

**CITY OF BUCKLEY, WASHINGTON**

**ORDINANCE NO. 10-17**

**AN ORDINANCE OF THE CITY OF BUCKLEY, WASHINGTON, AMENDING CHAPTERS 12.08, 12.09, 12.10, 12.11, 12.12, AND 12.13 BMC TO BECOME CONSISTENT WITH STATE AND FEDERAL REGULATIONS CONCERNING WETLANDS AND LOW IMPACT DEVELOPMENT; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE**

---

**WHEREAS**, Critical Areas Ordinances are created to protect the most vulnerable land areas within the nation; and

**WHEREAS**, the state requires natural resource lands and critical areas regulations be reviewed with the adoption of each jurisdiction's Comprehensive Plan under RCW 36.70A.060 (3); and

**WHEREAS**, the City of Buckley adopted its 2015 Comprehensive Plan on December 8, 2015; and

**WHEREAS**, the City retained a consultant to review current regulations against current requirements; and

**WHEREAS**, the consultant sent a final draft to the City in October, 2016; and

**WHEREAS**, the Planning Commission reviewed the draft; and

**WHEREAS**, the 60-day notice was received by the Washington State Department of Commerce December 14, 2016, acknowledging the proposed change in development regulations under Material Identification Number 23179; and

**WHEREAS**, the State Environmental Policy Act environmental determination of non-significance was issued December 21, 2016; and

**WHEREAS**, the first scheduled hearing of February 6, 2017, was cancelled because of inclement weather; and

**WHEREAS**, the City Council passed Emergency Ordinance 03-17 adopting Chapters 12.08 and 12.11, to satisfy the March 7, 2017, adoption deadline issued by FEMA; and

**WHEREAS**, the Planning Commission conducted a public hearing on this proposal on March 6, 2017; and

**WHEREAS**, on March 20, 2017 the Planning Commission recommended approval of the considered amendments;

**WHEREAS**, the City Council concurs with the Planning Commission recommendation and desires to adopt the amendments to Title 12, Critical Areas Regulations, to become consistent with State and Federal regulations concerning critical areas and low impact development;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BUCKLEY, PIERCE COUNTY, WASHINGTON, DO ORDAIN AS FOLLOWS:**

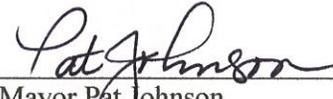
**Section 1.** Chapters 12.08, 12.09, 12.10, 12.11, 12.12, and 12.13 Buckley Municipal Code are amended as shown in Attachment A.

**Section 2.** Copy to the Department of Commerce. Pursuant to RCW 36.70A.106, the City Administrator is hereby authorized and directed to provide a copy of this ordinance to the State Department of Commerce within 10 days of adoption.

**Section 3.** Severability. If any section, sentence, clause or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this ordinance.

**Section 4.** Effective date. This ordinance or a summary thereof consisting of the title shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after publication.

APPROVED by the Buckley City Council this 25<sup>th</sup> day of April, 2017.

  
Mayor Pat Johnson

Attest:

  
Joanne Starr, City Clerk

APPROVED AS TO FORM:

  
Phil Olbrechts, City Attorney

PUBLISHED: May 3, 2017

EFFECTIVE: May 8, 2017

**Chapter 12.08**  
**CRITICAL AREAS – GENERAL PROVISIONS**

Sections:

- 12.08.010 Purpose.
- 12.08.020 Authority.
- 12.08.030 Relationship to other regulations.
- 12.08.035 Definitions.
- 12.08.040 Administrative procedures.
- 12.08.050 Fees.
- 12.08.060 Severability.
- 12.08.070 Administrative rules.
- 12.08.080 Interpretation.
- 12.08.090 Jurisdiction – Critical areas.
- 12.08.100 Protection of critical areas.
- 12.08.110 Best available science.
- 12.08.120 Applicability.
- 12.08.130 Exemptions.
- 12.08.140 Exception – Public agency and utility.
- 12.08.150 Exception – Reasonable use.
- 12.08.160 Allowed activities.
- 12.08.170 City review process.
- 12.08.180 Critical area preapplication consultation.
- 12.08.190 Critical areas permit application.
- 12.08.200 Public notice of initial determination.
- 12.08.210 Critical areas reports – Requirements.
- 12.08.220 Critical areas reports – Modifications to requirements.
- 12.08.230 Mitigation requirements.
- 12.08.240 Mitigation sequencing.
- 12.08.250 Mitigation plan requirements.
- 12.08.260 Innovative mitigation.
- 12.08.270 Determination.
- 12.08.280 Review criteria.
- 12.08.290 Favorable determination.
- 12.08.300 Unfavorable determination.
- 12.08.310 Completion of the critical areas review.
- 12.08.320 Appeals.
- 12.08.330 Variances.
- 12.08.340 Unauthorized critical area alterations and enforcement.
- 12.08.350 Critical area markers and signs.
- 12.08.360 Notice on title.
- 12.08.370 Native growth protection areas.
- 12.08.380 Critical area tracts.
- 12.08.390 Building setbacks.
- 12.08.400 Bonds to ensure mitigation, maintenance, and monitoring.
- 12.08.410 Critical area inspections.

**12.08.010 Purpose.**

- (1) The purpose of this title is to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property.
- (2) This title is to implement the goals, policies, guidelines, and requirements of the city of Buckley comprehensive plan and the Growth Management Act.
- (3) The city of Buckley finds that critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the city of Buckley and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and values provided by critical areas include, but are 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 and archaeological and aesthetic value protection, and recreation. These beneficial functions are not listed in order of priority.
- (4) Goals. By limiting development and alteration of critical areas, this title seeks to:
  - (a) Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, volcanic eruptions, or flooding;
  - (b) Protect unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats;
  - (c) Direct activities not dependent on critical area resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas; and
  - (d) Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, frequently flooded areas and habitat conservation areas; and
  - (e) Implement the primary goal of achieving no net loss of functions and values of wetlands.
- (5) The regulations of this title are intended to protect critical areas in accordance with the Growth Management Act and through the application of best available science, as determined according to WAC 365-195-900 through 365-195-925, and in consultation with state and federal agencies and other qualified professionals.
- (6) This title is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this title to make a parcel of property unusable by denying its owner reasonable economic use of the property.
- (7) The city of Buckley's enactment or enforcement of this title shall not be construed for the benefit of any individual person or group of persons other than the general public. (Ord. 21-05 § 2, 2005).

**12.08.020 Authority.**

- (1) As provided herein, the city planning director is given the authority to interpret and apply, and the responsibility to enforce, this title to accomplish the stated purpose.
- (2) The city of Buckley may withhold, condition, or deny development permits or activity approvals to ensure that the proposed action is consistent with this title. (Ord. 21-05 § 2, 2005).

March 6, 2017

**12.08.030 Relationship to other regulations.**

- (1) These critical area regulations shall apply as an overlay and in addition to zoning and other regulations adopted by the city of Buckley.
- (2) These critical area regulations shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA), as locally adopted.
- (3) Compliance with the provisions of this title does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, shoreline substantial development permits, HPA permits, Army Corps of Engineers Section 404 permits, and NPDES permits). The applicant is responsible for complying with these requirements, apart from the process established in this title. (Ord. 21-05 § 2, 2005).

**12.08.035 Definitions.**

For purposes of this chapter and subsequent chapters related to critical areas regulation, Chapters 12.09, 12.10, 12.11, 12.12 and 12.13 BMC, the following definitions shall apply except that those not defined in this title shall be as defined in the City of Buckley Municipal Code, the Washington Administrative Code, or the Revised Code of Washington. Words not found in any of these codes shall be as defined in Webster's Third New International Dictionary, latest edition.

"Active fault" means a fault that is considered likely to undergo renewed movement within a period of concern to humans. Faults are commonly considered to be active if the fault has moved one or more times in the last 10,000 years, but faults may also be considered active in some cases if movement has occurred in the last 500,000 years.

"Adaptive management" means a systematic process for improving management policies and practices by learning from the outcomes of previous policies and practices. Related to compensatory mitigation, it involves the permittee and the agencies discussing the problems occurring on a compensation site and coming to agreement on possible solutions or alternative approaches necessary to bring the site into compliance.

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

- (1) On a site immediately adjoining a critical area;
- (2) A distance equal to or less than the required critical area buffer width and building setback;
- (3) A distance equal to or less than one-half mile (2,640 feet) from a bald eagle nest;
- (4) A distance equal to or less than three hundred (300) feet upland from a stream, wetland, or water body;
- (5) Bordering or within the floodway, floodplain, or channel migration zone;
- (6) A distance equal to or less than two hundred (200) feet from a critical aquifer recharge area.

"Advance mitigation" means mitigation of an anticipated critical area impact or hazard completed according to an approved critical areas report and prior to site development.

“Agricultural land” means land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by RCW 84.33.100 through 84.33.140, or livestock, and/or that has been designated as of long-term commercial significance for agricultural production.

“Alteration” means any human-induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to, grading, filling, channelizing, dredging, clearing (vegetation), construction, compaction, excavation or any other activity that changes the character of the critical area.

“Anadromous fish” means fish that spawn and rear in freshwater and mature in the marine environment. While Pacific salmon die after their first spawning, adult char (bull trout) can live for many years, moving in and out of saltwater and spawning each year. The life history of Pacific salmon and char contains critical periods of time when these fish are more susceptible to environmental and physical damage than at other times. The life history of salmon, for example, contains the following stages: upstream migration of adults, spawning, intergravel incubation, rearing, smoltification (the time period needed for juveniles to adjust their body functions to live in the marine environment), downstream migration, and ocean rearing to adults.

“Applicant” means a person who files an application for a permit under this title and who is either the owner of the land on which that proposed activity would be located, a contract purchaser, or the authorized agent of such a person.

“Aquifer” means a geological formation, group of formations or part of a formation that is capable of yielding a significant amount of water to a well or spring.

“Aquifer, confined” means an aquifer bounded above and below by beds of distinctly lower permeability than that of the aquifer itself and that contains ground water under sufficient pressure for the water to rise above the top of the aquifer.

“Aquifer recharge areas” means areas that, due to the presence of certain soils, geology, and surface water, act to recharge ground water by percolation.

“Aquifer, sole source” means an area designated by the U.S. Environmental Protection Agency under the Safe Drinking Water Act of 1974, Section 1424(e). The aquifer(s) must supply 50 percent or more of the drinking water for an area without a sufficient replacement available.

“Aquifer susceptibility” means the ease with which contaminants can move from the land surface to the aquifer based solely on the types of surface and subsurface materials in the area. Susceptibility usually defines the rate at which a contaminant will reach an aquifer unimpeded by chemical interactions with the vadose zone media.

“Aquifer, unconfined” means an aquifer not bounded above by a bed of distinctly lower permeability than that of the aquifer itself and containing ground water under pressure approximately equal to that of the atmosphere. This term is synonymous with the term “water table aquifer.”

“Area of shallow flooding” means an area designated AO or AH zone on the flood insurance map(s). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

“Associated wetlands” means those wetlands which are in proximity to and either influence or are influenced by tidal waters or a lake or stream subject to the Shoreline Management Act.

“Avalanche hazard” means an area susceptible to a large mass of snow or ice, sometimes accompanied by other material, moving rapidly down a mountain slope.

“Base flood” means a flood event having a one percent chance of being equaled or exceeded in any given year, also referred to as the 100-year flood. Designations of base flood areas on flood insurance map(s) always include the letters A or V.

“Basement” means any area of the building having its floor below ground level on all sides.

“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. Some recognized sources of best available science are included in “Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas” published by the State Office of Community Development.

“Best management practices (BMPs)” means conservation practices or systems of practices and management measures that:

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

The city of Buckley shall monitor the application of best management practices to ensure that the standards and policies of this title are adhered to.

“Breakaway wall” means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

“Buffer” or “buffer zone” means an area contiguous to and that protects a critical area that is required for the continued maintenance, functioning, and/or structural stability of a critical area.

“Channel migration zone (CMZ)” means the lateral extent of likely movement along a stream or river during the next 100 years as determined by evidence of active stream channel movement over the past

100 years. Evidence of active movement over the 100-year time frame can be inferred from aerial photos or from specific channel and valley-bottom characteristics. The time span typically represents the time it takes to grow mature trees that can provide functional large woody debris to streams. A CMZ is not typically present if the valley width is generally less than two bankfull widths, is confined by terraces, no current or historical aerial photographic evidence exists of significant channel movement, and there is no field evidence of secondary channels with recent scour from stream flow or progressive bank erosion at meander bends. Areas separated from the active channel by legally existing artificial channel constraints that limit bank erosion and channel avulsion without hydraulic connections shall not be considered within the CMZ.

“Compensation project” means actions necessary to replace project-induced critical area and buffer losses, including land acquisition, planning, construction plans, monitoring and contingency actions.

“Compensatory mitigation” means replacing project-induced wetland losses or impacts, and includes, but is not limited to, the following:

- (1) “Restoration” means actions performed to reestablish wetland functional characteristics and processes that have been lost by alterations, activities, or catastrophic events within an area that no longer meets the definition of a wetland.
- (2) “Creation” means actions performed to intentionally establish a wetland at a site where it did not formerly exist.
- (3) “Enhancement” means actions performed to improve the condition of existing degraded wetlands so that the functions they provide are of a higher quality.
- (4) “Preservation” means actions taken to ensure the permanent protection of existing, high-quality wetlands.

“Conservation easement” means a legal agreement that the property owner enters into to restrict uses of the land. Such restrictions can include, but are not limited to, passive recreation uses such as trails or scientific uses and fences or other barriers to protect habitat. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property, therefore providing permanent or long-term protection.

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

“Critical areas” include any of the following areas or ecosystems: aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands, as defined in Chapter 36.70A RCW and this title.

“Critical area tract” means land held in private ownership and retained in an open condition in perpetuity for the protection of critical areas. Lands within this type of dedication may include, but are not limited to, portions and combinations of forest habitats, grasslands, shrub steppe, on-site watersheds, 100-year floodplains, shorelines or shorelines of statewide significance, riparian areas, and wetlands.

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

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

“Development” means any activity upon the land consisting of construction or alteration of structures, earth movement, dredging, dumping, grading, filling, mining, removal of any sand, gravel, or minerals, driving of piles, drilling operations, bulkheading, clearing of vegetation, or other land disturbance. Development includes the storage or use of equipment or materials inconsistent with the existing use. Development also includes approvals issued by the city of Buckley that bind land to specific patterns of use, including but not limited to subdivisions, short subdivisions, zone changes, conditional use permits, and binding site plans. (Also see BMC 12.11, Floods.) Development activity does not include activities such as:

- (1) Interior building improvements.
- (2) Exterior structure maintenance activities, including painting and roofing.
- (3) Routine landscape maintenance of established ornamental landscaping, such as lawn mowing, pruning and weeding.
- (4) Maintenance of the following existing facilities that does not expand the affected area: septic tanks (routine cleaning); wells; individual utility service connections; and individual cemetery plots in established and approved cemeteries.

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

“Director” means the planning director of the city of Buckley planning department or other responsible official, or other city staff granted the authority to act on behalf of the director.

“Elevated building” means a building that has no basement and its lowest elevated floor is raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

“Emergent wetland” means a wetland with at least 30 percent of the surface area covered by erect, rooted, herbaceous vegetation extending above the water surface as the uppermost vegetative strata.

“Erosion” means the process whereby wind, rain, water, and other natural agents mobilize and transport particles.

“Erosion hazard areas” means at least those areas identified by the United States Department of Agriculture National Resources Conservation Service as having a “severe” rill and interrill erosion hazard.

“Exotic” means any species of plants or animals which are foreign to the planning area.

“Fair market value” means the value placed on a building, structure or property using the previous year’s tax-assessed value as a basis for determination.

“Fill” means the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material that raises the elevation or creates dry land.

Fish and Wildlife Habitat Conservation Areas. “Fish and wildlife habitat conservation” means land management for maintaining species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. This does not mean maintaining all individuals of all species at all times, but it does mean not degrading or reducing populations or habitats so that they are no longer viable.

- (1) Fish and wildlife habitat conservation areas include:
  - (a) Areas with which endangered, threatened, and sensitive species have a primary association; and
  - (b) Habitats and species of local importance; and
  - (c) Commercial and recreational shellfish areas; and
  - (d) Kelp and eelgrass beds; herring and smelt spawning areas; and
  - (e) Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat; and
  - (f) Waters of the state; and
  - (g) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; or
  - (h) State natural area preserves and natural resource conservation areas.
- (2) 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, and/or other government agencies.

“Fish habitat” means habitat that is used by fish at any life stage at any time of the year, including potential habitat likely to be used by fish that could be recovered by restoration or management and includes off-channel habitat.

“Flood” or “flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters and/or the unusual and rapid accumulation of runoff of surface waters from any source.

“Flood elevation study” means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

“Flood hazard management projects” are those actions taken with the primary purpose of preventing or mitigating damage because of flooding. Flood hazard management projects or programs may employ any or several physical or regulatory controls, including dikes, dams, lakes, engineered floodways, bioengineering, planning and zoning (land use management). These provisions also apply to repair and maintenance of flood hazard management systems if the systems are enlarged or otherwise modified.

“Flood insurance rate map” means the official map on which the Federal Insurance Administration has delineated the areas of special flood hazard and includes the risk premium zones applicable to the community. Also known as “flood insurance map” or “FIRM.”

“Flood insurance study” means the official report provided by the Federal Insurance Administration that includes flood profiles, the flood boundary-floodway map, and the water surface elevation of the base flood.

“Floodplain” means the total land area adjoining a river, stream, watercourse or lake subject to inundation by the base flood.

“Flood protection elevation” means the elevation that is one foot above the base flood elevation.

“Flood-resistant material” means materials designed to be resistant to the impacts associated with flooding and defined and described in detail in FEMA Technical Bulletin No. 2-93, dated April 1993, and FEMA publication FEMA-348, “Protecting Building Utilities from Flood Damage.”

“Floodway” means the channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the surface water elevation more than one foot. Also known as the “zero rise floodway.”

“Forested wetland” means a wetland with at least 30 percent of the surface area covered by woody vegetation greater than 20 feet in height that is at least partially rooted within the wetland.

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

“Formation, confining” means the relatively impermeable formation immediately overlying a confined aquifer.

“Frequently flooded areas” means lands in the floodplain subject to a one percent or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance and attenuation functions, as determined by the planning director in accordance with WAC 365-190-080(3). Frequently flooded areas perform important hydrologic functions and may present a risk to persons and property. Classifications of frequently flooded areas include, at a minimum, the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

“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 and archaeological and aesthetic value protection, and recreation. These beneficial roles are not listed in order of priority.

“Geologically hazardous areas” means areas that may not be suited to development consistent with public health, safety or environmental standards, because of their susceptibility to erosion, sliding,

earthquake, or other geological events as designated by WAC 365-190-080(4). Types of geologically hazardous areas include: erosion, landslide, seismic, mine, and volcanic hazards.

“Ground water” means water in a saturated zone or stratum beneath the surface of land or a surface water body.

“Ground water management area” means a specific geographic area or subarea designated pursuant to Chapter 173-100 WAC for which a ground water management program is required.

“Ground water management program” means a comprehensive program designed to protect ground water quality, to assure ground water quantity, and to provide for efficient management of water resources while recognizing existing ground water rights and meeting future needs consistent with local and state objectives, policies and authorities within a designated ground water management area or subarea and developed pursuant to Chapter 173-100 WAC.

“Ground water, perched” means when ground water in a saturated zone is separated from the underlying main body of ground water by an unsaturated rock zone.

“Growth Management Act” means Chapters 36.70A and 36.70B RCW, as amended.

“Habitat conservation areas” means areas designated as fish and wildlife habitat conservation areas.

“Hazard areas” means areas designated as frequently flooded areas or geologically hazardous areas due to the potential for erosion, landslide, seismic activity, mine collapse, or other geological condition.

“Hazardous substances” means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090 or 173-303-100.

“Historic condition” means a condition of the land, including flora, fauna, soil, topography, and hydrology, that existed before the area and vicinity were developed or altered by human activity.

“Hydraulic project approval (HPA)” means a permit issued by the State Department of Fish and Wildlife for modifications to waters of the state in accordance with Chapter 75.20 RCW.

“Hydric soil” means a soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods described in the approved Federal wetland delineation manual and applicable regional supplements.

“Hydrologic soil groups” means soils grouped according to their runoff-producing characteristics under similar storm and cover conditions. Properties that influence runoff potential are depth to seasonally high water table, intake rate and permeability after prolonged wetting, and depth to a low permeable layer. Hydrologic soil groups are normally used in equations that estimate runoff from rainfall, but can be used to estimate a rate of water transmission in soil. There are four hydrologic soil groups:

- (1) Low runoff potential and a high rate of infiltration potential;
- (2) Moderate infiltration potential and a moderate rate of runoff potential;
- (3) Slow infiltration potential and a moderate to high rate of runoff potential; and
- (4) High runoff potential and very slow infiltration and water transmission rates.

“Hydrophytic vegetation” means macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The presence of hydrophytic vegetation shall be determined following the methods described in the approved Federal wetland delineation manual and applicable regional supplements.

“Hyporheic zone” means the saturated zone located beneath and adjacent to streams that contains some portion of surface waters, serves as a filter for nutrients, and maintains water quality.

“Impervious surface” means a hard surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development or that causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled macadam or other surfaces which similarly impede the natural infiltration of stormwater.

“In-kind compensation” means to replace critical areas with substitute areas whose characteristics and functions closely approximate those destroyed or degraded by a regulated activity. It does not mean replacement “in category.”

“Isolated wetlands” means those Class IV wetlands that:

- (1) Are outside of and not contiguous to any 100-year floodplain of a lake, river or stream; and
- (2) Have no contiguous hydric soils between the wetland and any surface waters.

“Infiltration” means the downward entry of water into the immediate surface of soil.

“Injection Well(s)” *mean*:

- (1) “Class I injection well” means a well used to inject industrial, commercial, or municipal waste fluids beneath the lowermost formation containing, within one-quarter mile of the well bore, an underground source of drinking water.
- (2) “Class II injection well” means a well used to inject fluids:
  - (a) Brought to the surface in connection with conventional oil or natural gas exploration or production and may be commingled with wastewaters from gas plants that are an integral part of production operations, unless those waters are classified as dangerous wastes at the time of injection;
  - (b) For enhanced recovery of oil or natural gas; or
  - (c) For storage of hydrocarbons that are liquid at standard temperature and pressure.

- (3) "Class III injection well" means a well used for extraction of minerals, including but not limited to the injection of fluids for:
- (a) In-situ production of uranium or other metals that have not been conventionally mined;
  - (b) Mining of sulfur by Frasch process; or
  - (c) Solution mining of salts or potash.
- (4) "Class IV injection well" means a well used to inject dangerous or radioactive waste fluids.
- (5) "Class V injection wells" means all injection wells not included in Classes I, II, III, or IV.

"Interrill" means an area subject to sheetwash.

"Joint aquatic resource permits application (JARPA)" means a single application form that may be used to apply for hydraulic project approvals, shoreline management permits, approvals of exceedance of water quality standards, water quality certifications, Coast Guard bridge permits, Department of Natural Resources use authorization, and Army Corps of Engineers permits.

"Lahars" means mudflows and debris flows originating from the slopes of a volcano.

"Landslide hazard areas" means areas that are potentially subject to risk of mass movement due to a combination of geologic landslide resulting from a combination of geologic, topographic, and hydrologic factors. These areas are typically susceptible to landslides because of a combination of factors including: bedrock, soil, slope gradient, slope aspect, geologic structure, ground water, or other factors.

"Lowest floor" means the lowest floor of the lowest enclosed area, including the basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable requirements of this title.

"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

"Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

"Mine hazard areas" means areas that are underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sink holes, gas releases, or subsidence due to mine workings. Factors that should be considered include: proximity to development, depth from ground surface to the mine working, and geologic material.

"Mitigation" means avoiding, minimizing or compensating for adverse critical areas impacts. "Mitigation sequencing" in the following order of preference, means:

- (1) Avoiding the impact altogether by not taking a certain action or parts of an action;

- (2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
- (3) Rectifying the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by repairing, rehabilitating or restoring the affected environment to the conditions existing at the time of the initiation of the project;
- (4) Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
- (5) Compensating for the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and
- (6) Monitoring the hazard or other required mitigation and taking remedial or corrective measures when necessary.

Note: Mitigation for individual actions may include a combination of the above measures.

“Moderately or Highly Susceptible Aquifer Recharge Areas” means aquifer recharge areas moderately or highly susceptible to degradation or depletion because of hydrogeologic characteristics are those areas meeting the criteria established by the State Department of Ecology.

“Moderately or Highly Vulnerable Aquifer Recharge Areas” means aquifer recharge areas that are moderately or highly vulnerable to degradation or depletion because of hydrogeologic characteristics are those areas delineated by a hydrogeologic study prepared in accordance with the State Department of Ecology guidelines.

“Monitoring” means evaluating the impacts of development proposals on the biological, hydrological, and geological elements of such systems and assessing the performance of required mitigation measures throughout the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features, and includes gathering baseline data.

“Monotypic vegetation” means only one plant species is present within an area. Generally, these plant species are nonnative and/or highly invasive.

“Native growth protection area (NGPA)” means an area where native vegetation is preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering and protecting plants and animal habitat.

“Native vegetation” means plant species that are indigenous to the area in question.

“Natural waters” means waters, excluding water conveyance systems that are artificially constructed or actively maintained for such uses as irrigation, drainage and stormwater runoff.

“Nonconformity” means a legally established existing use or legally constructed structure that is not in compliance with current regulations.

“Nonindigenous.” See “Exotic.”

“Off-site compensation” means to replace critical areas away from the site on which a critical area has been impacted.

“On-site compensation” means to replace critical areas at or adjacent to the site on which a critical area has been impacted.

“Ordinary high water mark (OHWM)” means that mark which is found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, that the soil has a character distinct from that of the abutting upland in respect to vegetation.

“Out-of-kind compensation” means to replace critical areas with substitute critical areas whose characteristics do not closely approximate those destroyed or degraded. It does not refer to replacement “out-of-category.”

“Perched Ground Water.” See “Ground water, perched.”

“Permeability” means the capacity of an aquifer or confining bed to transmit water. It is a property of the aquifer or confining bed and is independent of the force causing movement.

“Porous soil types” means soils, as identified by the National Resources Conservation Service, U.S. Department of Agriculture, that contain voids, pores, interstices or other openings which allow the passing of water.

“Potable water” means water that is safe and palatable for human use.

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

“Primary association” means that direct correlation or relationship between two or more individuals, actions and/or activities that influence one another in an immediate fashion.

“Priority habitat” means habitat type or elements with unique or significant value to one or more species as classified by the Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element (WAC 173-26-020(28)).

“Project area” means the area within the boundaries of the property to be disturbed, altered, or used by the proposed activity or the construction of any proposed structures.

“Qualified consultant/professional” means a person who has attained a degree from an accredited college or university in the subject matter necessary to evaluate the sensitive area in question (e.g., biology, botany, wildlife, soils or ecology for wetlands, streams and wildlife habitat; geology and/or civil

engineering for geologic hazards and aquifer recharge areas), and/or who is professionally trained and/or certified or licensed to practice in the scientific disciplines and/or has significant experience and background necessary to identify, evaluate, manage and mitigate impacts to the sensitive area in question.

“Reasonable use” means the minimum use to which a property owner is entitled under applicable state and federal constitutional provisions, including takings and substantive due process. Reasonable use shall be liberally construed to protect the constitutional property rights of the applicant.

“Recharge” means the process involved in the absorption and addition of water to ground water.

“Reclaimed water” means municipal wastewater effluent that has been adequately and reliably treated so that it is suitable for beneficial use. Following treatment it is no longer considered wastewater (treatment levels and water quality requirements are given in the water reclamation and reuse standards adopted by the State Departments of Ecology and Health).

“Recreation vehicle” means a vehicle that is:

- (1) Built on a single chassis;
- (2) Four hundred square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

“Repair or maintenance” means an activity that restores the character, scope, size, and design of a serviceable area, structure, or land use to its previously authorized and undamaged condition. Activities that change the character, size, or scope of a project beyond the original design and drain, dredge, fill, flood, or otherwise alter critical areas are not included in this definition.

“Restoration” means measures taken to restore an altered or damaged natural feature including:

- (1) Active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to an unauthorized alteration; and
- (2) Actions performed to reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.

“Rills” means steep-sided channels resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery. Rill erosion tends to occur on slopes, particularly steep slopes with poor vegetative cover.

“Riparian habitat” means areas adjacent to aquatic systems with flowing water that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife. Widths shall be measured from the ordinary high water mark

or from the top of bank if the ordinary high water mark cannot be identified. It includes the entire extent of the floodplain and the extent of vegetation adapted to wet conditions as well as adjacent upland plant communities that directly influence the stream system. Riparian habitat areas include those riparian areas severely altered or damaged due to human development activities.

“Scientific Process” means a valid scientific process is one that produces reliable information useful in understanding the consequences of a decision. The characteristics of a valid scientific process are as follows:

- (1) Peer Review. The information has been critically reviewed by other qualified scientific experts in that scientific discipline.
- (2) Methods. The methods that were used are standardized in the pertinent scientific discipline or the methods have been appropriately peer-reviewed to assure their reliability and validity.
- (3) Logical Conclusions and Reasonable Inferences. The conclusions presented are based on reasonable assumptions supported by other studies and are logically and reasonably derived from the assumptions and supported by the data presented.
- (4) Quantitative Analysis. The data have been analyzed using appropriate statistical or quantitative methods.
- (5) Context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge.
- (6) References. The assumptions, techniques, and conclusions are well referenced with citations to pertinent existing information.

“Scrub-shrub wetland” means a wetland with at least 30 percent of its surface area covered by woody vegetation less than 20 feet in height as the uppermost strata.

“Section 404 permit” means a permit issued by the Corps of Engineers for the placement of dredge or fill material or clearing in waters of the U.S., including wetlands, in accordance with 33 USC Section 1344. Section 404 permits may also be for endangered species consultation. Require a consultation under Section 7 of the Federal Endangered Species Act.

“Seeps” means a spot where water oozes from the earth, often forming the source of a small stream.

“Seismic hazard areas” means areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, or soil liquefaction.

“Serviceable” means presently usable.

“SEPA” means the Washington State Environmental Policy Act, Chapter 43.21C RCW.

“Shorelands” or “shoreland areas” means those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes and tidal waters which are subject to the provisions of Chapter 90.58 RCW.

“Shorelines” means all of the water areas of the state as defined in RCW 90.58.030, including reservoirs and their associated shorelands, together with the lands underlying them except:

- (1) Shorelines of statewide significance;
- (2) Shorelines on segments of streams upstream of a point where the mean annual flow is 20 cubic feet per second (cfs) or less and the wetlands associated with such upstream segments; and
- (3) Shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes.

“Shorelines of statewide significance” means those areas defined in RCW 90.58.030(2)(e).

“Shorelines of the state” means the total of all “shorelines,” as defined in RCW 90.58.030(2)(d), and “shorelines of statewide significance” within the state, as defined in RCW 90.58.030(2)(e).

“Significant portion of its range” means that portion of a species’ range likely to be essential to the long-term survival of the population in Washington.

“Soil survey” means the most recent soil survey for the local area or county by the National Resources Conservation Service, U.S. Department of Agriculture.

“Special flood hazard area” means the land in the floodplain within an area subject to a one percent or greater chance of flooding in any given year. Designations of special flood hazard areas on flood insurance map(s) always include the letters A or V.

“Special protection areas” means aquifer recharge areas defined by WAC 173-200-090 that require special consideration or increased protection because of unique characteristics, including, but not limited to:

- (1) Ground waters that support an ecological system requiring more stringent criteria than drinking water standards;
- (2) Ground water recharge areas and wellhead protection areas that are vulnerable to pollution because of hydrogeologic characteristics; and
- (3) Sole source aquifer status.

Sole Source Aquifer. See “Aquifer, sole source.”

“Species” means any group of animals classified as a species or subspecies as commonly accepted by the scientific community.

“Species, endangered” means any fish or wildlife species that is threatened with extinction throughout all or a significant portion of its range and is listed by the state or federal government as an endangered species.

“Species of local importance” means those species of local concern due to their population status or their sensitivity to habitat manipulation, or that are game species.

“Species, priority” means any fish or wildlife species requiring protective measures and/or management guidelines to ensure its persistence at genetically viable population levels as classified by the Department of Fish and Wildlife, including endangered, threatened, sensitive, candidate and monitor species, and those of recreational, commercial, or tribal importance.

“Species, threatened” means any fish or wildlife species that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range without cooperative management or removal of threats, and is listed by the state or federal government as a threatened species.

“Stream” means water contained within a channel, either perennial or intermittent, and classified according to WAC 222-16-030 or 222-16-031 and as listed under “water typing system.” Streams also include natural watercourses modified by man. Streams do not include irrigation ditches, wasteways, drains, drainage ways (such as Spiketon Ditch from the city reservoir to the south city limits), outfalls, operational spillways, channels, stormwater runoff facilities or other wholly artificial watercourses, except those that directly result from the modification to a natural watercourse.

“Structure” means a man-made assemblage of materials above or below ground.

“Subdrainage basin” or “subbasin” means the drainage area of the highest order stream containing the subject property impact area. “Stream order” is the term used to define the position of a stream in the hierarchy of tributaries in the watershed. The smallest streams are the highest order (first order) tributaries. These are the upper watershed streams and have no tributaries of their own. When two first order streams meet, they form a second order stream, and when two second order streams meet, they become a third order stream, and so on.

“Substantial damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

“Substantial improvement” means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the fair market value of the structure either: before the improvement or repair is started; or, if the structure has been damaged and is being restored, before the damage occurred.

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

“**Variance**” means a grant of relief from the requirements of Chapters 12.08 through 12.13 BMC of this title that permits construction in a manner that would otherwise be prohibited by Chapters 12.08 through 12.13 BMC.

“Volcanic hazard areas” means areas that are subject to pyroclastic flows, lava flows, debris avalanche, or inundation by debris flows, mudflows, or related flooding resulting from volcanic activity.

“Vulnerability” means the combined effect of susceptibility to contamination and the presence of potential contaminants.

“Water-dependent” means a use or portion of a use that cannot exist in a location that is not adjacent to the water, but is dependent on the water by reason of the intrinsic nature of its operations; a use that can be carried out only on, in, or adjacent to water. Examples of water-dependent uses include ship cargo terminal loading areas; fishing; ferry and passenger terminals; barge loading, ship building, and dry docking facilities; marinas, moorage, and boat launching facilities; aquaculture; float plane operations; surface water intake; and sanitary sewer and storm drain outfalls.

“Water resource inventory area (WRIA)” means one of 62 watersheds in the state of Washington, each composed of the drainage areas of a stream or streams, as established in Chapter 173-500 WAC as it existed on January 1, 1997.

“Water table” means that surface in an unconfined aquifer at which the pressure is atmospheric. It is defined by the levels at which water stands in wells that penetrate the aquifer just far enough to hold standing water.

“Water Table Aquifer.” See “Aquifer, unconfined.”

“Water typing system” means waters classified according to WAC 222-16-030 as follows:

- (1) “Type S water” means all waters, within their bankfull width, as inventoried as “shorelines of the state” under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW including periodically inundated areas of their associated wetlands.
- (2) “Type F water” means segments of natural waters that are not classified as Type S waters, which are within the bankfull widths of defined channels and periodically inundated areas of their associated wetlands, or within lakes, ponds or impoundments having a surface areas of 0.5 acres or greater at seasonal low water and which in any case contain fish habitat or are described by one of the following four categories:
  - (a) Are diverted for domestic use by more than 10 residential or camping units or by a public accommodation facility licensed to serve more than 10 persons, where such diversion is determined by the Department of Natural Resources to be a valid appropriation of water source for such users. Such waters shall be considered Type F water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by 50 percent, or whichever is less;
  - (b) Are diverted for use by federal, state, tribal or private fish hatcheries. Such waters shall be considered Type F water upstream from the point of diversion for 1,500 feet, including tributaries if highly significant for protection of downstream water quality;
  - (c) Are within a federal, state, local or private campground having more than 10 camping units; provided, that the water shall not be considered to enter a campground until it reaches the boundary of the park lands available for public use and comes within 100 feet of a camping unit, trail or other park improvement;

- (d) Riverine ponds, wall-based channels, and other channel features that are used by fish for off-channel habitat. These areas are critical to the maintenance of optimum survival of fish. This habitat shall be identified based on the following criteria:
- (i) The site must be connected to a fish habitat stream and be accessible during some period of the year; and
  - (ii) The off-channel water must be accessible to fish.
- (3) "Type Np water" means all segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are flowing waters that do not go dry any time of the year of normal rainfall and include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.
- (4) "Type Ns waters" means all segments of natural waters within the bankfull width of the defined channels that are not Type S, F, or Np waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np water. Ns waters must be physically connected by an above-ground channel system to Type S, F, or Np waters.

"Well" means a bored, drilled or driven shaft, or a dug hole whose depth is greater than the largest surface dimension for the purpose of withdrawing or injecting water or other liquids.

"Wellhead protection area (WHPA)" means the portion of a zone of contribution for a well, wellfield or spring, as defined using criteria established by the State Department of Ecology.

"Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation 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.

"Wetland classes," "classes of wetlands," or "wetland types" means the descriptive classes of the wetlands taxonomic classification system of the U.S. Fish and Wildlife Service (Cowardin, et al., 1979).

"Wetland edge" means the boundary of a wetland as delineated based on the definitions contained in this title.

"Wetlands mitigation site" means a site where wetlands are restored, created, enhanced, or, in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.

"Zone of contribution" means the area surrounding a well or spring that encompasses all areas or features that supply ground water recharge to the well or spring. (Ord. 21-05 § 2, 2005).

**12.08.040 Administrative procedures.**

The administrative procedures followed during the critical areas review process shall conform to the standards and requirements of BMC Title 20. This shall include, but not be limited to, timing, appeals, and fees associated with applications covered by this title. (Ord. 21-05 § 2, 2005).

**12.08.050 Fees.**

- (1) The city of Buckley by resolution shall establish fees for filing of a critical areas permit, critical areas review processing, and other services provided by the city as required by this title. These fees shall be based on the anticipated sum of direct costs incurred by the city for any individual development or action and may be established as a sliding scale that will recover all of the city's costs. Basis for these fees shall include, but not be limited to, the cost of engineering and planning review time, cost of inspection time, costs for administration, and any other special costs attributable to the critical areas review process.
- (2) Unless otherwise indicated in this title, the applicant shall be responsible for the initiation, preparation, submission, and expense of all required reports, assessment(s), studies, plans, reconnaissance(s), peer review(s) by qualified consultants, and other work prepared in support of or necessary to review the application. (Ord. 21-05 § 2, 2005).

**12.08.060 Severability.**

If any clause, sentence, paragraph, section, or part of this title or the application thereof to any person or circumstance shall be judged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered. The decision shall not affect or invalidate the remainder of any part thereof and to this end the provisions of each clause, sentence, paragraph, section, or part of this law are hereby declared to be severable. (Ord. 21-05 § 2, 2005).

**12.08.070 Administrative rules.**

The city administrator is authorized to adopt such administrative rules and regulations as necessary and appropriate to implement this title and to prepare and require the use of such forms as necessary for its administration. (Ord. 21-05 § 2, 2005).

**12.08.080 Interpretation.**

In the interpretation and application of this title, the provisions of this title shall be considered to be the minimum requirements necessary, shall be liberally construed to serve the purpose of this title, and shall be deemed to neither limit nor repeal any other provisions under state statute. (Ord. 21-05 § 2, 2005).

**12.08.090 Jurisdiction – Critical areas.**

- (1) The city of Buckley shall regulate all uses, activities, and developments within, adjacent to, or likely to affect one or more critical areas, consistent with best available science and the provisions herein.
- (2) Critical areas regulated by this title include:
  - (a) Wetlands as designated in Chapter 12.09 BMC, Wetlands;
  - (b) Critical aquifer recharge areas as designated in Chapter 12.10 BMC, Critical Aquifer Recharge Areas;
  - (c) Frequently flooded areas as designated in Chapter 12.11 BMC, Frequently Flooded Areas;
  - (d) Geologically hazardous areas as designated in Chapter 12.12 BMC, Geologically Hazardous Areas; and
  - (e) Fish and wildlife habitat conservation areas as designated in Chapter 12.13 BMC, Fish and Wildlife Habitat Conservation Areas.
- (3) All areas within the city of Buckley meeting the definition of one or more critical areas, regardless of any formal identification, are hereby designated as potential critical areas and are subject to the provisions of this title.
- (4) Mapping. The approximate location and extent of all known and/or suspected critical areas to include wetlands, aquifer recharge areas, frequently flooded areas, geologically hazardous areas and fish and wildlife habitat conservation areas may be depicted on the following maps, and are hereby incorporated by reference into this title:
  - (a) National Wetlands Inventory; and
  - (b) Department of Fish and Wildlife priority habitat and species maps; and
  - (c) Department of Natural Resources official water type reference maps, as amended; and
  - (d) Department of Natural Resources shorezone inventory; and
  - (e) Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors Reports published by the Washington Conservation Commission; and
  - (f) Department of Natural Resources state natural area preserves and natural resource conservation area maps; and
  - (g) U.S. Geological Survey landslide hazard, seismic hazard and volcano hazard maps; and
  - (h) Department of Natural Resources seismic hazard maps for Western Washington; and
  - (i) Department of Natural Resources slope stability maps; and
  - (j) Federal Emergency Management Administration flood insurance maps; and
  - (k) City of Buckley water system map; and
  - (l) Locally adopted maps.
- (5) Additionally, soil maps produced by the United States Department of Agriculture National Resources Conservation Service may be useful in helping to identify potential critical areas. The above-referenced maps are to be used as a guide for the city, project applicants and/or property owners, and may be periodically updated as new critical areas are identified. They are a reference only and shall not be used to determine whether a parcel of land has or has not existing critical areas within its boundaries. The city of Buckley will attempt to maintain a current inventory of the above-referenced maps. (Ord. 21-05 § 2, 2005).

**12.08.100 Protection of critical areas.**

Any action taken pursuant to this title shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with BMC 12.08.240, Mitigation sequencing, and/or BMC 12.08.260, Innovative mitigation, to minimize and mitigate all adverse impacts. (Ord. 21-05 § 2, 2005).

**12.08.110 Best available science.**

- (1) Protection for Functions and Values and Anadromous Fish. Critical areas reports and decisions to alter critical areas shall include the best available science in order to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat, such as salmon and bull trout.
- (2) Best Available Science to Be Used Must Be Consistent with Criteria. The best available science is that scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, or a qualified scientific expert or team of qualified scientific experts that is consistent with criteria established in WAC 365-195-900 through 365-195-925.

Whether a person is a qualified scientific expert with expertise appropriate to the relevant critical areas is determined by the person's professional credentials and/or certification, any advanced degrees earned in the pertinent scientific discipline from a recognized university, the number of years of experience in the pertinent scientific discipline, recognized leadership in the discipline of interest, formal training in the specific area of expertise, and field and/or laboratory experience with evidence of the ability to produce peer-reviewed publications or other professional literature. No one factor is determinative in deciding whether a person is a qualified scientific expert. Where pertinent scientific information implicates multiple scientific disciplines, cities are encouraged to consult a team of qualified scientific experts representing the various disciplines to ensure the identification and inclusion of the best available science.

- (3) Characteristics of a Valid Scientific Process. In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions, and in developing critical areas policies and development regulations that will be effective in protecting the functions and values of critical areas. To determine whether information received during the permit review process is reliable scientific information, the city planning director shall determine whether the source of the information displays the characteristics of a valid scientific process. Such characteristics are as follows:
  - (a) Peer Review. The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed;
  - (b) Methods. The methods used to obtain the information are clearly stated and replicated. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to assure their reliability and validity;

- (c) Logical Conclusions and Reasonable Inferences. The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained;
  - (d) Quantitative Analysis. The data have been analyzed using appropriate statistical or quantitative methods;
  - (e) Context. The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge; and
  - (f) References. The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and other pertinent existing information.
- (4) Nonscientific Information. Nonscientific information may supplement scientific information, but it is not an adequate substitute for valid and available scientific information. Common sources of nonscientific information include the following:
- (a) Anecdotal Information. One or more observations that are not part of an organized scientific effort (for example, "I saw a grizzly bear in that area while I was hiking.");
  - (b) Nonexpert Opinion. Opinion of a person who is not a qualified scientific expert in a pertinent scientific discipline (for example, "I do not believe there are grizzly bears in that area."); and
  - (c) Hearsay. Information repeated from communication with others (for example, "At a lecture last week, Dr. Smith said there were no grizzly bears in that area."). (Ord. 21-05 § 2, 2005).

#### **12.08.120 Applicability.**

- (1) The provisions of this title shall apply to all lands, all land uses and development activity, and all structures and facilities in the city of Buckley, whether or not a permit or authorization is required, and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns, leases, or administers land within the city. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the purposes and requirements of this title.
- (2) The city of Buckley 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 title, including, but not limited to, the following:
  - (a) Building permit;
  - (b) Clearing and grading permit;
  - (c) Forest practices permit;
  - (d) Conditional use permit;
  - (e) Shoreline conditional use permit;
  - (f) Shoreline substantial development permit;
  - (g) Shoreline exemption;
  - (h) Shoreline variance;

- (i) Short subdivision;
  - (j) Subdivision;
  - (k) Planned unit development;
  - (l) Binding site plan;
  - (m) Zoning variance;
  - (n) Zoning code amendment; or
  - (o) Any other adopted permit or required approval not expressly exempted by this title.
- (3) Approval of a permit or development proposal pursuant to the provisions of this title does not discharge the obligation of the applicant to comply with the provisions of this title. (Ord. 21-05 § 2, 2005).

#### **12.08.130 Exemptions.**

- (1) Exemption Request and Review Process. The proponent of the activity may submit a written request for exemption to the planning director that describes the activity and states the exemption listed in this section that applies.
- (2) The planning director shall review the exemption request to verify that it complies with this title and approve or deny the exemption. If the exemption is approved, it shall be placed on file with the planning department. If the exemption is denied, the proponent may continue in the review process and shall be subject to the requirements of this title.
- (3) Exempt activities shall avoid impacts to critical areas. All exempted activities shall use reasonable methods to avoid and/or minimize potential impacts to critical areas. To be exempt from this title does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense.
- (4) Exempt Activities. The following developments, activities, and associated uses shall be exempt from the provisions of this title; provided, that they are otherwise consistent with the provisions of other local, state, and federal laws and requirements:
- (a) Existing and ongoing agricultural activities, provided no alteration of flood storage capacity or conveyance occurs;
  - (b) Activities involving artificially created wetlands or streams intentionally created from nonwetland sites, including but not limited to grass-lined swales, irrigation and drainage ditches, detention facilities, and landscape features, except wetlands, streams or swales created as mitigation or that provide sensitive habitat for fish;
    - (i) Activities affecting Category IV wetlands less than 4,000 sf in size and/or Category III wetlands less than 1,000 sf in size and are ~~when~~ accompanied by an approved mitigation plan meeting the requirements of BMC 12.08.230 and 12.08.250 or an approved plan that meets the innovative mitigation requirements of BMC 12.08.260;
  - (c) Activities occurring in areas of 40 percent slope or greater, with a vertical elevation change of less than 15 feet may be exempted based upon city review of a soils report prepared by a geologist or geotechnical engineer, which demonstrates that no significant adverse impact will result from the exemption;

- (d) Normal and routine maintenance, operation and reconstruction of existing roads, streets, utilities and associated rights-of-way and structures;
- (e) Normal maintenance and repair, and reconstruction or remodeling of residential or commercial structures existing prior to the effective date of the ordinance codified in this chapter;
- (f) 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 the sensitive area shall be the minimum necessary to carry out the work or studies;
- (g) Educational activities, scientific research, and outdoor recreational activities, including but not limited to interpretive field trips, bird watching, and trails for horseback riding, bicycling and hiking, that will not have a significant adverse effect on the sensitive area. Trails must be constructed pursuant to BMC 12.08.160(3)(c), Public and Private Pedestrian Trails;
- (h) Emergency activities necessary to prevent an immediate threat to public health, safety or property;
- (i) Normal and routine maintenance and operation of existing landscaping and gardens, provided they comply with all other regulations in this chapter;
- (j) Minor activities not mentioned above and determined by the department to have minimal impacts to a sensitive area;
- (k) Installation, construction, replacement, repair or alteration of utilities and their associated facilities, lines, pipes, mains, equipment or appurtenances in improved city road rights-of-way;
- (l) Development of single-family and duplex lots legally created prior to the effective date of the ordinance codified in this chapter, consistent with the reasonable use provisions of these regulations, or single-family and duplex lots vested under state law and not located within Category I and II wetlands and Class I, II and III stream buffer setback areas;
- (m) Notwithstanding the exemptions provided by this subsection, any otherwise exempt activities occurring in or near a sensitive area shall comply with the intent of these standards and shall consider on-site alternatives that avoid or minimize potential impacts;
- (n) Exempt activities occurring in flood hazard areas shall not alter flood storage capacity or conveyance;
- (o) With the exception of subsections (3)(a), (h), and (i) of this section, and normal maintenance and repair of residential and commercial structures as in subsection (3)(f) of this section, no property owner or other entity shall undertake exempt activities prior to providing 10 days' notice to the city. In case of any question as to whether a particular activity is exempt from the provisions of this section, the city's determination shall prevail and shall be confirmed in writing within 10 days of receipt of the owner's or applicant's letter. Those activities falling under subsection (3)(i) of this section shall provide telephone or written communication with the department within 48 hours of the activity notifying such emergency activity was taken;
- (p) Structures may be reconstructed if destroyed by fire or other natural hazards by less than 50 percent of its assessed or appraised value (whichever is greater) if located within a buffer. Reconstruction of the structure shall not further encroach into the buffer area or increase the building footprint and must be initiated within one year of the date of such damage, as evidenced by the issuance of a valid building permit, and diligently pursued to completion unless

authorized in subsection (3)(g) of this section. Structures that are nonconforming solely due to the provisions of this chapter shall not be governed by the legal nonconformances provisions of Chapter 19.36 BMC. (Ord. 21-05 § 2, 2005).

- (q) Installation and maintenance within critical area buffers of LID BMPs in compliance with the Low Impact Development Technical Guidance Manual for Puget Sound.

**12.08.140 Exception – Public agency and utility.**

- (1) If the application of this title would prohibit a development proposal by a public agency or public utility, the agency or utility may apply for an exception pursuant to this section.
- (2) Exception Request and Review Process. An application for a public agency and utility exception shall be made to the city and shall include a critical areas permit application; critical areas report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW). The planning director shall prepare a recommendation to the decision maker based on review of the submitted information, a site inspection, and the proposal's ability to comply with public agency and utility exception review criteria in subsection (4) of this section.
- (3) Decision maker Review. The decision maker shall review the application and planning director's recommendation and conduct a public hearing pursuant to the provisions of BMC Title 20. The decision maker shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with all of the public agency and utility exception criteria in subsection (4) of this section.
- (4) Public Agency and Utility Review Criteria. The criteria for review and approval of public agency and utility exceptions follow:
  - (a) There is no other practical alternative to the proposed development with less impact on the critical areas; and
  - (b) The application of this title would unreasonably restrict the ability to provide utility services to the public; and
  - (c) The proposal meets the criteria in BMC 12.08.280, Review criteria.
- (5) Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application. (Ord. 01-12 § 2, 2012; Ord. 21-05 § 2, 2005).

**12.08.150 Exception – Reasonable use.**

- (1) If the application of this chapter would result in denial of reasonable and economically viable use of a property, and if such reasonable and economically viable use of the property cannot be obtained by consideration of a variance pursuant to BMC 12.08.330, then a landowner may seek a reasonable use exception from the standards of this chapter. Reasonable use exceptions are intended as a "last resort" when no plan for mitigation and/or variance can meet the requirements of this chapter and allow the applicant a reasonable economically viable use of his or her property.

- (2) Exception Request and Review Process. The reasonable use exception shall follow the review and public notification procedures of BMC 12.08.140(2) and (3). The planning director shall prepare a recommendation to the decision maker based on review of the submitted information, a site inspection, and the proposal's ability to comply with the reasonable use exception criteria in subsection (3) of this section.
- (3) Reasonable Use Review Criteria. The criteria for review and approval of reasonable use exceptions are:
  - (a) The application of this title would deny all reasonable use of the property; and
  - (b) No other reasonable use of the property has less impact on the critical area; and
  - (c) Any alteration is the minimum necessary to allow for reasonable use of the property; and
  - (d) The inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant after the effective date of the ordinance codified in this title, or its predecessor; and
  - (e) The proposal meets the criteria in BMC 12.08.280, Review criteria.
- (4) Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application. (Ord. 01-12 § 3, 2012; Ord. 21-05 § 2, 2005).

**12.08.160 Allowed activities.**

- (1) Critical Areas Report Not Required. Activities allowed under this title shall have been reviewed and permitted or approved by the city or other agency with jurisdiction, but do not require submittal of a separate critical area identification form or critical areas report, unless such submittal was required previously for the underlying permit. The planning director may apply conditions to the underlying permit or approval to ensure that the allowed activity is consistent with the provisions of this title to protect critical areas.
- (2) Required Use of Best Management Practices. All allowed activities shall be conducted using the best management practices, adopted pursuant to Chapter 14.30 BMC, that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The city shall observe the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.
- (3) Allowed Activities. The following activities are allowed:
  - (a) Permit Requests Subsequent to Previous Critical Areas Review. Development permits and approvals that involve both discretionary land use approvals (such as subdivisions, rezones, or conditional use permits), and construction approvals (such as building permits) if all of the following conditions have been met:
    - (i) The provisions of this title have been previously addressed as part of another approval;
    - (ii) There have been no material changes in the potential impact to the critical area or buffer since the prior review;

- (iii) There is no new information available that is applicable to any critical areas review of the site or particular critical area;
  - (iv) The permit or approval has not expired or, if no expiration date, no more than five years have elapsed since the issuance of that permit or approval; and
  - (v) Compliance with any standards or conditions placed upon the prior permit or approval has been achieved or secured;
- (b) Activities within the Improved Right-of-Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a city-authorized private roadway except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater;
- (c) Public and Private Pedestrian Trails. Public and private pedestrian trails, subject to the following:
- (i) Private trails shall be limited to a maximum width of six feet and shall be surfaced with a pervious material such as bark or an approved low impact development related material (such as permeable asphalt, grass pavers);
  - (ii) Public trails shall be limited to the following maximum widths and construction standards:

**Table IA**

<b>Trail Type</b>	<b>Max. Surface Width</b>	<b>Surface Material</b>
Regional trails (i.e., Foothills Trail)	12 feet	Any, to include asphalt
Public pedestrian	8 feet	Any, to include asphalt
Interpretive trails (where authorized in critical area)	6 feet	Pervious or raised boardwalk (see subsection (3)(c)(i) of this section)

- (iii) Critical area and/or buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and
  - (iv) Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report.
- (d) Select Vegetation Removal Activities. The following vegetation removal activities; provided, that no vegetation shall be removed from a critical area or its buffer without approval from the planning director:
- (i) The removal of the following vegetation with hand labor and light equipment:
    - (A) Invasive weeds;
    - (B) Himalayan blackberry (*Rubus discolor*, *R. procerus*); and
    - (C) Evergreen blackberry (*Rubus laciniatus*);

- (ii) The removal of trees that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property, from critical areas and buffers; provided, that:
  - (A) Tree cutting shall be limited to limbing and crown thinning, unless otherwise justified. Where limbing or crown thinning is not sufficient to address the hazard, trees should be topped to remove the hazard rather than cut at or near the base of the tree;
  - (B) All vegetation cut (tree stems, branches, tops, etc.) shall be left within the critical area or buffer unless removal is warranted due to the potential for disease transmittal to other healthy vegetation;
  - (C) The landowner shall replace any trees that are felled or topped with new trees at a ratio of one replacement tree for each tree felled or topped (1:1) within one year in accordance with an approved restoration plan. Replacement trees shall be a minimum of two inches in caliper and be a coniferous species such as fir, cedar, spruce, etc;
  - (D) If a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods of removal that will minimize impacts; and
  - (E) Hazard trees determined to pose an imminent threat or danger to public health or safety, or to public or private property, or serious environmental degradation may be removed or topped by the landowner prior to receiving written approval from the city; provided, that within 14 days following such action, the landowner shall submit a restoration plan that demonstrates compliance with the provisions of this title;
- (e) Measures to control a fire or halt the spread of disease or damaging insects consistent with the State Forest Practices Act, Chapter 76.09 RCW; provided, that the removed vegetation shall be replaced in-kind or with similar native species within one year in accordance with an approved restoration plan.

Unless otherwise provided or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited;
- (f) Chemical Applications. The application of herbicides, pesticides or other hazardous substances by public agencies for reasons of public health and safety;
- (g) Minor Site Investigative Work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation, not to exceed 50 cubic yards. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored;
- (h) Navigational Aids and Boundary Markers. Construction or modification of navigational aids and boundary markers;
- (i) Environmental Preservation. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing wetland; and
- (j) Harvesting Wild Crops. 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, or alteration of the wetland by changing existing topography, water conditions or water sources. (Ord. 21-05 § 2, 2005).

**12.08.170 City review process.**

- (1) As part of this review, the city shall:
  - (a) Verify the information submitted by the applicant;
  - (b) Evaluate the project area and vicinity for critical areas;
  - (c) Determine whether the proposed project is likely to impact the functions or values of critical areas; and
  - (d) Determine if the proposed project adequately addresses the impacts and avoids impacts to the critical area associated with the project.
- (2) If the proposed project is within, adjacent to, or is likely to impact a critical area, the city shall:
  - (a) Require a critical areas report from the applicant that has been prepared by a qualified consultant;
  - (b) Review and evaluate the critical areas report;
  - (c) Determine whether the development proposal conforms to the purposes and performance standards of this title, including the criteria in BMC 12.08.280, Review criteria;
  - (d) Assess potential impacts to the critical area and determine if they are necessary and unavoidable; and
  - (e) Determine if any mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of this title. (Ord. 21-05 § 2, 2005).

**12.08.180 Critical area preapplication consultation.**

Any person preparing to submit an application for development or use of land that may be regulated by the provisions of this title shall conduct a consultation meeting with the planning director prior to submitting an application for development or other approval. At this meeting, the planning director shall discuss the requirements of this title; provide critical area maps, scientific information, and other source materials; outline the review process; and work with the activity proponent to identify any potential concerns that might arise during the review process, in addition to discussing other permit procedures and requirements. (Ord. 21-05 § 2, 2005).

**12.08.190 Critical areas permit application.**

- (1) Submittal. Prior to the city's consideration of any proposed activity not found to be exempt under BMC 12.08.130, Exemptions, or allowed pursuant to BMC 12.08.160, Allowed activities, the applicant shall submit to the department a complete critical areas permit application on forms provided by the city.
- (2) Site Inspection. Upon receipt of a project application and a critical areas permit application, the planning director or designee shall conduct a site inspection to review critical area conditions on-site. The planning director shall notify the property owner of the inspection prior to the site visit. Reasonable access to the site shall be provided by the property owner for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.

- (3) Critical Areas Permit Application Review Process. The planning director shall review the critical area identification form, conduct a site inspection, and review other information available pertaining to the site and the proposal and make a determination as to whether any critical areas may be affected by the proposal and if a more detailed critical areas report shall be submitted.
  - (a) Decision Indicators. The planning director may use the following indicators to assist in determining the need for a critical areas report:
    - (i) Indication of a critical area on the city critical areas maps that may be impacted by the proposed activity;
    - (ii) Information and scientific opinions from appropriate agencies, including but not limited to the Departments of Fish and Wildlife, Natural Resources, and Ecology;
    - (iii) Documentation, from a scientific or other reasonable source, of the possible presence of a critical area; or
    - (iv) A finding by a qualified professional or a reasonable belief by the planning director that a critical area may exist on or adjacent to the site of the proposed activity.
- (4) Decision on Permit Application.
  - (a) No Critical Areas Present. If after a site visit the planning director's analysis indicates that the project area is not within or adjacent to a critical area or buffer, and that the proposed activity is unlikely to degrade the functions or values of a critical area, then the planning director shall rule that the critical areas review is complete and note on the permit application the reasons that no further review is required. A summary of this information shall be included in any staff report or decision on the underlying permit.
  - (b) Critical Areas Present, but No Impact – Waiver. If the planning director determines that there are critical areas within or adjacent to the project area, but that the proposed activity is unlikely to degrade the functions or values of the critical area, the planning director may waive the requirement for a critical areas report. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:
    - (i) There will be no alteration of the critical area or buffer;
    - (ii) The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this title; and
    - (iii) The proposal is consistent with other applicable regulations and standards.
- (5) A summary of this analysis and the findings shall be included in any staff report or decision on the underlying permit.
  - (a) Critical Areas May Be Affected by Proposal. If the planning director determines that a critical area or areas may be affected by the proposal, then the planning director shall notify the applicant that a critical areas report must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report.
- (6) Planning Director's Determination Subject to Reconsideration. A determination regarding the apparent absence of one or more critical areas by the planning director is not an expert certification regarding the presence of critical areas and the determination is subject to possible reconsideration and reopening if new information is received.

If the applicant wants greater assurance of the accuracy of the critical areas review determination, the applicant may choose to hire a qualified professional to provide such assurances.

**12.08.200 Public notice of initial determination.**

The city shall notify the public of proposals in accordance with BMC Title 20.

- (1) If the planning director determines that no critical areas report is necessary, the city shall state the reasons for this determination in the notice of application issued by the city for the proposal.
- (2) If the planning director determines that there are critical areas on the site that the proposed project is unlikely to impact, and the project meets the requirements for and has been granted a waiver from the requirement to complete a critical areas report, a summary of the analysis and findings for this decision shall be stated in the notice of application for the proposal.
- (3) If the planning director determines that critical areas may be affected by the proposal and a critical areas report is required, public notice of the application shall include a description of the critical area that might be affected and state that a critical areas report(s) is required. (Ord. 21-05 § 2, 2005).

**12.08.210 Critical areas reports – Requirements.**

- (1) Prepared by Qualified Consultant. If required by BMC 12.08.190(4)(c), Critical Areas May Be Affected by Proposal, the applicant shall submit a critical areas report prepared by a qualified consultant as defined herein.
- (2) Incorporating Best Available Science. The critical areas report shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance and reference the source of science used. The critical areas report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this title.
- (3) Minimum Report Contents. At a minimum, the report shall contain the following:
  - (a) The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;
  - (b) A copy of the site plan for the development proposal showing:
    - (i) Identified critical areas, buffers, and the development proposal with dimensions;
    - (ii) Limits of any areas to be cleared; and
    - (iii) A description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations;
  - (c) The dates and names of the persons preparing the report and documentation of any fieldwork performed on the site;
  - (d) Identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area;
  - (e) A statement specifying the accuracy of the report, and all assumptions made and relied upon;
  - (f) An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;

- (g) A description of reasonable efforts made to apply mitigation sequencing pursuant to BMC 12.08.240, Mitigation sequencing, to avoid, minimize, and mitigate impacts to critical areas;
  - (h) Plans for adequate mitigation, as needed, to offset any impacts, in accordance with BMC 12.08.250, Mitigation plan requirements, or BMC 12.08.260, Innovative mitigation, including, but not limited to:
    - (i) The impacts of any proposed development within or adjacent to a critical area or buffer on the critical area; and
    - (ii) The impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment;
  - (i) A discussion of the performance standards applicable to the critical area and proposed activity;
  - (j) Financial guarantees to ensure compliance; and
  - (k) Any additional information required for the critical area as specified in the corresponding chapter.
- (4) Unless otherwise provided, a critical areas report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the planning director. (Ord. 21-05 § 2, 2005).

**12.08.220 Critical areas reports – Modifications to requirements.**

- (1) Limitations to Study Area. The planning director may limit the required geographic area of the critical areas report as appropriate if:
- (a) The applicant, with assistance from the city, cannot obtain permission to access properties adjacent to the project area; or
  - (b) The proposed activity will affect only a limited part of the subject site.
- (2) Modifications to Required Contents. The applicant may consult with the planning director prior to or during preparation of the critical areas report to obtain city approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.
- (3) Additional Information May Be Required. The planning director may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with this title. Additional information that may be required includes, but is not limited to:
- (a) Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;
  - (b) Grading and drainage plans; and
  - (c) Information specific to the type, location, and nature of the critical area. (Ord. 21-05 § 2, 2005).

**12.08.230 Mitigation requirements.**

- (1) The applicant shall avoid and/or mitigate all impacts that degrade the functions and values of a critical area or areas. Unless otherwise provided in this title, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated in accordance with an approved critical areas report and SEPA documents.
- (2) Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard posed by a critical area.
- (3) Mitigation plans shall not affect adjacent properties by increasing wetland buffer widths or wetland classifications.
- (4) Mitigation shall not be implemented until after city approval of a critical areas report that includes a mitigation plan, and mitigation shall be in accordance with the provisions of the approved critical areas report. (Ord. 21-05 § 2, 2005).

**12.08.240 Mitigation sequencing.**

Applicants shall demonstrate that reasonable efforts have been examined with the intent to minimize impacts to critical areas. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following order of preference:

- (1) Avoiding the impact altogether by not taking a certain action or parts of an action;
- (2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
- (3) Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;
- (4) Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
- (5) Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and
- (6) Monitoring the hazard or other required mitigation and taking remedial action when necessary.

Note: Innovative mitigation for individual actions may include a combination of the above measures. (Ord. 21-05 § 2, 2005).

**12.08.250 Mitigation plan requirements.**

When mitigation is required, the applicant shall submit for approval by the city a mitigation plan as part of the critical areas report. The mitigation plan shall be prepared by a qualified consultant and shall include:

- (1) Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:
  - (a) A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;
  - (b) A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed; and
  - (c) An analysis of the likelihood of success of the compensation project.
- (2) Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this title have been met.
- (3) Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:
  - (a) The proposed construction sequence, timing, and duration;
  - (b) Existing and proposed wetland acreage;
  - (c) Vegetative, faunal, and hydrologic conditions;
  - (d) Relationship within watershed and to existing water bodies;
  - (e) Soil and substrate conditions, topographic elevations;
  - (f) Existing and proposed adjacent site conditions;
  - (g) Required wetland buffers;
  - (h) Property ownership;
  - (i) Grading and excavation details;
  - (j) Erosion and sediment control features;
  - (k) A planting plan specifying plant species, quantities, locations, size, spacing, and density; and
  - (l) Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

- (4) Monitoring Program. The mitigation plan shall include a program for monitoring construction of the compensation project, and for assessing a completed project. Monitoring programs prepared in order to comply with this section shall include the following:
  - (a) Procedures using quantitative and qualitative analysis for establishing the success or failure of the project; and
  - (b) For vegetation determinations, permanent sampling points shall be established; and
  - (c) Vegetative success shall equal 85 percent survival per year for planted trees, shrubs and/or cover of desirable understory or emergent species;

- (d) The applicant shall submit a monitoring report on the current status of the mitigation project to the city pursuant to the following schedule: upon immediate completion of the submitted planting plan; at the end of the first growing season after implementation of the planting plan; and annually thereafter at the end of each growing season for a period of five years; and
  - (e) If necessary, correct for failures by replacing dead or undesirable vegetation with appropriate plantings, repair damage caused by erosion, settling, or other geomorphologic processes or redesigning project. Correction procedures shall be approved by a qualified consultant.
- (5) Contingency Plan. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.
- (6) Financial Guarantees. The mitigation plan shall include financial guarantees to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be required pursuant to BMC 12.08.400. (Ord. 21-05 § 2, 2005).

#### **12.08.260 Innovative mitigation.**

- (1) The city may encourage, facilitate, and approve innovative mitigation projects for Class III and Class IV wetlands. Class II wetlands may be considered after review and approval by the decision maker. Advance mitigation or mitigation banking are examples of alternative mitigation projects allowed under the provisions of this section wherein one or more applicants, or an organization with demonstrated capability, may undertake a mitigation project together if it is demonstrated that all of the following circumstances exist:
- (a) Creation or enhancement of a larger system of critical areas and open space is preferable to the preservation of many individual habitat areas;
  - (b) The applicant(s) demonstrates the organizational and fiscal capability to act cooperatively;
  - (c) The applicant(s) demonstrates that long-term management of the habitat area will be provided; and
  - (d) There is a clear potential for success of the proposed mitigation at the identified mitigation site.
- (2) Conducting mitigation as part of a cooperative process does not reduce or eliminate the required replacement ratios.
- (3) Any innovative mitigation project being considered under this section shall be required to satisfy the mitigation plan and monitoring requirements of BMC 12.08.250. (Ord. 01-12 § 4, 2012; Ord. 21-05 § 2, 2005).

#### **12.08.270 Determination.**

The planning director shall make a determination as to whether the proposed activity and mitigation, if any, is consistent with the provisions of this title. The planning director's determination shall be based on the criteria of BMC 12.08.280, Review criteria. (Ord. 21-05 § 2, 2005).

**12.08.280 Review criteria.**

- (1) Any alteration to a critical area, unless otherwise provided for in this title, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:
  - (a) The proposal minimizes the impact on critical areas in accordance with BMC 12.08.240, Mitigation sequencing, or complies with BMC 12.08.260, Innovative mitigation;
  - (b) The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
  - (c) The proposal is consistent with the general purposes of this title and the public interest;
  - (d) Any alterations permitted to the critical area are mitigated in accordance with BMC 12.08.230, Mitigation requirements;
  - (e) The proposal protects the critical area functions and values consistent with the best available science; and
  - (f) The proposal is consistent with other applicable regulations and standards.
- (2) The city may condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by this title.
- (3) Except as provided for by this title, any project that cannot adequately mitigate its impacts to critical areas shall be denied. (Ord. 21-05 § 2, 2005).

**12.08.290 Favorable determination.**

If the planning director determines that the proposed activity meets the criteria in BMC 12.08.280, Review criteria, and complies with the applicable provisions of this title, the planning director shall prepare a written notice of determination and identify any required conditions of approval. The notice of determination and conditions of approval shall be included in the project file and be considered in the next phase of the city's review of the proposed activity in accordance with any other applicable codes or regulations.

Any conditions of approval included in a notice of determination shall be attached to the underlying permit or approval. Any subsequent changes to the conditions of approval shall void the previous determination pending re-review of the proposal and conditions of approval by the planning director.

A favorable determination should not be construed as endorsement or approval of any underlying permit or approval. (Ord. 21-05 § 2, 2005).

**12.08.300 Unfavorable determination.**

If the planning director determines that a proposed activity does not adequately mitigate its impacts on the critical areas and/or does not comply with the criteria in BMC 12.08.280, Review criteria, and the provisions of this title, the planning director shall prepare written notice of the determination that includes findings of noncompliance.

No proposed activity or permit shall be approved or issued if it is determined that the proposed activity does not adequately mitigate its impacts on the critical areas and/or does not comply with the provisions of this title.

Following notice of determination that the proposed activity does not meet the review criteria and/or does not comply with the applicable provisions of this title, the applicant may request consideration of a revised critical areas report. If the revision is found to be substantial and relevant to the critical areas review, the planning director may reopen the critical areas review and make a new determination based on the revised report. (Ord. 21-05 § 2, 2005).

#### **12.08.310 Completion of the critical areas review.**

The city's determination regarding critical areas pursuant to this title shall be final concurrent with the final decision to approve, condition, or deny the development proposal or other activity involved. (Ord. 21-05 § 2, 2005).

#### **12.08.320 Appeals.**

- (1) Any person may appeal to the a final administrative order, requirement, permit decision, condition and/or determination made; provided, that such appeal shall be filed in writing to the city planning department within 14 calendar days of the date of the written decision, order, requirement or determination is posted.
- (2) For the purpose of this section, the city's order, requirement, permit decision or determination shall not be deemed final until it is reduced to writing and mailed to the applicant.
- (3) The appeal shall be upheld if the applicant proves that the decision appealed is clearly erroneous or based upon error of law. (Ord. 21-05 § 2, 2005).

#### **12.08.330 Variances.**

- (1) An applicant who seeks a modification from the requirements of this title may pursue a variance by filing a written application with the city. Upon the filing of a proper application, hearing examiner shall conduct a duly noticed public hearing and review the application and make a finding that the request meets or fails to meet the variance criteria.
- (2) Variance Criteria. A variance may be granted only if the applicant demonstrates that the requested action conforms to all of the criteria set forth as follows:
  - (a) There are special conditions and circumstances applicable to the subject property or to the intended use such as shape, topography, location or surroundings that do not apply generally to other properties; and
  - (b) The variance is necessary for the preservation and enjoyment of a substantial property right or use possessed by other similarly situated property, but which because of special circumstances is denied the property in question; and
  - (c) Granting the variance will not be materially detrimental to the public welfare or injurious to the property or improvement; and

- (d) Granting the variance will not violate, abrogate, or ignore the goals, objectives or policies of this title or other adopted city land use policies or the comprehensive plan.
- (3) Conditions May Be Required. In granting any variance, the city may prescribe such conditions and safeguards as are necessary to secure adequate protection of critical areas from adverse impacts, and to ensure conformity with this title.
- (4) Additional Considerations for Frequently Flooded Areas. In addition to consideration of the review criteria in subsection (2) of this section, the decision maker shall also consider the following for activities proposed within a frequently flooded area:
  - (a) The danger to life and property due to flooding, erosion damage, or materials swept onto other lands during flood events; and
  - (b) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the proposed use; and
  - (c) The importance of the services provided by the proposed use to the community; and
  - (d) The necessity to the proposed use of a waterfront location, where applicable, and the availability of alternative locations for the proposed use that are not subject to flooding or erosion damage; and
  - (e) The safety of access to the property in times of flood for ordinary and emergency vehicles; and
  - (f) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
  - (g) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges;
  - (h) The proposed variance is the minimum necessary to alleviate hardship.
- (5) Variances shall only be issued upon a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
- (6) Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- (7) Any applicant to whom a variance is granted shall be given written notice that the permitted structure will be built with its lowest floor below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk.

**12.08.340 Unauthorized critical area alterations and enforcement.**

- (1) When a critical area or its buffer has been altered in violation of this title, all ongoing development work shall stop and the critical area shall be restored. The city 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 title.
- (2) Restoration Plan Required. All development work shall remain stopped until a restoration plan is prepared and approved by the city. Such a plan shall be prepared by a qualified consultant and shall describe how the actions proposed meet the minimum requirements described in subsection (3) of

this section. The planning director may, 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.

(3) Minimum Performance Standards for Restoration.

(a) For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:

- (i) The historic structural and functional values shall be restored, including water quality and habitat functions;
- (ii) The historic soil types and configuration shall be replicated;
- (iii) The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities; and
- (iv) The historic functions and values should be replicated at the location of the alteration.

(b) For alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

- (i) The hazard shall be reduced to a level equal to, or less than, the predevelopment hazard;
- (ii) Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and
- (iii) The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

(4) Site Investigations. The planning director or designee is authorized to make site inspections and take such actions as are necessary to enforce this title. Any applicant as a condition of permit review shall grant to the city unlimited right of entry to the work site for the purposes of making inspections to determine compliance with the requirements and conditions of the review and/or issuance of said permit.

(5) Penalties. Any person who violates any of the provisions of this chapter shall be guilty of a civil offense and subject to enforcement and penalty provisions of Chapter 1.12 BMC. (Ord. 21-05 § 2, 2005).

**12.08.350 Critical area markers and signs.**

- (1) The boundary at the outer edge of critical area tracts and easements shall be delineated with permanent survey stakes, using iron or concrete markers as established by local survey standards.
- (2) The boundary at the outer edge of the critical area or buffer shall be identified with temporary signs prior to any site alteration. Such temporary signs shall be replaced with permanent signs prior to occupancy or use of the site. (Ord. 21-05 § 2, 2005).

**12.08.360 Notice on title.**

- (1) In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any property containing a critical area or buffer on which a development proposal (e.g., short plat, long plat, subdivision, boundary line adjustment or other action that requires a land use permit) is submitted shall file a notice with the county according to the direction of the city. The notice shall state the presence of the critical area on the property, of the application of this title to the property, and the fact that limitations on actions in or affecting the critical area may exist. The notice shall run with the land.
- (2) This notice on title shall not be required for a development proposal by a public agency or public or private utility:
  - (a) Within a recorded easement or right-of-way;
  - (b) Where the agency or utility has been adjudicated the right to an easement or right-of-way; or
  - (c) On the site of a permanent public facility.
- (3) The applicant shall submit proof that the notice has been filed for public record before the city approves any development proposal for the property or, in the case of subdivisions, short subdivisions, planned unit developments, and binding site plans, at or before recording. (Ord. 21-05 § 2, 2005).

**12.08.370 Native growth protection areas.**

- (1) Unless otherwise required in this title, native growth protection areas (NGPA) shall be used in development proposals for subdivisions, short subdivisions, planned unit developments, and binding site plans to delineate and protect those contiguous critical areas and buffers listed below:
  - (a) All landslide hazard areas and buffers;
  - (b) All wetlands and buffers;
  - (c) All habitat conservation areas; and
  - (d) All other lands to be protected from alterations as conditioned by project approval.
- (2) Native growth protection areas shall be recorded on all documents of title of record for all affected lots.
- (3) Native growth protection areas shall be designated on the face of the plat or recorded drawing in a format approved by the city attorney. The designation shall include the following restrictions:
  - (a) An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
  - (b) The right of the city to enforce the terms of the restriction. (Ord. 21-05 § 2, 2005).

**12.08.380 Critical area tracts.**

- (1) Critical area tracts shall be used in development proposals for subdivisions, short subdivisions, planned unit developments, and binding site plans to delineate and protect those contiguous critical areas and buffers listed below that total 5,000 or more square feet:

- (a) All landslide hazard areas and buffers; and
  - (b) All wetlands and buffers; and
  - (c) All habitat conservation areas; and
  - (d) All other lands to be protected from alterations as conditioned by project approval.
- (2) Critical area tracts shall be recorded on all documents of title of record for all affected lots.
  - (3) Critical area tracts shall be designated on the face of the plat or recorded drawing in a format approved by the city attorney. The designation shall include the following restriction:
    - (a) An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
    - (b) The right of the city to enforce the terms of the restriction.
  - (4) The city may require that any required critical area tract be dedicated to the city, held in an undivided interest by each owner of a building lot within the development with the ownership interest passing with the ownership of the lot, or held by an incorporated homeowner's association or other legal entity (such as a land trust, which assures the ownership, maintenance, and protection of the tract). (Ord. 21-05 § 2, 2005).

#### **12.08.390 Building setbacks.**

Unless otherwise provided, buildings and other structures shall be set back a distance of 15 feet from the edges of all critical area buffers or from the edges of all critical areas, if no buffers are required. The following may be allowed in the building setback area:

- (1) Landscaping, provided the plant material is not an invasive species per the Washington State Noxious Weed Control Board or Washington State Department of Agriculture (a list of class A through C noxious weeds is a brochure from the Washington State Noxious Weed Control Board );
- (2) Uncovered decks less than 30 inches in height;
- (3) Building overhangs if such overhangs do not extend more than 18 inches into the setback area; and
- (4) Impervious ground surfaces, such as driveways and patios; provided, that such improvements may be subject to water quality regulations as adopted in Chapter 14.30 BMC. (Ord. 21-05 § 2, 2005).

#### **12.08.400 Bonds to ensure mitigation, maintenance, and monitoring.**

- (1) When mitigation required pursuant to a development proposal is not completed prior to the city final permit approval, such as final plat approval or final building inspection, the city shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the city. If the development proposal is subject to mitigation, the applicant shall post a mitigation/maintenance bond or other security in a form and amount deemed acceptable by the city to ensure mitigation is fully functional.
- (2) The performance bond shall be in the amount of 125 percent of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater. Upon satisfactory completion of the project, the performance

bond shall be released and replaced with a required maintenance bond in the amount of 50 percent of the estimated cost of the completed project.

- (3) All bonds shall be in the form of a surety bond, performance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the city attorney.
- (4) Bonds or other security authorized by this section shall remain in effect until the city determines, in writing, that the standards bonded for have been met. Maintenance bonds or other security shall be held by the city for a minimum of three years after project acceptance by the city to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.
- (5) Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.
- (6) Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.
- (7) Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the city may demand payment of any financial guarantees or require other action authorized by the city code or any other law.
- (8) Any funds recovered pursuant to this section shall be used to complete the required mitigation.  
(Ord. 21-05 § 2, 2005).

**12.08.410 Critical area inspections.**

Reasonable access to the site shall be provided to the city, state, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.  
(Ord. 21-05 § 2, 2005).

**Chapter 12.09  
WETLANDS**

Sections:

- 12.09.010 Designation, rating and mapping wetlands.
- 12.09.020 Critical areas report – Additional requirements for wetlands.
- 12.09.030 Performance standards – General requirements.
- 12.09.040 Performance standards – Mitigation requirements.
- 12.09.050 Performance standards – Subdivisions.

**12.09.010 Designation, rating and mapping wetlands.**

- (1) Designating Wetlands. Wetlands are those areas, designated in accordance with the approved federal wetland delineation manual and applicable regional supplements.
- (2) Wetland Ratings. Wetlands shall be rated according to the Department of Ecology wetland rating system found in the Washington State Wetland Rating System documents (Western Washington, Ecology Publication No. 14-06-029) or as revised by Ecology. These documents contain the definitions and methods for determining if the criteria below are met.
  - (a) Wetland Rating Categories.
    - (i) Category I. Category I wetlands are those that 1) represent a unique or rare wetland type; or 2) are more sensitive to disturbance than most wetlands; or 3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or 4) provide a high level of functions. The following types of wetlands are Category I:
      - (A) Wetlands that perform many functions well (scoring 23 points or more)
      - (B) Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program (WNHP) or Washington Department of Natural Resources (WDNR);
      - (C) Bogs;
      - (D) Mature and old-growth forested wetlands larger than 1 acre;
      - (E) Wetlands in coastal lagoons;
      - (F) Relatively undisturbed estuarine wetlands larger than 1 acre; or
      - (G) Interdunal wetlands that score 8 or 9 habitat points and are larger than 1 acre.
    - (ii) Category II. Category II wetlands are those not defined as Category I wetlands and include:
      - (A) Interdunal wetlands larger than 1 acre of those found in a mosaic of wetlands;
      - (B) Estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre;
      - (C) Wetlands with a moderately high level of functions (scoring between 20 and 22 points).
    - (iii) Category III. Category III wetlands are 1) wetlands with a moderate level of functions (scores between 16 and 19 points), 2) can often be adequately replaced with a well-planned mitigation project; and 3) interdunal wetlands between 0.1 and 1 acre in size. Wetlands scoring between 16-19 points generally have been disturbed in some ways, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

- (iv) Category IV. Category IV wetlands have the lowest levels of functions (scoring fewer than 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.
- (3) Mapping of Wetlands. The approximate location and extent of wetlands are shown on the adopted critical area maps as referenced in BMC 12.08.090(4) and (5).
- (4) The identification, classification, extent and location of any wetland shall be determined through the performance of a field investigation by a qualified consultant using the approved Federal wetland delineation manual and applicable regional supplements.

#### **12.09.020 Critical areas report – Additional requirements for wetlands.**

In addition to the general critical areas report requirements of BMC 12.08.210, critical areas reports for wetlands must meet the requirements of this section. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

- (1) Wetland Analysis. In addition to the minimum required contents of BMC 12.08.210, Critical areas reports – Requirements, a critical areas report for wetlands shall contain an analysis of the wetlands including the following site- and proposal-related information at a minimum:
  - (a) A written assessment and accompanying maps of the wetlands and buffers within 300 feet of the project area, including the following information at a minimum:
    - (i) The project area of the proposed activity;
    - (ii) Wetland delineation and required buffers;
    - (iii) Existing wetland acreage;
    - (iv) Wetland category; vegetative, faunal, and hydrologic characteristics;
    - (v) Soil and substrate conditions; and
    - (vi) Topographic elevations, at five-foot contours.
  - (b) Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the information detailed in BMC 12.08.250, Mitigation plan requirements.
- (2) Additional Information May Be Required. When appropriate, the planning director may also require the critical areas report to include an evaluation by the Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as appropriate. (Ord. 21-05 § 2, 2005).

#### **12.09.030 Performance standards – General requirements.**

- (1) Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and values of the wetland and other critical areas.
- (2) Activities and uses shall be prohibited from wetlands and wetland buffers, except as provided for in this title.

- (3) **Category I Wetlands.** Activities and uses shall be prohibited from Category I, except as provided for in the public agency and utility exception, reasonable use exception, and variance sections of this title.
- (4) **Category II.** With respect to activities proposed in Category II wetlands, the following standards shall apply:
  - (a) Water-dependent activities as provided for under the City’s Shoreline Master Program may be allowed where there are no feasible alternatives that would not have a less adverse impact on the wetland, its buffers and other critical areas.
  - (b) Where non-water-dependent activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited, unless the applicant demonstrates that:
    - (i) The basic project purpose cannot reasonably be accomplished and successfully avoid, or result in less adverse impact on, a wetland on another site or sites in the general region; and
    - (ii) All alternative designs of the project as proposed, that would avoid, or result in less of an adverse impact on a wetland or its buffer, such as a reduction in the size, scope, configuration, or density of the project, are not feasible.
- (5) **Category III and IV Wetlands.** Activities and uses that result in unavoidable and necessary impacts may be permitted in Category III and IV wetlands and associated buffers in accordance with an approved critical areas report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant’s objectives.
- (6) **Wetland Buffers.**
  - (a) **Land Use Intensity.** Wetland buffers in the City of Buckley are determined based on the category of the wetland and the land use intensity proposed. Land use impact “intensity” is based on development types and the estimated impact based on the proposed change in land use.

Land Use Impact "Intensity" Based on Development Types	
Rating of impact from proposed changes in land use	Types of land uses that cause the impact based on common zoning categories
High	Commercial, Urban, Industrial, Institutional, Retail Sales, Residential with more than 2 units/acre, New agriculture (high- intensity processing such as dairies, nurseries and green houses, raising and harvesting crops requiring annual tilling, raising and maintaining animals), High intensity recreation (golf courses, ball fields), hobby farms
Moderate	Residential with 2 units/acre or less, Moderate-Intensity Open Space (parks), New agriculture (moderate-intensity such as orchards and hay fields)

Land Use Impact "Intensity" Based on Development Types	
Rating of impact from proposed changes in land use	Types of land uses that cause the impact based on common zoning categories
Low	Forestry, Open space (low-intensity such as passive recreation and natural resources preservation)

(b) Buffer Widths. The City of Buckley establishes the following buffer widths based on category and land use intensity, as defined above. These buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. Required wetland buffers, based on wetland category and land use intensity, are as follows:

Alternative 2 Buffer Widths, Based Upon Category and Land Use Intensity		
Category (2014 Wrn. WA Rating System)	Total Points in Rating System	Alternative 2 Buffer Category + Land Use Intensity (lo/mod/hi)
I	>23	lo 150, mod 225, hi 300
II	20-22	lo 150, mod 225, hi 300
III	16-19	lo 50, mod 75, hi 100
IV	<16	lo 25, mod 30, hi 50

- (c) Measurement of Wetland Buffers. All buffers shall be measured from the wetland boundary as surveyed in the field. The width of the wetland buffer shall be determined according to the wetland category and the proposed land use. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.
- (d) Modification of Buffer Widths. The buffer widths of BMC 12.09.030(6)(b) may be decreased through buffer width averaging in BMC 12.09.030(6)(e) or reduction mechanisms of this section.
- (i) The buffer widths recommended for land uses with "high intensity" impacts to wetlands can be reduced to those recommended for "moderate intensity" impacts under the conditions identified below.
- (A) For wetlands that score moderate or high for habitat (6 points or more), the width of the buffer around the wetland can be reduced if the following measures to minimize the impacts of different land uses on wetlands are applied.

Disturbance	Required Measures to Minimize Impacts
Lights	<ul style="list-style-type: none"> <li>• Direct lights away from wetland</li> </ul>
Noise	<ul style="list-style-type: none"> <li>• Locate activity that generates noise away from wetland</li> <li>• If warranted, enhance existing buffer with native vegetation</li> </ul>

Disturbance	Required Measures to Minimize Impacts
	<p>plantings adjacent to noise source</p> <ul style="list-style-type: none"> <li>• For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer</li> </ul>
Toxic runoff	<ul style="list-style-type: none"> <li>• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered</li> <li>• Establish covenants limiting use of pesticides within 150 ft of wetland</li> <li>• Apply integrated pest management</li> </ul>
Stormwater runoff	<ul style="list-style-type: none"> <li>• Retrofit stormwater detention and treatment for roads and existing adjacent development</li> <li>• Prevent channelized flow from lawns that directly enters the buffer</li> <li>• Use Low Intensity Development techniques (for more information refer to BMC 14.30 and the Stormwater Management Manual)</li> </ul>
Change in water regime	<ul style="list-style-type: none"> <li>• Infiltrate or treat, detain and disperse into buffer new runoff from surfaces and new lawns</li> </ul>
Pets and Human disturbance	<ul style="list-style-type: none"> <li>• Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion</li> <li>• Place wetland and its buffer in a separate tract or protect with a conservation easement</li> </ul>
Dust	<ul style="list-style-type: none"> <li>• Use best management practices to control dust</li> </ul>

- (e) Wetland Buffer Width Averaging. The planning director may also allow modification of the wetland buffer width in accordance with an approved critical areas report and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified wetlands consultant demonstrates that:
- (i) It will not reduce wetland functions or values;
  - (ii) The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit

- from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
- (iii) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer;
  - (iv) The buffer width is not reduced to less than 50 percent of the high intensity buffer width or 50 feet, whichever is greater, except for buffers for Category III and IV wetlands and low or moderate intensity land uses; and
  - (v) Buffer width averaging is being conducted and/or implemented within or on the property where the averaging is being requested.
- (f) Buffer Uses. In addition to those allowed uses listed within BMC 12.08.160, the following uses may be permitted within a wetland buffer in accordance with the review procedures of this title, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:
- (i) Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife;
  - (ii) Passive Recreation. Passive recreation facilities designed and in accordance with an approved critical areas report, including:
    - (A) Walkways and trails, pursuant to BMC 12.08.160(3)(c)(i) and (ii); and
    - (B) Wildlife viewing structures; and
    - (C) Fishing access areas.
  - (iii) Stormwater Management Facilities. Stormwater management facilities, limited to stormwater dispersion outfalls, detention facilities and bioswales, may be allowed; provided, that:
    - (A) Alternate locations have been considered and been demonstrated to not be feasible; and
    - (B) The location of such facilities will not degrade the functions or values of the wetland.
    - (C) Stormwater detention facilities are not allowed in buffers of Category I or II wetlands.
- (7) Signs and Fencing of Wetlands.
- (a) Temporary Markers. The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur, and inspected by the planning director prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction, and shall not be removed until permanent signs, if required, are in place.
  - (b) Permanent Signs. As a condition of any permit or authorization issued pursuant to this chapter, the planning director shall require the applicant to install permanent signs along the boundary of a wetland or buffer.

Permanent signs shall be made of a metal face and attached to a metal post, or another material of equal durability. Signs must be posted at an interval of one per lot or every 100 feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the director:

Protected Wetland Area

Do Not Disturb

Contact the City of Buckley Regarding Uses and Restriction

- (c) Fencing.
  - (i) The planning director may require the applicant to install a permanent fence at the edge of the wetland buffer when fencing will prevent future impacts to the wetland.
  - (ii) The applicant shall be required to install a permanent fence around the wetland or buffer when domestic grazing animals are present or may be introduced on-site.
  - (iii) Fencing installed as part of a proposed activity or as required in this subsection (7)(c) of this section shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat. (Ord. 21-05 § 2, 2005).

**12.09.040 Performance standards – Mitigation requirements.**

- (1) Mitigation shall achieve equivalent or greater biological functions. Mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions.
- (2) Mitigation shall result in no net loss. Wetland mitigation actions shall not result in a net loss of wetland area or functions and values except when the following criteria are met:
  - (a) The lost wetland area provides minimal functions and the mitigation action(s) results in a net gain in wetland functions as determined by a site-specific function assessment; or
  - (b) The lost wetland area provides minimal functions as determined by a site-specific function assessment and other replacement habitats provide greater benefits to the functioning of the watershed, such as riparian habitat restoration and enhancement; or
  - (c) Out-of-kind replacement will best meet formally identified regional goals, such as replacement of historically diminished wetland types.
- (3) Preference of Mitigation Actions. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:
  - (i) Enhancing on-site degraded wetlands.
    - (A) Restoring wetlands on upland sites that were formerly wetlands and/or have been degraded.
  - (ii) Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of exotic introduced species.
- (4) Mitigation Ratios.
  - (a) Acreage Replacement Ratios. The following ratios shall apply to creation or restoration that is in-kind, on-site, the same category, timed prior to or concurrent with alteration, and has a high probability of success. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

Category and type of wetland	Creation or re-establishment	Rehabilitation	Enhancement
Cat. I: Bog, natural heritage site	Not considered possible	Case by case	Case by case

Cat. I: mature forest	6:1	12:1	24:1
Cat. I based on functions	4:1	8:1	16:1
Cat. II	3:1	6:1	12:1
Cat. III	2:1	4:1	8:1
Cat. IV	1.5:1	3:1	6:1

(5) Wetlands Enhancement as Mitigation.

- (i) Impacts to wetlands may be mitigated by enhancement of existing significantly degraded wetlands. Applicants proposing to enhance wetlands must produce a critical areas report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show whether existing wetland functions will be reduced by the enhancement actions. (Ord. 21-05 § 2, 2005).

**12.09.050 Performance standards – Subdivisions.**

The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:

- (1) Land that is located wholly within a wetland or its buffer may not be subdivided.
- (2) Land that is located partially within a wetland or its buffer may be subdivided; provided, that:
  - (a) Each lot and/or parcel created through the subdivision process shall maintain a minimum buildable lot area not including a wetland or buffer area which totals 75 percent of the minimum lot size area for the zoning district where located; and
  - (b) Meets the minimum lot size requirements of BMC Title 19.
- (3) Access roads and utilities serving the proposed subdivision may be permitted within the wetland and associated buffers only if the city determines that no other feasible alternative exists. Loss of wetlands shall be mitigated in accordance with this title. (Ord. 21-05 § 2, 2005).

**Chapter 12.10**  
**CRITICAL AQUIFER RECHARGE AREAS**

**Sections:**

- 12.10.010 Critical aquifer recharge areas designation.
- 12.10.020 Aquifer recharge area susceptibility ratings.
- 12.10.030 Mapping of aquifer recharge areas.
- 12.10.040 Activities allowed in critical aquifer recharge areas.
- 12.10.050 Critical areas report – Additional requirements for critical aquifer recharge areas.
- 12.10.060 Performance standards – General requirements.
- 12.10.070 Performance standards – Specific uses.
- 12.10.080 Uses prohibited from critical aquifer recharge areas.

**12.10.010 Critical aquifer recharge areas designation.**

Critical aquifer recharge areas (CARA) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). CARA have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. These areas include the following:

- (1) Wellhead Protection Areas. Wellhead protection areas may be defined by the boundaries of the 10-year time of ground water travel, or boundaries established using alternate criteria approved by the Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.
- (2) Sole Source Aquifers. Sole source aquifers are areas that have been designated by the U.S. Environmental Protection Agency pursuant to the Federal Safe Drinking Water Act.
- (3) Susceptible Ground Water Management Areas. Susceptible ground water management areas are areas that have been designated as moderately or highly vulnerable or susceptible in an adopted ground water management program developed pursuant to Chapter 173-100 WAC.
- (4) Special Protection Areas. Special protection areas are those areas defined by WAC 173-200-090. (Ord. 21-05 § 2, 2005).

**12.10.020 Aquifer recharge area susceptibility ratings.**

Aquifer recharge areas shall be rated as having high, moderate, or low susceptibility based on soil permeability, geologic matrix, infiltration, and depth to water as determined by the criteria established by the State Department of Ecology. (Ord. 21-05 § 2, 2005).

**12.10.030 Mapping of aquifer recharge areas.**

The approximate location and extent of aquifer recharge areas are shown on the adopted critical area maps as referenced in BMC 12.08.090(4) and (5).

- (1) Aquifer recharge areas are delineated on the water system map for source locations and WAC 246-290-135 shall be used to define the radius around them as the recharge area. (Ord. 21-05 § 2, 2005).

**12.10.040 Activities allowed in critical aquifer recharge areas.**

In addition to those allowed activities listed in BMC 12.08.160, the following activities are allowed in critical aquifer recharge areas and do not require submission of a critical areas report:

- (1) Construction of structures and improvements, including additions, resulting in less than five percent or 2,500 square feet (whichever is greater) total site impervious surface area that do not result in a change of use or increase the use of a hazardous substance.
- (2) Development and improvement of parks, recreation facilities, open space, or conservation areas resulting in less than five percent (5%) total site impervious surface area that do not increase the use of a hazardous substance.
- (3) On-site domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per one acre. (Ord. 21-05 § 2, 2005).

**12.10.050 Critical areas report – Additional requirements for critical aquifer recharge areas.**

In addition to the general critical areas report requirements of BMC 12.08.210, critical areas reports for critical aquifer recharge areas must meet the requirements of this section. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

- (1) Prepared by a Qualified Professional. An aquifer recharge area critical areas report shall be prepared by a qualified professional who is a hydrogeologist, geologist, or engineer, who is licensed in the state of Washington and has experience in preparing hydrogeologic assessments.
- (2) Hydrogeologic Assessment Required. For all proposed activities to be located in a critical aquifer recharge area, a critical areas report shall contain a level one hydrogeologic assessment. A level two hydrogeologic assessment shall be required for any of the following proposed activities:
  - (a) Activities that result in five percent or more impervious site area;
  - (b) Activities that divert, alter, or reduce the flow of surface or ground waters, or otherwise reduce the recharging of the aquifer;
  - (c) The use of hazardous substances, other than household chemicals used according to the directions specified on the packaging for domestic applications;
  - (d) The use of injection wells, including on-site septic systems, except those domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per one acre; or
  - (e) Any other activity determined by the planning director likely to have an adverse impact on ground water quality or quantity, or on the recharge of the aquifer.
- (3) Level One Hydrogeologic Assessment. A level one hydrogeologic assessment shall include the following site- and proposal-related information at a minimum:

- (a) Available information regarding geologic and hydrogeologic characteristics of the site including the surface location of all critical aquifer recharge areas 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 1,300 feet of the project area;
  - (d) Location of other critical areas, including surface waters, within 1,300 feet of the project area;
  - (e) Available historic water quality data for the area to be affected by the proposed activity; and
  - (f) Best management practices proposed to be utilized.
- (4) Level Two Hydrogeologic Assessment. A level two hydrogeologic assessment shall include the following site- and proposal-related information at a minimum, in addition to the requirements for a level one hydrogeologic assessment:
- (a) Historic water quality data for the area to be affected by the proposed activity compiled for at least the previous five-year period;
  - (b) Ground water monitoring plan provisions; and
  - (c) Discussion of the effects of the proposed project on the ground water quality and quantity, including:
    - (i) Predictive evaluation of ground water withdrawal effects on nearby wells and surface water features; and
    - (ii) Predictive evaluation of contaminant transport based on potential releases to ground water; and
  - (d) A spill plan that identifies equipment and/or structures that could fail, resulting in an impact. Spill plans shall include provisions for regular inspection, repair, and replacement of structures and equipment that could fail. (Ord. 21-05 § 2, 2005).

#### **12.10.060 Performance standards – General requirements.**

- (1) 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.
- (2) The proposed activity must comply with the water source protection requirements and recommendations of the Federal Environmental Protection Agency, State Department of Health, and the local health district.
- (3) The proposed activity must be designed and constructed in accordance with Chapters 14.04 and 14.30 BMC and the city of Buckley water comprehensive plan. (Ord. 21-05 § 2, 2005).

#### **12.10.070 Performance standards – Specific uses.**

- (1) Storage Tanks. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:
  - (a) Underground Tanks. All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

- (i) Prevent releases due to corrosion or structural failure for the operational life of the tank; and
  - (ii) Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and
  - (iii) Use material in the construction or lining of the tank that is compatible with the substance to be stored.
- (b) Above-Ground Tanks. All new above-ground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
- (i) Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;
  - (ii) Have a primary containment area enclosing or underlying the tank or part thereof; and
  - (iii) A secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.
- (2) Vehicle Repair and Servicing.
- (a) Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.
  - (b) No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the State Department of Ecology prior to commencement of the proposed activity.
- (3) Residential Use of Pesticides and Nutrients. Application of household pesticides, herbicides, and fertilizers shall not exceed times and rates specified on the packaging.
- (4) Spreading or Injection of Reclaimed Water. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the Departments of Ecology and Health.
- (a) Surface spreading must meet the ground water recharge criteria given in RCW 90.46.080 and 90.46.010(10).
  - (b) Direct injection must be in accordance with the standards developed by authority of RCW 90.46.042.
- (5) State and Federal Regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

**Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities**

<b>Activity</b>	<b>Statute – Regulation – Guidance</b>
Above-ground storage tanks	WAC 173-303-640
Animal feedlots	Chapters 173-216 and 173-220 WAC
Automobile washers	Chapter 173-216 WAC; Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Below-ground storage tanks	Chapter 173-360 WAC

Chemical treatment storage and disposal facilities	WAC 173-303-082
Hazardous waste generator (boat repair shops, biological research facility, dry cleaners, furniture stripping, motor vehicle service garages, photographic processing, printing and publishing shops, etc.)	Chapter 173-303 WAC
Injection wells	Federal 40 CFR Parts 144 and 146; Chapter 173-218 WAC
Junk yards and salvage yards	Chapter 173-304 WAC; Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and gas drilling	WAC 332-12-450, Chapter 173-218 WAC
On-site sewage systems (large-scale)	Chapter 173-240 WAC
On-site sewage systems (< 14,500 gal/day)	Chapter 246-272 WAC; local health ordinances
Pesticide storage and use	Chapters 15.54 and 17.21 RCW
Sawmills	Chapters 173-303 and 173-304 WAC; Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid waste handling and recycling facilities	Chapter 173-304 WAC
Surface mining	WAC 332-18-015
Wastewater application to land surface	Chapters 173-216 and 173-200 WAC; WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

(Ord. 21-05 § 2, 2005).

**12.10.080 Uses prohibited from critical aquifer recharge areas.**

The following activities and uses are prohibited in critical aquifer recharge areas:

- (1) Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, woodwaste, and inert and demolition waste landfills;
- (2) Underground Injection Wells. Class I, III, and IV wells are prohibited; Class V injection wells may be permitted subject to the following:
  - (a) The application for the Class V injection well has undergone a review and received approval from the Washington State Department of Ecology and Pierce County department of health and has gone through and received approval through the variance process identified in BMC 12.08.330;
- (3) Mining.
  - (a) Metals and hard rock mining.
  - (b) Sand and gravel mining is prohibited from critical aquifer recharge areas determined to be highly susceptible or vulnerable;
- (4) Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
- (5) Storage, processing, or disposal of radioactive substances. Facilities that store, process, or dispose of radioactive substances; and

(6) Other.

- (a) Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source;
- (b) Activities that would significantly reduce the recharge to aquifers that are a source of significant baseflow to a regulated stream;
- (c) Activities that are not connected to an available sanitary sewer system are prohibited from critical aquifer recharge areas associated with sole source aquifers. (Ord. 21-05 § 2, 2005).

**Chapter 12.11**  
**FREQUENTLY FLOODED AREAS**

Sections:

- 12.11.010 Designation of frequently flooded areas.
- 12.11.020 Critical areas report – Additional requirements.
- 12.11.030 Warning and disclaimer of liability.
- 12.11.040 Performance standards – General requirements.
- 12.11.050 Performance standards – Specific uses.
- 12.11.060 Performance standards – Areas of shallow flooding.
- 12.11.070 Uses and activities prohibited from frequently flooded areas.

**12.11.005 Definitions**

In addition to the definitions in BMC 12.08, the following definitions will be used for this chapter. If any term is defined differently in the municipal code, the following terms shall take precedence for floodplains and floodways:

**“Development”** means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard.

**“Elevation certificate”** means the official form (FEMA Form 086-0-33) used to track development and provide elevation information necessary to ensure compliance with community floodplain management ordinances, and determine the proper insurance premium rate with Section B completed by Community Officials.

**“Increased cost of compliance”** means a flood insurance claim payment up to \$30,000 directly to a property owner for the cost to comply with floodplain management regulations after a direct physical loss caused by a flood. Eligibility for an ICC claim can be through a single instance of “substantial damage” or as a result of a “cumulative substantial damage.” (More information can be found in FEMA ICC Manual 301.)

**“Mobile home park or subdivision”** means one of the following:

- A. “Existing manufactured home park or subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community
- B. “Expansion to an existing manufactured home park or subdivision” means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).
- C. “New manufactured home park or subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either

final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

**“New construction”** means structures for which the “start of construction” commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

**“Start of construction”** includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

**“Structure”** means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

**“Substantial damage”** means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**“Substantial improvement”** means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

- 1) Before the improvement or repair is started; or
- 2) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.
  - a) This term “substantial improvement” can exclude:
    - i) Any project for improvement of a structure to correct pre-cited existing violations of state or local health, sanitary, or safety code specifications which have been previously identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
    - ii) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

**“Violation”** for Chapter 12.11 (floods) means the failure of a structure or other development to be fully compliant with the community's flood plain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in § 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

**12.11.010 Designation of frequently flooded areas.**

- (1) Frequently Flooded Areas. Frequently flooded areas shall include:
  - (a) The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled “The Flood Insurance Study for Pierce County and Incorporated Areas” dated March 7, 2017, and any revisions thereto, with an accompanying Flood Insurance Rate Map (FIRM), and any revisions thereto, are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study and the FIRM are on file at the building & planning office. The best available information for flood hazard area identification as outlined in this adopting ordinance shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under this adopting ordinance.
  - (b) Areas Identified by the Director. Those areas of special flood hazard identified by the planning director based on review of base flood elevation and floodway data available from federal, state, Pierce County or other valid sources when base flood elevation data has not been provided from the Federal Insurance Administration (A and V zones of the flood insurance map(s)).
- (2) Use of Additional Information. The planning director may use additional flood information that is more restrictive or detailed than that provided in the flood insurance study conducted by the Federal Emergency Management Agency (FEMA) to designate frequently flooded areas, including data on channel migration, historical data, high water marks, photographs of past flooding, location of restrictive floodways, maps showing future build-out conditions, maps that show riparian habitat areas, or similar information.
- (3) Flood Elevation Data. When base flood elevation data is not available (A and V zones), the planning director shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source in order to administer this chapter.
- (4) Designation Made by Director. The flood insurance maps are to be used as a guide for the city of Buckley, project applicants and/or property owners, and the public, and should be considered a minimum designation of frequently flooded areas. As flood insurance maps may be continuously updated as areas are reexamined or new areas are identified, newer and more restrictive information for flood hazard area identification shall be the basis for regulation.
- (5) Maintenance of Records. The planning director shall obtain and record the as-built elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement. The planning director shall also maintain for public inspection all records of floodplain hazards, certificates of floodproofing, and flood elevation data. (Ord. 21-05 § 2, 2005).

**12.11.020 Critical areas report – Additional requirements.**

In addition to the general critical areas report requirements of BMC 12.08.210, critical areas reports for frequently flooded areas must meet the requirements of this section. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

- (1) Prepared by a Qualified Professional. A frequently flooded areas report shall be prepared by a qualified professional who is a hydrologist, or engineer, who is licensed in the state of Washington with experience in preparing flood hazard assessments.
- (2) Area Addressed in Critical Areas Report. The following areas shall be addressed in a critical areas report for frequently flooded areas:
  - (a) The site area of the proposed activity;
  - (b) All areas of a special flood hazard area, as indicated on the flood insurance map(s) within 200 feet of the project area; and
  - (c) All other flood areas indicated on the flood insurance map(s) within 200 feet of the project area.
- (3) Flood Hazard Assessment Required. A critical areas report for a proposed activity within a frequently flooded area shall contain a flood hazard assessment including the following site- and proposal-related information at a minimum:
  - (a) Site and Construction Plans. A copy of the site and construction plans for the development proposal showing:
    - (i) Floodplain (100-year flood elevation), 10-year and 50-year flood elevations, floodway, other critical areas, buffers, and shoreline areas;
    - (ii) Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain;
    - (iii) Clearing limits; and
    - (iv) Elevation of the lowest floor (including basement) of all structures, and the level to which any nonresidential structure has been floodproofed;
  - (b) Watercourse Alteration. When watercourse alteration is proposed, the critical areas report shall include:
    - (i) Extent of Watercourse Alteration. A description of and plan showing the extent to which a watercourse will be altered or relocated as a result of the proposal;
    - (ii) Maintenance Program Required for Watercourse Alterations. A maintenance program that provides maintenance practices for the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished; and
    - (iii) Compliance Documentation. Information describing and documenting how the proposed water course alteration complies with the requirements of Chapter 12.13 BMC, Fish and Wildlife Habitat Conservation Areas, Chapter 19.42 BMC, Shoreline Management, and other applicable state or federal permit requirements.
- (4) Information Regarding Other Critical Areas. Potential impacts to wetlands, fish and wildlife habitat, and other critical areas shall be addressed in accordance with the applicable sections of this title. (Ord. 21-05 § 2, 2005).

**12.11.030 Warning and disclaimer of liability.**

- (1) The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside frequently flooded areas or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city of Buckley, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder. (Ord. 21-05 § 2, 2005).
- (2) This Ordinance shall not in any way impair/remove the necessity of compliance with any other applicable laws, ordinances, regulations, etc. Where this Ordinance imposes a greater restriction, the provisions of this Ordinance shall control.

**12.11.040 Performance standards – General requirements.**

The following standards shall be adhered to in all frequently flooded areas, except as otherwise provide for in this chapter:

- (1) **Development Permit Required.** A development permit shall be obtained before land is altered or a new use is commenced within a frequently flooded area. For application of this chapter, development shall include any manmade alteration to land, including but not limited to buildings, structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment or materials within the area of special flood hazard.
- (2) **All Necessary Permits Shall Be Obtained.** The planning director shall verify that all necessary permits have been obtained from those governmental agencies from which prior approval is required by federal, state, or local law, including Section 404 of the Federal Water Pollution Control Act Amendment of 1972 and the Endangered Species Act of 1973.
- (3) **Before Regulatory Floodway.** In areas where the base flood elevation is provided, but where a regulatory floodway has not been designated, new construction, substantial improvements, or other development, including fill, shall not be permitted within zones A1 – 30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- (4) **Areas without Base Flood Elevation Data.** Where base flood elevation data is not available (A and V zones), and there is insufficient data available from federal, state, or other sources, the planning director shall determine the base flood elevation using FEMA-approved engineering methods, and historical data, high water marks, photographs of past flooding, and other available information. If there is insufficient data available for the planning director to make a determination of the base flood elevation, and standards requiring a base flood elevation cannot be implemented, the planning director shall require measures that assure the proposed structures will be reasonably safe from flooding. At a minimum, the base flood elevation shall be set at least two feet above the highest adjacent grade.

- (5) Construction Materials and Methods.
  - (a) Methods That Minimize Flood Damage. All new construction and substantial improvements shall be constructed using flood-resistant materials and utility equipment, and with methods and practices that minimize flood damage.
  - (b) Structures shall be located outside the floodplain. All structures, utilities and other improvements located within the floodplain are required to go through the variance process for review and approval.
  - (c) Utilities Shall Be Protected. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (6) Elevation Certificate Required Following Construction. Following construction of a structure within the floodplain where the base flood elevation is provided, the applicant shall obtain an elevation certificate that records the elevation of the lowest floor. The elevation certificate shall be completed on a form provided by FEMA by a surveyor or engineer licensed in the state of Washington and shall be submitted to the city of Buckley and Pierce County for recording.
- (7) Anchoring.
  - (a) Anchoring Required. All new construction and substantial improvements within the floodplain shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
  - (b) Manufactured Homes Shall Be Anchored. All manufactured homes placed within the floodplain must be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.
- (8) Fill and Grading. Fill and grading within the floodplain shall only occur upon a determination from a qualified professional that the fill or grading will not block side channels, inhibit channel migration, increase flood hazards to others, or be placed within a channel migration zone, whether or not the city of Buckley has delineated such zones as of the time of the application. (Ord. 21-05 § 2, 2005).

#### **12.11.050 Performance standards – Specific uses.**

Specific uses shall adhere to the following relevant standards, in addition to the general standards of BMC 12.11.040, Performance standards – General requirements.

- (1) Residential Construction.
  - (a) Must Be Above Base Flood Elevation. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation.
  - (b) Areas Below the Lowest Floor. Fully enclosed areas below the lowest floor that are subject to flooding shall only be allowed when designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:

- (i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided; and
  - (ii) The bottom of all openings shall be no higher than one foot above grade; and
  - (iii) Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.
- (2) **Manufactured Homes Must Be Elevated.** All manufactured homes to be placed or substantially improved shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated one foot or more above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- (3) **Recreational Vehicles.** Recreational vehicles are required to either:
- (a) Be on the site for fewer than 180 consecutive days;
  - (b) Be fully licensed and ready for highway use, on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
  - (c) Must obtain a development permit and meet the requirements, including elevation and anchoring, for manufactured homes.
- (4) **Nonresidential Construction.**
- (a) **Must Be Above Base Flood Elevation.** New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the base flood elevation, or, together with attendant utility and sanitary facilities, shall:
    - (i) Be floodproofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
    - (ii) Have structural components that shall be capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
    - (iii) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Following construction of the structure, certifications shall be submitted to the city of Buckley and Pierce County that record the actual (as-built) elevation to which the structure was floodproofed;
    - (iv) Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (for example, a building floodproofed to the base flood level will be rated as one foot below).
  - (b) **Areas Below the Lowest Floor.** Fully enclosed areas below the lowest floor that are not floodproofed shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
    - (i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided; and

- (ii) The bottom of all openings shall be no higher than one foot above grade; and
- (iii) Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.

(5) Utilities.

- (a) Shall Be Designed to Minimize Infiltration of Floodwaters. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems.
- (b) Sanitary Sewage Systems. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
- (c) On-Site Waste Disposal Systems. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. New on-site sewage disposal systems are prohibited pursuant to subsection (3) of BMC 12.11.070, Uses and activities prohibited from frequently flooded areas.

(6) Subdivision Proposals.

- (a) All subdivisions and short subdivisions shall:
  - (i) Minimize Flood Damage. Subdivisions and short subdivisions shall be designed to minimize or eliminate flood damage; and public utilities and facilities that are installed as part of such subdivisions, such as sewer, gas, electrical, and water systems, shall be located and constructed to minimize flood damage; subdivisions should be designed using natural features of the landscape, and should not incorporate "flood protection" changes;
  - (ii) Have Adequate Drainage. Subdivisions and short subdivisions shall have adequate natural surface water drainage in accordance with Chapter 14.30 BMC to reduce exposure to flood hazards; and
  - (iii) Show Flood Areas on Plat Maps. Subdivisions and short subdivisions shall show the 100-year floodplain, floodway, and channel migration zone on the preliminary and final plat, and short plat maps;
- (b) Lots shall have adequate space outside flood areas. All lots created through subdivision or short subdivision shall have adequate building space outside the 100-year floodplain, the floodway, and the channel migration zone. Adequate building space means that each newly created lot shall maintain a minimum buildable lot area outside of the flood areas which totals 75 percent of the minimum lot size area for the zoning district where located; and
- (c) Detailed base flood elevation data shall be generated for subdivisions of at least 50 lots or five acres. Where detailed base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or five acres, whichever is less.

(7) Alteration of Watercourses.

- (a) Shall Be in Accordance with Habitat Regulations. Watercourse alterations shall only be allowed in accordance with Chapter 12.13 BMC, Fish and Wildlife Habitat Conservation Areas, and Chapter 19.42 BMC, Shoreline Management.
- (b) Shall Not Result in Blockage. Watercourse alteration projects shall not result in blockage of side channels.

- (c) Notification Required. The city of Buckley shall notify adjacent communities and the State Department of Ecology at least 30 days prior to permit issuance submit evidence of such notification to the Federal Insurance Administration of the proposed watercourse alteration.
- (d) Maintenance of Alterations. The applicant shall indefinitely maintain the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished. Maintenance shall be bonded for a period of at least five years, and be in accordance with an approved maintenance program. (Ord. 21-05 § 2, 2005).

**12.11.060 Performance standards – Areas of shallow flooding.**

Uses in areas of shallow flooding shall adhere to the following standards, in addition to the general standards of BMC 12.11.040, Performance standards – General requirements, and relevant specific standards of BMC 12.11.050, Performance standards – Specific uses.

- (1) Residential Structures. New construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement) elevated above the highest grade adjacent to the building, one foot or more above the depth number specified in feet on the flood insurance map or at least two feet if no depth number is specified.
- (2) Nonresidential Structures. New construction and substantial improvements of nonresidential structures within AO zones shall either:
  - (a) Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above the depth number specified on the flood insurance map or at least two feet if no depth number is specified; or
  - (b) Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Following construction of the structure, certifications shall be submitted to the city of Buckley and Pierce County that record the actual (as-built) elevation to which the structure was floodproofed.
- (3) Drainage Paths. All development shall include adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
- (4) Recreational Vehicles. Recreational vehicles placed on sites within AO zones on the flood insurance map(s) shall meet the requirements of this chapter. (Ord. 21-05 § 2, 2005).

**12.11.070 Uses and activities prohibited from frequently flooded areas.**

- (1) Critical Facilities. Critical facilities are prohibited from frequently flooded areas.
- (2) Wells Used for Potable Water. Water wells used for potable water are prohibited from the floodway.

- (3) On-Site Sewage Disposal Systems. On-site sewage disposal systems are prohibited from the floodway, the channel migration zone, and the 10-year floodplain elevation.
- (4) Construction in Floodways.
- (a) New Construction Requires Certification by an Engineer. Encroachments, including new construction, substantial improvements, fill, and other development, are prohibited within designated floodways unless certified by a registered professional engineer. Such certification shall demonstrate through hydrologic and hydraulic analyses, performed in accordance with standard engineering practice, that the proposed encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge.
- Small projects that are solely to protect or create fish habitat and designed by a qualified professional may be allowed without certification if the planning director determines that the project will not obstruct flood flows.
- (b) Residential Construction and Reconstruction Prohibited. Construction and reconstruction of residential structures is prohibited within designated floodways, except for:
- (i) Repairs, reconstruction, or improvements to a structure that do not increase the ground floor area; and
- (ii) Repairs, reconstruction or improvements to a structure for which the cost does not exceed 50 percent of the market value of the structure either:
- (A) Before the repair or reconstruction is started, or
- (B) If the structure has been damaged and is being restored, before the damage occurred;
- Improvement to a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions or to structures identified as historic places shall not be included in the 50 percent. (Ord. 21-05 § 2, 2005).

**Chapter 12.12**  
**GEOLOGICALLY HAZARDOUS AREAS**

## Sections:

- 12.12.010 Designation of geologically hazardous areas.
- 12.12.020 Designation of specific hazard areas.
- 12.12.030 Classification of geologically hazardous areas.
- 12.12.040 Mapping of geologically hazardous areas.
- 12.12.050 Activities allowed in geologically hazardous areas.
- 12.12.060 Critical areas report – Additional requirements for geologically hazardous areas.
- 12.12.070 Critical areas report – Additional requirements for specific hazards.
- 12.12.080 Performance standards – General requirements.
- 12.12.090 Performance standards – Specific hazards.

**12.12.010 Designation of geologically hazardous areas.**

Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and use. Areas susceptible to one or more of the following types of hazards shall be designated as geologically hazardous areas:

- (1) Erosion hazard;
- (2) Landslide hazard;
- (3) Seismic hazard;
- (4) Mine hazard;
- (5) Volcanic hazard; and
- (6) Other geological events including tsunamis, mass wasting, debris flows, rock falls, and differential settlement. (Ord. 21-05 § 2, 2005).

**12.12.020 Designation of specific hazard areas.**

- (1) Erosion Hazard Areas. Erosion hazard areas are at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "moderate to severe," "severe," or "very severe" rill and inter-rill erosion hazard.
- (2) Landslide Hazard Areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include, but are not limited to, the following:
  - (a) Areas of historic failures, such as:
    - (i) Those areas delineated by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "severe" limitation for building site development;
    - (ii) Those areas mapped by the Department of Ecology (Coastal Zone Atlas) or the Department of Natural Resources (slope stability mapping) as unstable ("U" or class 3), unstable old slides ("UOS" or class 4), or unstable recent slides ("URS" or class 5); or

- (iii) Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Department of Natural Resources;
- (b) Areas with all three of the following characteristics:
  - (i) Slopes steeper than 15 percent; and
  - (ii) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
  - (iii) Springs or ground water seepage;
- (c) Areas that have shown movement during the Holocene epoch (from 10,000 years ago to the present) or that are underlain or covered by mass wastage debris of that epoch;
- (d) Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
- (e) Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action;
- (f) Any area 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.
- (3) Seismic Hazard Areas. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, 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.
- (4) Mine Hazard Areas. Mine hazard areas are those areas underlain by, or affected by, mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sink holes, gas releases, or subsidence due to mine workings. Factors that should be considered include: proximity to development, depth from ground surface to the mine working, and geologic material.
- (5) Volcanic Hazard Areas. Volcanic hazard areas are areas subject to pyroclastic flows, lava flows, debris avalanche, inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.
- (6) Other Hazard Areas. Geologically hazardous areas shall also include areas determined by the planning director to be susceptible to other geological events including mass wasting, debris flows, rock falls, and differential settlement. (Ord. 21-05 § 2, 2005).

**12.12.030 Classification of geologically hazardous areas.**

All geologic hazard areas should be classified according to the following categories for each geologic hazard type:

<b>Classification</b>	<b>Documentation and Data Sources</b>
Known or Suspected Risk	Documentation or projection of the hazard by a qualified professional exists.
Risk Unknown	Documentation or projection of the lack of hazard by a qualified professional exists, or data are not available to determine the presence or absence of a geologic hazard.

(Ord. 21-05 § 2, 2005).

**12.12.040 Mapping of geologically hazardous areas.**

The approximate location and extent of geologically hazardous areas are shown on the adopted critical areas maps as referenced in BMC 12.08.090(4) and (5). (Ord. 21-05 § 2, 2005).

**12.12.050 Activities allowed in geologically hazardous areas.**

The following activities are allowed in geologically hazardous areas pursuant to BMC 12.08.160, Allowed activities, and do not require submission of a critical areas report:

- (1) Erosion and Landslide Hazard Areas. Except as otherwise provided for in this title, only those activities approved and permitted consistent with an approved critical areas report in accordance with this title shall be allowed in erosion or landslide hazard areas.
- (2) All Other Hazard Areas to Include Seismic, Mine, Volcanic and Other Hazard Areas. The following activities are allowed within all other hazard areas:
  - (a) Construction of new buildings with less than 2,500 square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;
  - (b) Additions to existing single-story residences that are 250 square feet or less; and
  - (c) Installation of fences. (Ord. 21-05 § 2, 2005).

**12.12.060 Critical areas report – Additional requirements for geologically hazardous areas.**

- (1) Prepared by a Qualified Professional. A critical areas report for a geologically hazardous area shall be prepared by a geotechnical engineer or geologist, licensed in the state of Washington, with experience analyzing geologic, hydrologic, and ground water flow systems; or by a geologist who earns his or her livelihood from the field of geology and/or geotechnical analysis, with experience analyzing geologic, hydrologic and ground water flow systems, who has experience preparing reports for the relevant type of hazard.
- (2) Area Addressed in Critical Areas Report. The following areas shall be addressed in a critical areas report for geologically hazardous areas:
  - (a) The project area of the proposed activity; and
  - (b) All geologically hazardous areas within 200 feet of the project area or that have potential to be affected by the proposal.
- (3) Geotechnical Assessment. A critical areas report for a geologically hazardous area shall contain an assessment of geological hazards including the following site- and proposal-related information at a minimum:
  - (a) Site and Construction Plans. The report shall include a copy of the site plans for the proposal showing:

- (i) The type and extent of geologic hazard areas, and any other critical areas and buffers on, adjacent to, within 200 feet of, or that are likely to impact the proposal;
  - (ii) Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain;
  - (iii) The topography, in two-foot contours, of the project area and all hazard areas addressed in the report; and
  - (iv) Clearing limits;
- (b) Assessment of Geological Characteristics. The report shall include an assessment of the geologic characteristics and engineering properties of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted taxonomic classification systems in use in the region. The assessment shall include, but not be limited to:
- (i) A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report; and
  - (ii) A detailed overview of the field investigations, published data and references; data and conclusions from past assessments of the site; and site-specific measurements, test, investigations, or studies that support the identification of geologically hazardous areas; and
  - (iii) A description of the vulnerability of the site to seismic and other geologic events;
- (c) Analysis of Proposal. The report shall contain a geotechnical analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property and affected adjacent properties; and
- (d) Minimum Buffer and Building Setback. The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.
- (4) Incorporation of Previous Study. Where a valid geotechnical report has been prepared within the last five years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical areas report. The applicant shall submit a geotechnical assessment detailing any changed environmental conditions associated with the site.
- (5) Mitigation of Long-Term Impacts. When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the preexisting level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the preexisting conditions following abandonment of the activity. (Ord. 21-05 § 2, 2005).

**12.12.070 Critical areas report – Additional requirements for specific hazards.**

In addition to the general critical areas report requirements of BMC 12.08.210, critical areas reports for geologically hazardous areas must meet the requirements of this section. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

- (1) Erosion and Landslide Hazard Areas. In addition to the basic critical areas report requirements, a critical areas report for an erosion hazard or landslide hazard area shall include the following information at a minimum:
  - (a) Site Plan. The report shall include a copy of the site plan for the proposal showing:
    - (i) The height of slope, slope gradient, and cross-section of the project area;
    - (ii) The location of springs, seeps, or other surface expressions of ground water on or within 200 feet of the project area or that have potential to be affected by the proposal; and
    - (iii) The location and description of surface water runoff.
  - (b) Geotechnical Analysis. The geotechnical analysis shall specifically include:
    - (i) A description of the extent and type of vegetative cover; and
    - (ii) An estimate of load capacity including surface and ground water conditions, public and private sewage disposal systems, fills and excavations and all structural development; and
    - (iii) An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure; and
    - (iv) An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event; and
    - (v) Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on downslope properties; and
    - (vi) A study of slope stability including an analysis of proposed angles of cut and fill and site grading; and
    - (vii) Recommendations for building limitations, structural foundations, and an estimate of foundation settlement; and
    - (viii) An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion.
  - (c) Erosion and Sediment Control Plan. For any development proposal on a site containing an erosion hazard area, an erosion and sediment control plan shall be required. The erosion and sediment control plan shall be prepared in compliance with requirements set forth in Chapter 14.30 BMC;
  - (d) Drainage Plan. The report shall include a drainage plan for the collection, transport, treatment, discharge and/or recycling of water prepared in accordance with Chapter 14.30 BMC. The drainage plan should consider on-site septic system disposal volumes where the additional volume will affect the erosion or landslide hazard area.
  - (e) Mitigation Plans. Hazard and environmental mitigation plans for erosion and landslide hazard areas shall include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan and/or other means for maintaining long-term soil stability.

- (f) **Monitoring Surface Waters.** If the planning director determines that there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to the receiving waters, or the sensitivity of the receiving waters, the critical areas report shall include a plan to monitor the surface water discharge from the site. The monitoring plan shall include a recommended schedule for submitting monitoring reports to the city of Buckley.
- (2) **Seismic Hazard Areas.** In addition to the basic report requirements, a critical areas report for a seismic hazard area shall also meet the following requirements:
  - (a) The site map shall show all known and mapped faults within 200 feet of the project area or that have potential to be affected by the proposal.
  - (b) The geotechnical analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement).
- (3) **Mine Hazard Areas.** In addition to the basic report requirements, a critical areas report for a mine hazard critical area shall also meet the following requirements:
  - (a) **Site Plan.** The site plan shall delineate the following found within 200 feet of or directly underlying the project area, or that have potential to be affected by the proposal:
    - (i) The existence of mines, including all significant mine features, such as mine entries, portals, adits, mine shafts, air shafts, and timber shafts; and
    - (ii) The location of any nearby mines that may impact or be affected by the proposed activities; and
    - (iii) The location of any known sinkholes, significant surface depressions, trough subsidence features, coal mine spoil piles and other mine-related surface features; and
    - (iv) The location of any prior site improvements that have been carried out to mitigate abandoned coal mine features.
  - (b) **Geotechnical Analysis.** The geotechnical analysis shall include a discussion of the potential for subsidence on the site and classify all mine hazard areas within 200 feet of the project area, or that have potential to be affected by the proposal, as either moderate or severe.
- (4) **Volcanic Hazard Areas.** In addition to the basic report requirements, a critical areas report for a volcanic hazard area shall also meet the following requirements:
  - (a) **Site Plan.** The site plan shall show all areas within 200 feet of the project area that have the potential to be affected by pyroclastic flows, lahars, or mud and debris flows derived from volcanic events;
  - (b) **Geotechnical Analysis.** The geotechnical analysis shall include a complete discussion of the potential impacts of volcanic activity on the site (for example, inundation by mud flows resulting from volcanic activity); and
  - (c) **Emergency Management Plan.** The emergency management plan shall include plans for emergency building exit routes, site evacuation routes, emergency training, notification of local emergency management officials, and an emergency warning system.
- (5) **Other Geologically Hazardous Areas.** In addition to the basic report requirements, the planning director may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity and the subject hazard. (Ord. 21-05 § 2, 2005).

**12.12.080 Performance standards – General requirements.**

- (1) Alterations of geologically hazardous areas or associated buffers may only occur for activities that:
  - (a) Will not increase the threat of the geological hazard to adjacent properties beyond predevelopment conditions; and
  - (b) Will not adversely impact other critical areas; and
  - (c) Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than predevelopment conditions; and
  - (d) Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist licensed in the state of Washington.
- (2) Critical Facilities Prohibited. Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative. (Ord. 21-05 § 2, 2005).

**12.12.090 Performance standards – Specific hazards.**

- (1) Erosion and Landslide Hazard Areas. Activities on sites containing erosion or landslide hazards shall meet the following requirements:
  - (a) Buffer Required. A minimum buffer of 25 feet shall be established from all edges of erosion or landslide hazard areas.
    - (i) Increased Buffer. The planning director may increase the buffer requirement up to a distance equal to the height of the slope in order to minimize the risk of property damage, death or injury resulting from erosion and landslides caused in whole or part by the development, based upon review of and concurrence with a critical areas report prepared by a qualified professional.
    - (ii) Buffer Reduction. The buffer may be reduced to a minimum of 10 feet when a qualified professional demonstrates to the planning director's satisfaction that the reduction will adequately protect the proposed development, adjacent developments and uses and the subject critical area.
  - (b) Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a geotechnical analysis is submitted and certifies that:
    - (i) The development will not increase surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions; and
    - (ii) The development will not decrease slope stability on adjacent properties; and
    - (iii) Such alterations will not adversely impact other critical areas.
  - (c) Design Standards. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this title. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design standards are:
    - (i) The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of

- dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the Uniform Building Code; and
- (ii) Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas; and
  - (iii) Structures and improvements shall minimize alterations to the natural contour of the slope and foundations shall be tiered where possible to conform to existing topography; and
  - (iv) Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation; and
  - (v) The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties; and
  - (vi) The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and
  - (vii) Development shall be designed to minimize impervious lot coverage.
- (d) **Vegetation Shall Be Retained.** Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited.
- (e) **Seasonal Restriction.** Clearing shall be allowed only from May 1st to October 1st of each year; provided, that the city of Buckley may extend or shorten the dry season on a case-by-case basis depending on actual weather conditions, except that timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practice permit issued by the city of Buckley or the Department of Natural Resources.
- (f) **Utility Lines and Pipes.** Utility lines and pipes shall be permitted in erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Stormwater conveyance shall be allowed only through a high-density polyethylene pipe with fuse-welded joints, or a similar product that is technically equal to or superior.
- (g) **Point Discharges.** Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:
- (i) Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope; or both of the following:
  - (ii) Conveyed via continuous storm pipe downslope to a point where there are no erosion hazard areas downstream from the discharge; and
  - (iii) Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predeveloped state.
- (h) **Subdivisions.** The division of land in erosion and landslide hazard areas and associated buffers is subject to the following:
- (i) Land that is located wholly within an erosion or landslide hazard area or its buffer may not be subdivided. Land that is located partially within an erosion or landslide hazard area or its

- buffer may be divided; provided, that each resulting lot has sufficient buildable area outside of, and will not affect, the erosion or landslide hazard or its buffer. Adequate building space means that each newly created lot shall maintain a minimum buildable lot area outside of the erosion or landslide hazard area which totals 75 percent of the minimum lot size area for the zoning district where located; and
- (ii) Access roads and utilities may be permitted within the erosion or landslide hazard area and associated buffers if the city of Buckley determines that no other feasible alternative exists.
- (i) Prohibited Development. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.
- (2) Seismic Hazard Areas. Activities proposed to be located in seismic hazard areas shall meet the standards of BMC 12.12.080, Performance standards – General requirements.
- (3) Mine Hazard Areas.
- (a) Subdivisions. The division of land in mine hazard areas and associated buffers is subject to the following:
    - (i) Land that is located wholly within a mine hazard area or its buffer may not be subdivided. Land that is located partially within a mine hazard area or its buffer may be divided; provided, that each resulting lot has sufficient buildable area outside of, and will not affect, the mine hazard or its buffer. Adequate building space means that each newly created lot shall maintain a minimum buildable lot area outside of the mine hazard area which totals 75 percent of the minimum lot size area for the zoning district where located; and
    - (ii) Access roads and utilities may be permitted within the mine hazard area and associated buffers if the city of Buckley determines that no other feasible alternative exists.
  - (b) Reclamation Activities. For all reclamation activities, including grading, filling, and stockpile removal, as-built drawings shall be submitted to the city of Buckley in a format specified by the planning director.
- (4) Volcanic Hazard Areas. Activities on sites containing areas susceptible to inundation due to volcanic hazards shall require an evacuation and emergency management plan.
- (5) Other Hazard Areas. Activities on sites containing or adjacent to volcanic or other geologically hazardous areas shall meet the standards of BMC 12.12.080, Performance standards – General requirements. (Ord. 21-05 § 2, 2005).

**Chapter 12.13**  
**FISH AND WILDLIFE HABITAT CONSERVATION AREAS**

## Sections:

- 12.13.010 Designation of fish and wildlife habitat conservation areas.
- 12.13.020 Critical areas report – Additional requirements for habitat conservation areas.
- 12.13.030 Performance standards – General requirements.
- 12.13.040 Performance standards – Specific habitats.
- Appendix A Threatened, endangered and candidate species.

**12.13.010 Designation of fish and wildlife habitat conservation areas.**

## (1) Fish and wildlife habitat conservation areas include:

- (a) Areas with which State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.
  - (i) The U.S. Fish and Wildlife Service and the National Marine Fisheries Service shall be consulted as necessary for current listing status.
  - (ii) State-designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species), and WAC 232-12-011 (state threatened and sensitive species). The State Department of Fish and Wildlife maintains the most current listing and shall be consulted as necessary for current listing status.

A combined list of federally and state identified species is included in Appendix A at the end of this chapter and is to be used as a reference only and may not be the most up-to-date listing.
- (b) State Priority Habitats and Areas Associated with State Priority Species. Priority habitats are those 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 or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the State Department of Fish and Wildlife.
- (c) Habitats and Species of Local Importance. Habitats and species of local importance are those identified by the city of Buckley, including those that possess unusual or unique habitat warranting protection because of qualitative species diversity or habitat system health indicators.
- (d) Naturally Occurring Ponds under 20 Acres. Naturally occurring ponds are those ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.
- (e) Waters of the State. Waters of the state include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-030.
- (f) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.

- (g) State Natural Area Preserves and Natural Resource Conservation Areas. Natural area preserves and natural resource conservation areas are defined, established, and managed by the State Department of Natural Resources.
- (h) Land essential for preserving connections between habitat blocks and open spaces.
- (2) Mapping of Habitat Conservation Areas. The approximate location and extent of habitat conservation areas are shown on the adopted critical area maps as referenced in BMC 12.08.090(4) and (5). (Ord. 21-05 § 2, 2005).

**12.13.020 Critical areas report – Additional requirements for habitat conservation areas.**

In addition to the general critical areas report requirements of BMC 12.08.210, critical areas reports for habitat conservation areas must meet the requirements of this section. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

- (1) Prepared by a Qualified Professional. A critical areas report for a habitat conservation area shall be prepared by a qualified professional who is a biologist with experience preparing reports for the relevant type of habitat.
- (2) Area Addressed in Critical Areas Report. The following areas shall be addressed in a critical areas report for habitat conservation areas:
  - (a) The project area of the proposed activity;
  - (b) All habitat conservation areas and recommended buffers within 100 feet of the project area; and
  - (c) All shoreline areas, floodplains, and other critical areas, and related buffers within 100 feet of the project area.
- (3) Habitat Assessment. A habitat assessment is an investigation of the project area to evaluate the presence or absence of a potential critical fish or wildlife species or habitat. A critical areas report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:
  - (a) Detailed description of vegetation on and adjacent to the project area;
  - (b) Identification of any species of local importance, priority species, or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
  - (c) 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;
  - (d) A detailed discussion of the potential impacts on habitat by the project, including potential impacts to water quality;
  - (e) A discussion of measures, including avoidance, minimization and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with BMC 12.08.240, Mitigation sequencing, and/or BMC 12.08.260, Innovative mitigation; and

- (f) A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs.
- (4) Additional Information May Be Required. When appropriate due to the type of habitat or species present or the project area conditions, the planning director may also require the habitat management plan to include:
  - (a) An evaluation by an independent qualified professional regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate;
  - (b) A request for consultation with the Department of Fish and Wildlife or the local Native American Indian tribe; and
  - (c) Detailed surface and subsurface hydrologic features both on and adjacent to the site. (Ord. 21-05 § 2, 2005).

#### **12.13.030 Performance standards – General requirements.**

- (1) Alterations Shall Not Degrade the Functions and Values of Habitat. A habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with this title.
- (2) Nonindigenous Species Shall Not Be Introduced. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat conservation area unless authorized by a state or federal permit or approval.
- (3) Mitigation Shall Result in Contiguous Corridors. Mitigation sites shall be located to achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical areas report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.
- (4) Approvals of Activities May Be Conditioned. The planning director shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions may include, but are not limited to, the following:
  - (a) Establishment of buffer zones;
  - (b) Preservation of critically important vegetation;
  - (c) Limitation of access to the habitat area, including fencing to deter unauthorized access;
  - (d) Seasonal restriction of construction activities;
  - (e) Establishment of a duration and timetable for periodic review of mitigation activities; and
  - (f) Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.
- (5) Mitigation Shall Achieve Equivalent or Greater Biological Functions. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site.

Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

(6) Approvals shall be supported by the best available science.

(7) Buffers.

(a) Establishment of Buffers. The planning director shall require the establishment of buffer areas for activities in, or adjacent to, habitat conservation areas when needed to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation, or areas identified for restoration, established to protect the integrity, functions and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby, and shall be consistent with BMC 12.08.110. Habitat conservation areas and their buffers shall be preserved in perpetuity through the use of native growth protection areas and critical area tracts in accordance with BMC 12.08.370 and 12.08.380.

(b) Seasonal Restrictions. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.

(c) Habitat Buffer Averaging. The planning director may allow the recommended habitat area buffer width to be reduced in accordance with a critical areas report, the best available science, and the management recommendations issued by the State Department of Fish and Wildlife, only if:

(i) It will not reduce stream or habitat functions; and

(ii) It will not adversely affect salmonid habitat; and

(iii) It will provide additional natural resource protection, such as buffer enhancement; and

(iv) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

(v) The buffer area width is not reduced by more than 25 percent in any location.

(8) Signs and Fencing of Habitat Conservation Areas.

(a) Temporary Markers. The outer perimeter of the habitat conservation area or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur, and verified by the planning director prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

(b) Permanent Signs. As a condition of any permit or authorization issued pursuant to this chapter, the planning director shall require the applicant to install permanent signs along the boundary of a habitat conservation area or buffer.

Permanent signs shall be made of a metal face and attached to a metal post, or another material of equal durability. Signs must be posted at an interval of one per lot or every 100 feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the director:

Habitat Conservation Area  
Do Not Disturb

Contact the City of Buckley  
Regarding Uses and Restriction

- (c) Fencing.
  - (i) The planning director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer when fencing will prevent future impacts to the habitat conservation area.
  - (ii) The applicant shall be required to install a permanent fence around the habitat conservation area or buffer when domestic grazing animals are present or may be introduced on-site.
  - (iii) Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts.
- (9) Subdivisions. The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:
  - (a) Land that is located wholly within a habitat conservation area or its buffer may not be subdivided.
  - (b) Land that is located partially within a habitat conservation area or its buffer may be divided; provided, that an accessible and contiguous portion of each new lot is located outside of the habitat conservation area or its buffer and meets the minimum lot size requirements of BMC Title 19. Each lot and/or parcel created through the subdivision or site plan process shall maintain a minimum buildable lot area not including a wetland or buffer area which totals 75 percent of the minimum lot size area for the zoning district where located.
  - (c) Access roads and utilities serving the proposed subdivision may be permitted within the habitat conservation area and associated buffers only if the city of Buckley determines that no other feasible alternative exists and when consistent with this title. (Ord. 21-05 § 2, 2005).

**12.13.040 Performance standards – Specific habitats.**

- (1) Endangered, Threatened, and Sensitive Species.
  - (a) No development except public trail development shall be allowed within a habitat conservation area or buffer with which state or federal endangered, threatened, or sensitive species have a primary association.
  - (b) Whenever activities are proposed on lands that contain or are adjacent to a habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical areas report prepared by a qualified professional and approved by the city of Buckley. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Department of Fish and Wildlife and the appropriate federal agency.
  - (c) Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). Whenever activities are proposed on lands containing or adjacent to a

verified nest territory or communal roost, a habitat management plan shall be developed by a qualified professional.

- (2) Anadromous Fish.
- (a) All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:
    - (i) Activities shall be timed to occur only during the allowable work window as designated by the Department of Fish and Wildlife for the applicable species;
    - (ii) An alternative alignment or location for the activity is not feasible;
    - (iii) The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas; and
    - (iv) Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved critical areas report.
  - (b) Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.
  - (c) Fills, when authorized by Chapter 19.42 BMC, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts, and shall only be allowed for a water-dependent use.
- (3) Wetland Habitats. All proposed activities within or adjacent to habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in Chapter 12.09 BMC, Wetlands. If nonwetlands habitat and wetlands are present at the same location, the provisions of this chapter or Chapter 12.09 BMC, Wetlands, whichever provides greater protection to the habitat, apply.
- (4) Riparian Habitat Areas. Unless otherwise allowed in this title, all structures and activities shall be located outside of the riparian habitat area.
- (a) Establishment of Riparian Habitat Areas. Riparian habitat areas shall be established for habitats that include aquatic and terrestrial ecosystems that mutually benefit each other, and that are located adjacent to rivers, perennial or intermittent streams, seeps, and springs.
  - (b) Riparian Habitat Area Widths. Recommended riparian habitat area widths are shown in the table below. A riparian habitat area shall have the width recommended, unless a greater width is required pursuant to subsection (4)(c) of this section, or a lesser width is allowed pursuant to subsection (4)(d) of this section. Widths shall be measured outward in each direction, on the horizontal plane, from the ordinary high water mark or from the top of bank if the ordinary high water mark cannot be identified. Riparian areas should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions, which include but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian wildlife habitat to other habitats.

#### **Riparian Habitat Areas**

Stream type	Recommended RHA widths
Type S	150 feet
Type F	100 feet
Type Np	50 feet
Type Ns	25 feet

- (c) Increased Riparian Habitat Area Widths. The recommended riparian habitat area widths shall be increased, as follows:
- (i) When the planning director determines on the basis of a report by a qualified professional that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;
  - (ii) When the frequently flooded area exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the frequently flooded area;
  - (iii) When the channel migration zone exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the channel migration zone;
  - (iv) When the habitat area is within an erosion or landslide hazard area, or buffer, the riparian habitat area shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.
- (d) Riparian Habitat Area Width Averaging. The planning director may allow the recommended riparian habitat area width to be reduced in accordance with a critical areas report only if:
- (i) The width reduction will not reduce stream or habitat functions; and
  - (ii) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
  - (iii) The buffer width is not reduced to less than 50 percent of the standard width or 50 feet, whichever is greater, except for buffers in Class IV and V streams which are prohibited from averaging; and
  - (iv) Buffer width averaging is being conducted and/or implemented within or on the property where the averaging is being requested; and
  - (v) The width reduction will not be located within another critical area or associated buffer; and
  - (vi) The reduced riparian habitat area width is supported by best available science.
- (e) Riparian Habitat Mitigation. Mitigation of adverse impacts to riparian habitat areas shall result in equivalent functions and values on a per function basis, be located as near the alteration as feasible, and be located in the same subdrainage basin as the habitat impacted.
- (f) Alternative Mitigation for Riparian Habitat Areas. The performance standards set forth in this subsection may be modified at the city of Buckley's discretion if the applicant demonstrates that greater habitat functions, on a per function basis, can be obtained in the affected subdrainage basin as a result of alternative mitigation measures.
- (5) Aquatic Habitat. The following specific activities may be permitted within a riparian habitat area, pond, lake, water of the state, marine habitat or associated buffer when the activity complies with the provisions set forth in Chapter 19.42 BMC and subject to the standards of this subsection. The standards that provide the most protection to protected habitat and species shall apply.

- (a) Clearing and Grading. When clearing and grading is permitted as part of an authorized activity or as otherwise allowed in these standards, the following shall apply:
  - (i) Grading is allowed only during the dry season, which is typically regarded as beginning on May 1st and ending on October 1st of each year; provided, that the city of Buckley may extend or shorten the dry season on a case-by-case basis, determined on actual weather conditions.
  - (ii) The soil duff layer shall remain undisturbed to the maximum extent possible. Where feasible, any soil disturbed shall be redistributed to other areas of the project area.
  - (iii) The moisture-holding capacity of the topsoil layer shall be maintained by minimizing soil compaction or reestablishing natural soil structure and infiltrative capacity on all areas of the project area not covered by impervious surfaces.
  - (iv) Erosion and sediment control that meets or exceeds the standards set forth in Chapter 14.30 BMC shall be provided.
- (b) Shoreline Erosion Control Measures. All activities conducted in and/or around the shorelands area as defined within these regulations shall be required to comply with all provisions of Chapter 19.42 BMC, Shoreline Management. (Ord. 21-05 § 2, 2005).