# CITY OF BUCKLEY, WASHINGTON

## ORDINANCE NO. 03-17

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BUCKLEY, PIERCE COUNTY, WASHINGTON, ADOPTING A SIX-MONTH INTERIM ORDINANCE AMENDING THE CITY'S FREQUENTLY FLOODED AREAS ORDINANCE (CHAPTER 12.11 BMC) AND CRITICAL AREAS ORDINANCE (CHAPTER 12.08 BMC) IN ORDER TO TIMELY ADOPT AND IMPLEMENT NEW FLOOD MAPS REQUIRED UNDER THE NATIONAL FLOOD INSURANCE PROGRAM AND DECLARING AN EMERGENCY IN ORDER TO PROVIDE FOR AN IMMEDIATE EFFECTIVE DATE.**

**WHEREAS,** in order to continue to qualify for federal flood insurance, the City is required to adopt and implement new flood insurance maps by March 7, 2017; and

**WHEREAS,** it is not possible for the City to timely adopt the new flood insurance map and implement regulations in a timely manner within the normal review process required for adoption of amendments to the City's development standards; and

**WHEREAS,** prior to learning of the need to immediately adopt the new flood insurance maps, the City had been coordinating frequently flooded area amendments with broader critical area ordinance amendments, which have a significant amount of overlap, and there is insufficient time to separate out critical area ordinance amendments that are not essential to the frequently flooded area amendments; and

**WHEREAS,** loss of federal flood insurance could cause severe financial consequences to City residents,

NOW THEREFORE THE CITY OF BUCKLEY, PIERCE COUNTY, DOES ORDAIN AS FOLLOWS:

**Section 1.** That the Recitals above are hereby adopted by reference as the City Council's findings of fact, as if fully set forth herein. The City Council may, in its discretion, modify and/or adopt additional findings of fact at the conclusion of the public hearing set by this ordinance.

**Section 2.** That pursuant to the provisions of RCW 35A.63.220, an interim ordinance is hereby enacted that adopts amendments to Chapter 12.08 and 12.11 BMC as identified in track change in Exhibit A and B to this ordinance, incorporated by this reference as if set forth in full. The amendments shall go into effect on March 7, 2017 as required to maintain eligibility for federal flood insurance.

**Section 3.** The City Council deems it to be in the public interest to establish this ordinance as an emergency interim ordinance in order to provide additional time for the Planning Commission and City Council to consider permanent regulations to adopt the amendments required to maintain federal flood insurance.

**Section 4.** That as required by RCW 35A.63.220, the City Council hereby refers this interim ordinance to the Planning Commission to make a recommendation for permanent amendments as necessary to maintain eligibility for federal flood insurance.

**Section 5.** That as required by RCW 35A.63.220, the City Clerk shall schedule a public hearing within 60 days of the adoption of this ordinance in order to take public testimony and to consider adopting further findings to justify the adoption of this ordinance.

**Section 6.** That this ordinance shall be transmitted to the Washington State Department of Commerce, pursuant to RCW 36.70A.106.

**Section 7.** Declaration of Emergency and Immediate Effective Date. That for the reasons identified in the whereas clauses of this ordinance, the City Council hereby finds and declares that an emergency exists and that the 180-day interim regulations adopted by this ordinance shall become effective immediately upon passage of this ordinance and that an immediate effective date and this declaration of emergency is necessary for the protection of the public health, public safety, public property and public peace. The findings adopted by this ordinance are further adopted in support of this declaration of emergency.

**Section 8.** If any provision of this ordinance is held invalid, such invalidity shall not affect any other provision, or the applications thereof, which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are to be declared severable.

Introduced, passed, and approved by at least five members of the Buckley City Council on this 28th day of February, 2017.

Mayor Pat Johnson

ATTEST:

Joanne Starr, City Clerk

APPROVED AS TO FORM:

Phil A. Olbrechts

City Attorney

PUBLISHED: March 8, 2017

EFFECTIVE: Immediately

**EXHIBIT A**

# Chapter 12.08
# CRITICAL AREAS – GENERAL PROVISIONS

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**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.

**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.

**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.

**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.~~relies on scientific methods to evaluate how well regulatory and nonregulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty~~.

"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;
~~(1)~~(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. 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.

***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

***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).

"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.~~mean cooperative and coordinated land use planning is critically important among counties and cities in a region. In some cases, intergovernmental cooperation and coordination may show that it is sufficient to assure that a species will usually be found in certain regions across the state.~~

(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 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 rate 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 ~~Washington State Wetland Identification and Delineation Manual~~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~~Washington State Wetland Identification and Delineation Manual~~.

"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 ~~which are less than two acres in size and/or Class III wetlands less than one-third acre in size and~~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).

(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) Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;~~
~~(5)~~(4) Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
~~(6)~~(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
~~(7)~~(6) Monitoring the hazard or other required mitigation and taking remedial ~~action~~ 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. 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. 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.

***New construction*** means, for the purposes of determining insurance rates, 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.

***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.

"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(~~34~~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. 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 (cfps) 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, 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. *Structure,* for insurance purposes, means:

**(1)** A building with two or more outside rigid walls and a fully secured roof, that is affixed to a permanent site;

**(2)** A manufactured home ("a manufactured home," also known as a mobile home, is a structure: built on a permanent chassis, transported to its site in one or more sections, and affixed to a permanent foundation); or

**(3)** A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.

For the latter purpose, "structure" does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in paragraph (3) of this definition, or a gas or liquid storage tank.
*Subsidized rates* mean the rates established by the Federal Insurance Administrator involving in the aggregate a subsidization by the Federal Government.

"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.

***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.

"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~~1~~ as follows:

(1) "Type ~~1~~ S water" means all waters, within their ~~ordinary high water mark~~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~~, but not including those waters associated with wetlands as defined in Chapter 90.58 RCW~~.

(2) "Type ~~2~~ F water" means segments of natural waters that are not classified as Type ~~1~~ 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: ~~and have a high fish, wildlife, or human use. These are segments of natural waters and periodically inundated areas of their associated wetlands, which:~~

(a) Are diverted for domestic use by more than 10~~0~~ 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. ~~and only~~Such waters shall be considered Type ~~2~~ 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 ~~2~~ 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 ~~30~~ 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) Are used by fish for spawning, rearing or migration. Waters having the following characteristics are presumed to have highly significant fish populations:~~

~~(i) Stream segments having a defined channel 20 feet or greater within the bankfull width and having a gradient of less than four percent.~~

~~(ii) Lakes, ponds, or impoundments having a surface area of one acre or greater at seasonal low water; or~~

~~(e)~~(d) Riverine ponds, wall-based channels, and other channel features that ~~Are~~ 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 ~~-bearing~~ habitat stream and be accessible during some period of the year; and

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

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

~~(a) Are diverted for domestic use by more than 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 and the only practical water source for such users. Such waters shall be considered to be Type 3 waters upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by 50 percent, whichever is less;~~

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

~~(i) Waters having the following characteristics are presumed to have fish use:~~

~~(A) Stream segments having a defined channel of two feet or greater within the bankfull width in Western Washington; or three feet or greater in width in Eastern Washington; and having a gradient of 16 percent or less.~~

~~(B) Stream segments having a defined channel of two feet or greater within the bankfull width in Western Washington; or three feet or greater within the bankfull width in Eastern Washington, and having a gradient greater than 16 percent and less than or equal to 20 percent, and having greater than 50 acres in contributing basin size in Western Washington or greater than 175 acres in contributing basin size in Eastern Washington, based on hydrographic boundaries;~~

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

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

~~(ii) The Department of Natural Resources shall waive or modify the characteristics in subsection (c)(ii)(A) of this definition where:~~

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

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

~~(C) Sufficient information about a geomorphic region is available to support a departure from the characteristics in subsection (c)(ii)(A) of this definition, as determined in~~

~~consultation with the Department of Fish and Wildlife, Department of Ecology, affected tribes and interested parties.~~

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

~~At least 13 acres in the Western Washington coastal zone (which corresponds to the Sitka spruce zone defined in Franklin and Dyrness, 1973);~~

~~At least 52 acres in other locations in Western Washington;~~

~~At least 300 acres in Eastern Washington.~~

~~(5)~~(4) "Type ~~5~~ Ns waters" means all segments of natural waters within the bankfull width of the defined channels that are not Type ~~1~~S, ~~2~~F, ~~3,~~ or ~~4~~ Np waters. These are seasonal, non-fish- habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall~~the year~~ and are not located downstream from any stream reach that is a Type ~~4~~ Np water. ~~Type 5~~Ns waters must be physically connected by an above-ground channel system to Type ~~1~~S, ~~2~~F, ~~3,~~ or ~~4~~ 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. ~~For identifying and delineating a wetland, local government shall use the Washington State Wetland Identification and Delineation Manual.~~

"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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.").

**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.

**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 ~~one acre~~4,000 sf in size and/or Category III wetlands less than ~~one-third~~1,000 sf ~~acre~~ 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.

~~(p)~~(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 board of adjustment 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) Board of Adjustment Review. The board of adjustment shall review the application and planning director's recommendation and conduct a public hearing pursuant to the provisions of BMC Title 20. The board of adjustment 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.

**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.

**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)~~gravel~~;

(ii) Public trails shall be limited to the following maximum widths and construction standards:

**Table IA**

| Trail Type | Max. Surface Width | Surface Material |
|---|---|---|
| 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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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 board of adjustment. 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.

**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.

**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.

**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.

**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.

**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.

**12.08.320 Appeals.**

(1) Any person may appeal to the board of adjustment 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.

**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, the ~~board of adjustment~~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 board of adjustment 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.

(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.

**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.

**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.

**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.

**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.

**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).

**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 ~~and is included in Appendix A at the end of this chapter~~);

(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.

**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.

**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.

## Appendix A

| Class A – C Washington State Noxious Weeds | | |
|---|---|---|
| **Common Name** | **Latin Name** | **Class** |
| Velvetleaf | Abutilon theophrasti | A |
| Russian knapweed | Acroptilon repens | B |
| Jointed goatgrass | Aegilops cylindrical | C |
| Camelthorn | Alhagi maurorum | B |
| Garlic mustard | Alliaria petiolate | A |
| Blackgrass | Alopecurus myosuroides | B |
| Indigobush | Amorpha fruticose | B |
| Annual bugloss | Anchusa arvensis | B |
| Common bugloss | Anchusa officinalis | B |
| Wild chervil | Anthriscus sylvestris | B |
| Absinth wormwood | Artemisia absinthium | C |
| Hoary alyssum | Berteroa incana | B |
| White bryony | Bryonia alba | B |
| Butterfly bush | Buddleia davidii | C |
| Fanwort | Cabomba caroliniana | B |
| Hoary cress | Cardaria draba | C |
| Hairy whitetop | Cardaria pubescens | C |
| Plumeless thistle | Carduus acanthoides | B |
| Musk thistle | Carduus nutans | B |
| Italian thistle | Carduus pycnocephalus | A |
| Slenderflower thistle | Carduus tenuiflorus | A |
| Longspine sandbur | Cenchrus longispinus | B |
| Spotted knapweed | Centaurea biebersteinii | B |
| Purple starthistle | Centaurea calcitrapa | A |
| Diffuse knapweed | Centaurea diffusa | B |
| Brown knapweed | Centaurea jacea | B |
| Bighead knapweed | Centaurea macrocephala | A |
| Black knapweed | Centaurea nigra | B |
| Vochin knapweed | Centaurea nigrescens | A |
| Meadow knapweed | Centaurea pratensis | B |
| Yellow starthistle | Centaurea solstitialis | B |
| Rush skeletonweed | Chondrilla juncea | B |
| Canada thistle | Cirsium arvense | C |
| Bull thistle | Cirsium vulgare | C |
| Old man's beard | Clematis vitalba | C |
| Poison hemlock | Conium maculatum | C |
| Field bindweed | Convolvulus arvensis | C |
| Common crupina | Crupina vulgaris | A |
| Dodder | Cuscuta approximate | C |
| Houndstongue | Cynoglossum officinale | B |
| Yellow nutsedge | Cyperus esculentus | B |
| Scotch broom | Cytisus scoparius | B |
| Wild carrot | Daucus carota | B |

| | | |
|---|---|---|
| ~~Blueweed~~ | ~~Echium vulgare~~ | ~~B~~ |
| ~~Brazilian elodea~~ | ~~Egeria densa~~ | ~~B~~ |
| ~~Hairy willow-herb~~ | ~~Epilobium hirsutum~~ | ~~C~~ |
| ~~Leafy spurge~~ | ~~Euphorbia esula~~ | ~~B~~ |
| ~~Myrtle spurge~~ | ~~Euphorbia myrsinites~~ | ~~B~~ |
| ~~Eggleaf spurge~~ | ~~Euphorbia oblongata~~ | ~~A~~ |
| ~~Goatsrue~~ | ~~Galega officinalis~~ | ~~A~~ |
| ~~Herb-robert~~ | ~~Geranium robertianum~~ | ~~B~~ |
| ~~Babysbreath~~ | ~~Gypsophila paniculata~~ | ~~C~~ |
| ~~English ivy~~ | ~~Hedera helix 'Baltica'~~ | ~~C~~ |
| ~~English ivy~~ | ~~Hedera helix 'Pittsburgh'~~ | ~~C~~ |
| ~~English ivy~~ | ~~Hedera helix 'Star'~~ | ~~C~~ |
| ~~English ivy~~ | ~~Hedera hibernica 'Hibernicia'~~ | ~~C~~ |
| ~~Texas blueweed~~ | ~~Helianthus ciliaris~~ | ~~A~~ |
| ~~Spikeweed~~ | ~~Hemizonia pungens~~ | ~~C~~ |
| ~~Giant hogweed~~ | ~~Heracleum mantegazzianum~~ | ~~A~~ |
| ~~Polar hawkweed~~ | ~~Hieracium atratum~~ | ~~B~~ |
| ~~Yellow hawkweed~~ | ~~Hieracium caespitosum~~ | ~~B~~ |
| ~~Yellow devil hawkweed~~ | ~~Hieracium floribundum~~ | ~~A~~ |
| ~~Queendevil hawkweed~~ | ~~Hieracium glomeratum~~ | ~~B~~ |
| ~~Smooth hawkweed~~ | ~~Hieracium laevigatum~~ | ~~B~~ |
| ~~Mouseear hawkweed~~ | ~~Hieracium pilosella~~ | ~~B~~ |
| ~~Orange hawkweed~~ | ~~Hieracium aurantiacum~~ | ~~B~~ |
| ~~Hawkweed, spp~~ | ~~Hieracium Nonnative species except those listed as class A or B~~ | ~~C~~ |
| ~~Hydrilla~~ | ~~Hydrilla verticillata~~ | ~~A~~ |
| ~~Black henbane~~ | ~~Hyoscyamus niger~~ | ~~C~~ |
| ~~St. Johnswort~~ | ~~Hypericum perforatum~~ | ~~C~~ |
| ~~Common catsear~~ | ~~Hypochaeris radicata~~ | ~~B~~ |
| ~~Policeman's helmet~~ | ~~Impatiens glandulifera~~ | ~~B~~ |
| ~~Yellow flag iris~~ | ~~Iris pseudocorus~~ | ~~C~~ |
| ~~Dyers woad~~ | ~~Isatis tinctoria~~ | ~~A~~ |
| ~~Kochia~~ | ~~Kochia scoparia~~ | ~~B~~ |
| ~~Perennial pepperweed~~ | ~~Lepidium latifolium~~ | ~~B~~ |
| ~~Lepyrodiclis~~ | ~~Lepyrodiclis holosteoides~~ | ~~B~~ |
| ~~Oxeye daisy~~ | ~~Leucanthemum vulgare~~ | ~~B~~ |
| ~~Dalmatian toadflax~~ | ~~Linaria dalmatica ssp. Dalmatica~~ | ~~B~~ |
| ~~Yellow toadflax~~ | ~~Linaria vulgaris~~ | ~~C~~ |
| ~~Water primrose~~ | ~~Ludwigia hexapetala~~ | ~~B~~ |
| ~~Garden loosestrife~~ | ~~Lysimachia vulgaris~~ | ~~B~~ |
| ~~Purple loosestrife~~ | ~~Lythrum salicaria~~ | ~~B~~ |
| ~~Wand loosestrife~~ | ~~Lythrum virgatum~~ | ~~B~~ |
| ~~Scentless mayweed~~ | ~~Matricaria perforate~~ | ~~C~~ |
| ~~Wild four o' clock~~ | ~~Mirabilis nyctaginea~~ | ~~A~~ |
| ~~Eurasian watermilfoil~~ | ~~Myriophyllum spicatum~~ | ~~B~~ |
| ~~Parrotfeather~~ | ~~Myriophyllum aquaticum~~ | ~~B~~ |

| | | |
|---|---|---|
| ~~Fragrant water lily~~ | ~~Nymphaea odorata~~ | ~~C~~ |
| ~~Yellow floating heart~~ | ~~Nymphoides peltata~~ | ~~B~~ |
| ~~Scotch thistle~~ | ~~Onopordum acanthium~~ | ~~B~~ |
| ~~Reed canarygrass~~ | ~~Phalaris arundinacea~~ | ~~C~~ |
| ~~Common reed (nonnative genotypes)~~ | ~~Phragmites australis~~ | ~~C~~ |
| ~~Oxtongue hawkweed~~ | ~~Picris hieracioides~~ | ~~B~~ |
| ~~Bohemian knotweed~~ | ~~Polygonum bohemicum~~ | ~~B~~ |
| ~~Japanese knotweed~~ | ~~Polygonum cuspidatum~~ | ~~B~~ |
| ~~Himalayan knotweed~~ | ~~Polygonum polystachyum~~ | ~~B~~ |
| ~~Giant knotweed~~ | ~~Polygonum sachalinense~~ | ~~B~~ |
| ~~Curly-leaf pondweed~~ | ~~Potamogeton crispus~~ | ~~C~~ |
| ~~Sulfur cinquefoil~~ | ~~Potentilla recta~~ | ~~B~~ |
| ~~Kudzu~~ | ~~Pueraria montana var. lobate~~ | ~~A~~ |
| ~~Austrian fieldcress~~ | ~~Rorippa austriaca~~ | ~~B~~ |
| ~~Grass-leaved arrowhead~~ | ~~Sagittaria graminea~~ | ~~B~~ |
| ~~Mediterranean sage~~ | ~~Salvia aethiopis~~ | ~~A~~ |
| ~~Meadow clary~~ | ~~Salvia pratensis~~ | ~~A~~ |
| ~~Clary sage~~ | ~~Salvia sclarea~~ | ~~A~~ |
| ~~Cereal rye~~ | ~~Secale cereale~~ | ~~C~~ |
| ~~Tansy ragwort~~ | ~~Senecio jacobaea~~ | ~~B~~ |
| ~~Common groundsel~~ | ~~Senecio vulgaris~~ | ~~C~~ |
| ~~White cockle~~ | ~~Silene latifolia ssp. Alba~~ | ~~C~~ |
| ~~Milk thistle~~ | ~~Silybum marianum~~ | ~~A~~ |
| ~~Silverleaf nightshade~~ | ~~Solanum elaeagnifolium~~ | ~~A~~ |
| ~~Buffalobur~~ | ~~Solanum rostratum~~ | ~~A~~ |
| ~~Lawnweed~~ | ~~Soliva sessilis~~ | ~~A~~ |
| ~~Perennial sowthistle~~ | ~~Sonchus arvensis~~ | ~~B~~ |
| ~~Johnsongrass~~ | ~~Sorghum halepense~~ | ~~A~~ |
| ~~Smooth cordgrass~~ | ~~Spartina alterniflora~~ | ~~B~~ |
| ~~Common cordgrass~~ | ~~Spartina anglica~~ | ~~B~~ |
| ~~Denseflower cordgrass~~ | ~~Spartina densiflora~~ | ~~A~~ |
| ~~Salt meadow cordgrass~~ | ~~Spartina patens~~ | ~~A~~ |
| ~~Spanish broom~~ | ~~Spartium junceum~~ | ~~A~~ |
| ~~Swainsonpea~~ | ~~Sphaerophysa salsula~~ | ~~B~~ |
| ~~Saltcedar~~ | ~~Tamarix ramosissima~~ | ~~B~~ |
| ~~Common tansy~~ | ~~Tanacetum vulgare~~ | ~~C~~ |
| ~~Spurge flax~~ | ~~Thymelaea passerine~~ | ~~A~~ |
| ~~Hedgeparsley~~ | ~~Torilis arvensis~~ | ~~B~~ |
| ~~Puncturevine~~ | ~~Tribulus terrestris~~ | ~~B~~ |
| ~~Gorse~~ | ~~Ulex europaeus~~ | ~~B~~ |
| ~~Spiny cocklebur~~ | ~~Xanthium spinosum~~ | ~~C~~ |
| ~~Syrian bean-caper~~ | ~~Zygophyllum fabago~~ | ~~A~~ |

**EXIBIT B**

# 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.

## 12.11.010 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.~~Areas Identified on the Flood Insurance Map(s). Those areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Buckley, Pierce County, Washington, dated November 1979," with an accompanying flood insurance map(s), and any revisions thereto. The flood insurance study and accompanying map(s) are hereby adopted by reference, declared part of this chapter, and are available for public review at the city of Buckley.~~

(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.

**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.

**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.

(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.

**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, the State Department of Ecology, and the Federal Insurance Administration of the proposed watercourse alteration at least 30 days prior to permit issuance.

(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.

**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.

**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.