22.10.370.

22.10.340 Performance standards.

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

B. The proposed activity must comply with the [source](#) water ~~source~~ protection requirements and recommendations of the U.S. Environmental Protection Agency, Washington State Department of Health, Washington State Department of Ecology, and the Benton-~~Franklin~~ [County](#) Health [District](#). ~~Department~~.

C. The proposed activity must be designed and constructed in accordance with existing local, state and federal laws and regulations, and the Stormwater Management Manual for Eastern Washington, as amended (Ecology ~~2004~~[2019](#)), and/or the locally adopted program, as applicable.

22.10.350 Uses prohibited in critical aquifer recharge areas.

The following activities and uses are prohibited in CARAs:

A. Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste landfills;

B. Underground Injection Wells. Class I, III, and IV wells, [and underground injection wells that do not comply with Chapter 173-218 WAC or Chapter 173-200 WAC and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells](#);

C. Mining in critical aquifer recharge areas determined to be highly susceptible ~~in the~~

~~city's wellhead protection plan.~~

1. Metals and hard rock mining;

2. Sand and gravel mining;

D. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);

E. Storage, Processing, or Disposal of Radioactive Substances. Facilities that store, process, or dispose of radioactive substances.

Article VII. General Standards Information

22.10.360 General exemptions.

The following activities shall be exempt from the provisions of this chapter, provided they are conducted using best management practices and minimize and/or mitigate the impacts to critical areas:

A. Existing and ongoing agricultural activities, as defined in RMC 22.10.040 and subject to the provisions found in RMC 22.10.080(C)(3);

B. Maintenance, operation and reconstruction of existing roads, streets, utilities, and associated structures; provided, that reconstruction of any structures may not increase the impervious area;

C. Normal maintenance, repair and reconstruction of residential or commercial structures; provided, that reconstruction of any structures may not increase the impervious floor area;

D. Site investigative work and studies necessary for preparing land use applications, including soils tests, water quality studies, wildlife studies and similar tests and investigations; provided, that any disturbance of critical areas shall be the minimum necessary to carry out the work or studies;

E. Educational activities, scientific research, and outdoor recreational activities, including but not limited to interpretive fields, bird watching, fishing and hiking, that will not have a significant effect on the habitat area;

F. Public agency emergency activities necessary to prevent an immediate threat to public health, safety or property; provided, that retroactive mitigation is required to restore a site to a pre-emergency response condition to ensure no net loss of ecological functions. Retroactive mitigation must occur within the first growing season following completion of the emergency work;

G. Prior to the effective date of the ordinance codified in this chapter any of the following activities that have met all conditions of approval in a timely manner and are consistent

with the reasonable use provisions of this chapter:

1. Complete applications as defined by the appropriate ordinance;
2. Approved preliminary plats; and
3. Development of legally created lots which have been recorded with Benton County;

H. Minor activities not mentioned above and determined by the administrator to pose minimal risk to critical areas;

I. The operation, maintenance, or reconstruction of existing canals, waterways, wasteways, drains, reservoirs or other facilities that lie within the boundaries of and are maintained by an irrigation district or company; provided, that any new construction or related activity does not encroach into a critical area.

22.10.370 Permit process and application requirements.

A. Preapplication Conference. All applicants are encouraged to meet with the administrator prior to submitting an application subject to these regulations. The purpose of this meeting shall be to discuss the city of Richland's critical areas requirements, processes, and procedures; to review any conceptual site plans prepared by the applicant; to discuss appropriate investigative techniques and methodology; to identify potential impacts and mitigation measures; and to familiarize the applicant with state and federal programs, particularly those pertaining to wetlands. Such conference shall be for the convenience of the applicant and any recommendations shall not be binding on the applicant or the city of Richland.

B. Application Requirements. The information required by this section should be coordinated with reporting requirements required by this section for any other critical area located on the site.

1. Prior to the issuance of a SEPA threshold determination for a proposal, a wetland determination, wetland delineation report, fish and wildlife habitat conservation area report, geologic hazard report or critical aquifer recharge area report must be submitted to the administrator for review if such critical areas are indicated on any portion of the site. The purpose of the reports is to determine the extent and function of critical areas where regulated activities are proposed. The report will also be used by the administrator to determine the appropriate implementation of critical area regulations and the extent to which potential impacts of proposed activities are addressed by existing regulations that provide environmental analysis and measures that avoid or otherwise mitigate the probable specific adverse environmental impacts of proposed activities.

2. In addition, wetland boundaries must be staked and flagged in the field by a qualified professional.

3. The report on any critical area shall include the following information:
 - a. Vicinity map;
 - b. A map showing:
 - i. Site boundary, property lines and roads;
 - ii. Internal property lines, rights-of-way, easements, etc.;
 - iii. Existing physical features of the site including buildings, fences, and other structures, roads, parking lots, utilities, water bodies, etc.;
 - iv. Contours at the smallest readily available intervals, preferably at five-foot intervals;
 - v. For large (50 acres or larger) or complex projects with wetlands or habitat areas, an aerial photo with overlays displaying the site boundaries and wetland delineation or habitat area(s) may be required. Generally, an orthophotograph at a scale of one inch equals 400 feet or greater (such as one inch equals 200 feet) should be used. If an orthophotograph is not available, the center of a small scale (e.g., one inch equals 2,000 feet) aerial enlarged to one inch equals 400 feet may be used;
 - vi. Locational information including legal description and address;
 - vii. All natural and manmade features within 150 feet of the site boundary;
 - viii. General site conditions including topography, acreage, and water bodies or wetlands; and
 - ix. Identification of any areas that have previously been disturbed or degraded by human activity or natural processes.
4. In addition to the general report requirements, a report on wetlands shall include the following information:
 - a. Delineated wetland boundary;
 - b. The wetland boundary must be accurately drawn at an appropriate engineering scale such that information shown is not cramped or illegible. The drawing shall be prepared by a surveyor. Generally, a scale of one inch equals 40 feet or greater (such as one inch equals 20 feet) should be used. Existing features must be distinguished from proposed features;
 - c. Site designated on the wetlands areas maps described in RMC 22.10.090;

- d. Hydrologic mapping showing patterns of water movement into, through, and out of the site area;
- e. Location of all test holes and vegetation sample sites, numbered to correspond with flagging in the field and field data sheets;
- f. Field data sheets from the Federal Manual, numbered to correspond with sample site locations as staked and flagged in the field; and describe:
 - i. Specific descriptions of plant communities, soils, and hydrology;
 - ii. A summary of existing wetland function and value; and
 - iii. A summary of proposed wetland and buffer alterations, impacts, and the need for the alterations as proposed. Potential impacts may include but are not limited to loss of flood storage potential, loss of wildlife habitat, expected decreases in species diversity or quantity, changes in water quality, increases in human intrusion, and impacts on associated wetland or water resources. If alteration of a Category I, II, III or IV wetland is proposed, a wetland mitigation plan is required according to the standards of RMC 22.10.140.

5. In addition to the general report requirements, a report on fish and wildlife habitat conservation areas shall include the requirements listed in RMC 22.10.200 together with the following information. (The level of detail contained in the report shall generally reflect the size and complexity of the proposal and the function and value of the habitat. The administrator may require field studies at the applicant's expense in appropriate cases.)

- a. A map of vegetative cover types, reflecting the general boundaries of different plant communities on the site;
- b. A description of the species typically associated with the cover types, including an identification of any critical wildlife species expected to be found;
- c. The results of searches of Washington State Department of Natural Resource's Natural Heritage and Washington State Department of Wildlife's nongame data system databases, if available;
- d. Additional information on species occurrence available from the city of Richland or Benton County or the Washington State Department of Fish and Wildlife; and
- e. Include the following descriptions:
 - i. The layers, diversity and variety of habitat found on the site;
 - ii. Identification of edges between habitat types and any species commonly

associated with that habitat;

iii. The location of any migration or movement corridors;

iv. A narrative summary of existing habitat functions and values;

v. A summary of proposed habitat and buffer alterations, impacts, and mitigation. Potential impacts may include but are not limited to clearing of vegetation, fragmentation of wildlife habitat, expected decreases in species diversity or quantity, changes in water quality, increases in human intrusion, and impacts on wetlands or water resources; and

vi. Describe how mitigation meets the criteria of RMC 22.10.220 including the specified mitigation sequence.

6. In addition to the general report requirements, applicants for activities within 200 feet of geologically hazardous areas shall conduct technical studies and reports which include the following:

a. Review site history and available information;

b. Conduct a surface reconnaissance of the site and adjacent areas;

c. Conduct subsurface exploration suitable to the site and proposal to assess geotechnical geohydrologic conditions;

d. Conduct a detailed stability analysis of the existing landslide that demonstrates that the proposal will result in a suitable factor of safety during and following site development;

e. Characterize soils, geology and drainage;

f. Characterize ground water conditions including the presence of any public or private wells in the immediate vicinity;

g. Analyze proposed clearing, grading and construction activities, including construction scheduling; potential direct and indirect, on-site and off-site, impacts from development; and proposed mitigation measures, including any special construction techniques, monitoring or inspection programs (during and after construction), and surface water management controls;

h. Evaluate the presence of geologic conditions giving rise to geologic hazards;

i. Evaluate the safety and appropriateness of the proposed activities;

j. Recommend appropriate construction practices, monitoring programs and other

mitigating measures required to ensure achievement of the purpose and intent of these regulations. The format of any required reports shall be determined by the administrator;

k. Recommend surface water management controls during construction and operation;

l. Propose construction scheduling; and

m. Recommend site monitoring and inspection during construction.

7. In addition to the general report requirements, a report for critical aquifer recharge areas must meet the following requirements:

a. Available information regarding geologic and hydrogeologic characteristics of the site including the surface location of all CARAs located on site or immediately adjacent to the site, and permeability of the unsaturated zone;

b. Ground water depth, flow direction, and gradient based on available information;

c. Currently available data on wells and springs within 1,000 feet of the project area;

d. Location of other critical areas, including surface waters, within 1,000 feet of the project area;

e. Available historic water quality data for the area to be affected by the proposed activity;

f. Evaluation of the potential impact of the proposed development on ground water quality, both short and long term, based on an assessment of the cumulative impacts of the proposal in combination with existing and potential future land use activities;

g. ~~A proposed mitigation plan~~ Identified protective measures, as applicable. Applicants must demonstrate how they will integrate necessary and appropriate best management practices to prevent degradation of ground water.

8. In addition to the general report requirements, a report on floodplain development shall include the information required by RMC 22.16.040, Administration.

C. Permit Process. This section is not intended to create a separate permit process for development proposals. To the extent possible, the administrator shall consolidate and integrate the review and processing of critical area-related aspects of proposals with other land use and environmental considerations and approvals.

[D. The administrator has the authority to seek expert advice in determining the adequacy of the submitted report, at the applicant's expense.](#)

22.10.380 Requirements of qualified professional.

All reports or studies are to be performed by a professional, licensed or qualified as a consultant, in the critical area at issue. The administrator shall determine whether a person is a qualified professional pursuant to RMC 22.10.040, in accordance with ~~based on the criteria established in~~ WAC 365-195-905(4).

22.10.385 Notice on title.

A. In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any property that contains one or more critical areas or buffers for which a development proposal has been approved shall ~~file~~ record a notice with the county auditor's office according to the direction of the city. The notice shall state the presence of the critical area(s) or buffer(s) on the property, the application of this chapter to the property, and a listing of the limitations on actions in or affecting the critical area or buffer that may exist. The notice shall note specific requirements that may include but not be limited to the preservation of existing native vegetation; restrictions on access; the prohibition on construction of buildings or other improvements; the prohibition on grading, filling or clearing activities or other requirements as identified in this chapter. The notice shall "run with the land."

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

1. Within a recorded easement or right-of-way;
2. Where the agency or utility has been adjudicated the right to an easement or right-of-way; or
3. On the site of a permanent public facility.

C. The applicant shall submit proof that the notice has been ~~filed for public~~ recorded before the city grants any final development approval for the property. In the case of subdivisions, short subdivisions or binding site plans, a note on the recorded plat shall satisfy the requirement for a notice on title.

22.10.390 Land divisions.

All proposed divisions of land which include regulated critical areas shall comply with the following procedure and development standard:

A. New lots shall contain at least one building site, including access that is suitable for development and is not within the regulated critical area or its associated buffer or setback in which a restriction of prohibition on alteration is provided by this program.

22.10.400 On-site density transfer for critical areas.

A. An owner of a residential site or property containing critical areas may be permitted to transfer the density attributable to the critical area and associated buffer area or setback to another non-sensitive portion of the same site or property, subject to the limitations of

this section and other applicable regulations.

B. Density can be transferred from the critical portion and associated buffer area or setback to the nonsensitive portion of the residential site subject to the following conditions:

1. The basis for the density transfer will be an actual site plan for the site or property as if it did not have the critical area, subject to the provisions of the underlying zoning classification, applicable setbacks, and other standards of the city code or other land development regulations.

2. Based on the above site plan, a portion of the density that could be achieved on the critical portion and associated buffer or setback of the site can be transferred to the nonsensitive portion of the site. The following chart indicates the amount of density that can be transferred, based on the degree of sensitivity of the critical area:

Category of Critical Area	Percent of Density on Critical Area That May Be Transferred on Site
Category I and II Wetlands	25%
High and Very High Geologically Hazardous Area	25%
Seismic Hazard	25%
Category III and IV Wetlands	100%
Low and Medium Geologically Hazardous Area	100%

3. When transferring the density from the critical portion of the site and its associated buffer or setback to the nonsensitive portion of the site, the overall density of the nonsensitive portion of the site may be increased, provided the additional density does not exceed what would be allowed by the next residential zoning classification. In the case of the highest density multifamily zoning classifications, the density may not be increased beyond the current density.

4. The nonwetland portion of the site is not constrained by another environmentally critical or geologically hazardous area regulated by this code.

5. The nonwetland portion of the site is subject to the lot size and setback requirements of the next residential zoning classification. Land uses and other standards of the city code or other land development regulations shall continue to apply as per the existing zoning classification.

C. An on-site density transfer shall meet the requirements and follow the procedures of:

1. Planned unit development, RMC 23.50.010;

2. Plats and subdivision, RMC Title 24.

D. The fact that development rights have been sold or received, and all related conditions, will be recorded, in a form acceptable to the city attorney, to become a part of the deed of the “sending” and “receiving” properties.

22.10.405 Density bonus for increased buffers.

A. An owner of a residential site or property containing critical areas who chooses to increase the buffers adjacent to a wetland or wildlife habitat area beyond the minimums required under this title shall be permitted to increase the density on the portion of the site that lies outside of a critical area or its required buffer. The amount of density bonus shall be based on the amount of additional buffer lands provided, through a calculation of the area of the additional buffer and/or wildlife corridor proposed on site, expressed as a percentage of the total site area, exclusive of the total wetland, wetland buffer area and/or wildlife corridor as required under the provisions of this chapter. This percentage can then be doubled and applied to the total number of units located within the noncritical area portion of the site to determine the allowed density increase.

An example application of the density bonus provision is as follows: An applicant has a 15-acre site with an identified wetland area and buffer and proposes an additional three-quarter acre of buffer, which translates to five percent of the total site. This entitles the developer to a 10 percent increase in lot count. If the existing zoning permitted 40 lots, the density bonus would entitle the applicant to an additional four lots.

B. In order to qualify for a density bonus:

1. Any additional wetland buffer area must be adjacent to the required wetland buffer area;
2. Any additional habitat buffer area must be adjacent to the required habitat area;
3. A wildlife corridor not otherwise required by this title may qualify for a density bonus; provided, that the fish and wildlife habitat conservation area report prepared by a qualified professional identifies the location of said wildlife corridor as beneficial to priority, threatened or endangered species.

C. When transferring the density from the critical portion of the site and its associated buffer or setback to the nonsensitive portion of the site, the overall density of the nonsensitive portion of the site may be increased, provided the additional density does not exceed what would be allowed by the next residential zoning classification. In the case of the highest density multifamily zoning classifications, the density may not be increased beyond the current density.

22.10.410 Interpretations and appeals.

A. Interpretations and Conflicts. Any question regarding interpretation of these regulations shall be resolved pursuant to the procedures set forth in RMC 23.70.070.

B. Appeals from permit decisions shall be governed by the procedures set forth in Chapter 19.70 RMC.

22.10.415 Penalties.

Any person who has violated any provision of this chapter shall have committed a civil infraction subject to a civil penalty as set forth in RMC 10.02.050(E).

Provided, if the same violator has been found to have committed an infraction violation for the same or similar conduct two separate times, with the violations occurring at the same location and involving the same or similar sections of the Richland Municipal Code or other similar codes, the third or subsequent violation shall constitute a misdemeanor, punishable as provided in RMC 1.30.010 for criminal offenses.

22.10.420 General savings provision – Reasonable economic use.

A. The standards and regulations of this chapter are not intended, and shall not be construed or applied in a manner, to deny all reasonable economic use of private property. If an applicant demonstrates to the satisfaction of the administrator that strict application of these standards and the utilization of cluster techniques, planned unit development, and transfer of development rights would deny all reasonable economic use of its property, development may be permitted subject to appropriate conditions, derived from this chapter as determined by the administrator and after all variance requests from the hearing examiner have been denied.

B. An applicant for relief from strict application of these standards shall demonstrate the following:

1. That no reasonable use with less impact on the critical habitat and/or hazard area and buffer is feasible and reasonable;
2. That there is no feasible and reasonable on-site alternative to the activities proposed, considering possible changes in site layout, reductions in density and similar factors;
3. That the proposed activities, as conditioned, will result in the minimum possible impacts to wetlands and buffers;
4. That all reasonable mitigation measures have been implemented or assured;
5. That all provisions of the city's regulations allowing density transfer on site and off site have been considered;
6. That the inability to derive a reasonable economic use is not the result of the applicant's actions or that of a previous property owner, such as by segregating or dividing the property and creating an undevelopable condition.

22.10.430 No special duty created.

It is the purpose of this chapter to provide for the health, welfare, and safety of the general public, and not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this chapter. No provision or term used in this chapter is intended to impose any duty whatsoever upon the city or any of its officers, agents, or employees for whom the implementation or enforcement of this chapter shall be discretionary and not mandatory.

Nothing contained in this chapter is intended to be, nor shall be construed to create or form the basis for any liability on the part of the city or its officers, agents, and employees for any injury or damage resulting from the failure of any premises to abate a nuisance or to comply with the provisions of this chapter or be a reason or a consequence of any inspection, notice, or order, in connection with the implementation or enforcement of this chapter, or by reason of any action of the city related in any manner to enforcement of this chapter by its officers, agents or employees.

22.10.435 Unauthorized alterations and enforcement.

A. When a critical area or its buffer has been altered in violation of this chapter, all ongoing development work shall stop and the critical area shall be restored. The administrator shall have the authority to issue a “stop-work” order to cease all ongoing development work and order restoration, rehabilitation, or replacement measures at the owner’s or other responsible party’s expense to compensate for violation of provisions of this chapter.

B. Requirement for Restoration Plan. All development work shall remain stopped until a restoration plan is prepared and approved by city. Such a plan shall be prepared by a qualified professional using the currently accepted scientific principles and shall describe how the actions proposed meet the minimum requirements described in subsection (C) of this section. The administrator shall, at the violator’s expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

C. Minimum Performance Standards for Restoration. The following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater functions and habitat values can be obtained, these standards may be modified:

1. The historic structure, functions, and values of the affected critical area shall be restored, including water quality and habitat functions;
2. The historic soil types and configuration shall be restored to the extent practicable;
3. The affected critical area and its buffer shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration;

4. Information demonstrating compliance with other applicable provisions of this chapter shall be submitted to the administrator.

D. Site Investigations. The administrator is authorized to make site inspections and take such actions as necessary to enforce this chapter. The administrator shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

E. Penalties. See RMC 22.10.415.

F. If the critical area affected cannot be restored, money from any associated penalties shall be deposited in a dedicated account for the preservation or restoration of landscape processes and functions in the watershed in which the affected wetland is located. The administrator may coordinate its preservation or restoration activities with others to optimize the effectiveness of the restoration action.

G. Illegal Modifications. Wetland rating categories and/or fish and wildlife conservation area boundaries shall not change due to illegal modifications made by the applicant or with the applicant's knowledge.

22.10.440 Severability.

The provisions of this chapter are declared to be separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section or portion of this chapter to any person or circumstance shall not affect the validity of the remainder of this chapter or the validity of its application to other persons or circumstances.

22.10.450 Critical area map.

The critical area map and all amendments thereto adopted as part of this code shall be filed in the office of the administrator and may be viewed in the development services division.

Section 2. This Ordinance shall take effect the day following its publication in the official newspaper of the City of Richland.

Section 3. Should any section or provision of this Ordinance be declared by a court of competent jurisdiction to be invalid, that decision shall not affect the validity of the Ordinance as a whole or any part thereof, other than the part so declared to be invalid.

Section 4. The City Clerk and the codifiers of this Ordinance are authorized to make necessary corrections to this Ordinance, including but not limited to the correction of scrivener's errors/clerical errors, section numbering, references, or similar mistakes of form.

PASSED by the City Council of the City of Richland, Washington, at a regular meeting on the 6th day of July, 2021.


Ryan Lukson, Mayor

Attest:


Jennifer Rogers, City Clerk

Approved as to form:


Heather Kintzley, City Attorney

Date Published: July 11, 2021