

**PLANNING COMMISSION  
MEETING**

**March 6, 2019  
6:30 p.m.**

**AGENDA**



*"Where Dreams Can Soar"*

*The City of Bonney Lake's Mission is to protect the community's livable identity and scenic beauty through responsible growth planning and by providing accountable, accessible and efficient local government services.*

[www.ci.bonney-lake.wa.us](http://www.ci.bonney-lake.wa.us)

**Location:** Justice & Municipal Center, 9002 Main Street East, Bonney Lake.

**Planning Commission Members:**

Grant Sulham – Chair  
Craig Sarver – Vice Chair  
David Baus  
Brad Doll  
Dennis Poulsen  
Debbie Strous-Boyd  
Bill Fredric

**City Staff:**

Jason Sullivan, Planning and Building  
Supervisor  
Mary Reinbold, Assistant Planner  
Debbie McDonald, Planning Commission Clerk

- I. Call to Order**
- II. Roll Call & Next Meeting Poll (March 20, 2019)**
- P.3 **III. Approval of Minutes**
- IV. Public Comments and Concerns**
- V. Public Hearing (NONE)**
- VI. Old / Continuing Business**
- P.5 **A. Ordinance D19-05 Critical Areas Ordinance**
- VII. New Business**
- VIII. For the Good of the Order**
  - A. Correspondence
  - B. Staff Comments
  - C. Commissioner Comments
- IX. Adjournment**

**Next Scheduled Meeting:** March 20, 2019

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**PLANNING  
COMMISSION MEETING**

**February 20, 2019  
6:30 p.m.**

**DRAFTED MINUTES**



*"Where Dreams Can Soar"*

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**Location:** Justice & Municipal Center, 9002 Main Street East, Bonney Lake.

- I. Call to Order:** The meeting was called to order at 6:30 P.M.
- II. Roll Call:** Planning Commissioners in attendance were Chair Grant Sulham, Vice-Chair Craig Sarver, Commissioner Debbie Strous-Boyd, Commissioner David Baus, Commissioner Bill Frederic, Commissioner Brad Doll and Commissioner Dennis Poulsen

**III. Absent:**

Staff members in attendance were Planning and Building Supervisor Jason Sullivan, Assistant Planner/Code Enforcement Mary Reinbold and Planning Commission Clerk Debbie McDonald

**IV. Approval of Minutes:**

**Motion was made by Commissioner Baus and seconded by Vice-Chair Sarver to approve the February 6, 2019 as written.**

**Motion approved 7-0**

**VI. Public Comment and Concerns:**

Carol Troxel 6815 W Tapps Hwy E: First wanted to correct the minutes that stated she lived here for 15-years, it has been 40-years. Would like to know the number of people who wanted to have Commercial on the Park Place property.

**VII. Public Hearings:** NONE

**VIII. Old/Continuing Business:**

**A. WPLUP Project Phase III – Draft Zoning Code Chapters**

Planning and Building Supervisor Sullivan stated this is a continuation from the last Planning Commission meeting. Tonight will be reviewing the zoning matrix. Discussed the changes that were made and why some uses are placed in certain zones.

Commissioners asked questions throughout the presentation.

Planning and Building Supervisor Sullivan will add a table to what the letters mean.

**IX. New Business:** NONE

**X. For the Good of the Order:**

**A. Correspondence:** NONE

**B. Staff Comments:**

Assistant Planner Mary Reinbold announced the City's 70<sup>th</sup> Birthday party will be Feb. 28 over at old City Hall. Will hold a Critical Areas Open House on March 14, over at the Senior Center.

**C. Commissioner Comments:**

Commissioner Baus would like to talk about RV Parks at the Joint Meeting.

**XI. Adjournment:**

**Motion was made by Vice-Chair Sarver and seconded by Commissioner Doll to adjourn.**

**Motion approved 7-0**

**Meeting adjourned at 7:36**

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Debbie McDonald Planning Commission Clerk



# Planning and Building Division Briefing Memorandum

**Date:** February 6, 2018  
**To:** Planning Commission  
**From:** Mary Reinbold – Assistant Planner Code Enforcement  
**Re:** **Critical Areas Ordinance Update**

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**PURPOSE:** The purpose of this agenda item is to provide the Planning Commission with the initial draft of the Critical Areas Ordinance Update.

**ATTACHMENTS:**

1. Ordinance D19-05

**BACKGROUND:**

The comprehensive plan of the City of Bonney Lake, *Bonney Lake 2035*, contains an implementation element. As part of that element the City is directed to complete an in-depth review of the City's Critical Areas Code (City of Bonney Lake Municipal Code Chapters 16.20 through 16.40) during 2018. The current Critical Areas Code was passed in 2004, with amendments made in 2009 and 2014. An update of this code is required to be based on the best available science as defined by WAC 365-195-900 through 365-195-925. The City will also use this work to begin updating the Environmental Stewardship Element of the City's Comprehensive Plan.

To assist in the completion of this work the City has contracted with The Watershed Company. In addition to the tasks listed above The Watershed Company will also assist with a review and update of the City's clearing code and update of the City's landscaping code with the goal of improving visual character and encouraging sustainability in the built environment.

**DISCUSSION:**

The draft ordinance addresses the following:

1. The current floodplain definitions in BLMC 16.26.020 are relocated to the definitions section in BLMC 16.20.030 so that all of the definitions for the critical area regulations area located in one place instead of multiple sections. Staff is still reviewing these definitions to ensure that the definitions are consistent with the requirements of FEMA.
2. A section was added to provide additional information related to the performance bonding for mitigation. Performance bonding is currently required; however, there are no provisions provide for how the bonding should be completed, making it difficult for people to understand the requirements. Also, without specific standards there is no way to ensure



# Planning and Building Division Briefing Memorandum

that each project has the appropriate bonding needed to ensure that the mitigation is successful.

3. The critical area variance was replaced with a reasonable use permit to differentiate it from a land use variance. The same process and requirements still apply.
4. A section was added creating a Limited Density Transfer as a way of further protecting critical areas. In general the section would allow someone who is doing a subdivision or short subdivision to transfer some of the development potential out of the portion of the site encumbered by a wetland, stream and/or corresponding buffers to the area that is not encumbered. Under the approach, the developer would not be able to seek or request any other modifications or reductions to the wetland buffer and the buffer would have to remain in a native state. An example of how it would work is provided below:

A property owner has an 11 acre site (this is considered the gross acres). If 1 acre of the site is encumbered by wetland, stream and/or corresponding buffers, the net acres for the site is 10 acres. The City uses net acres to determine the number of house that could be build, which is typically 4 to 5 units per net acre. The proposed provision would allow them to transfer a portion of the density from the undevelopable portion of the site, by increasing the net density by 0.3 acres to determine the total allowed number of units on 10.3 acres. The amount is based on a sliding scale based on the percentage of the site that is considered undevelopable. As the percentage of the site that is considered undevelopable increases, the amount of the allowed density transfer decreases.

5. Updates to the Wetland Characteristics table in BLMC16.22.040 were made to reflect 2018 changes in the Washington Department of Ecology guidance, which increase what is considered as a moderate habitat score from 5 to 6. This means that wetlands with a habitat score of 5 would be considered a lower quality wetland and require a smaller buffer.
6. Review and update regulations pertaining to the City's lakes not regulated under the Shoreline Management Act (RCW 90.58), including review of existing conditions and applicable Best Available Science (BAS).
7. Review and update regulations pertaining to critical aquifer recharge areas (CARAs).
8. Established a buffer for the landslide hazard areas based on best available science. The buffer can be reduced based on the recommendations of a geologist subject to specific requirements in the BLMC.



# Planning and Building Division Briefing Memorandum

9. There are also a number of edits to the language to improve readability.

**Next steps and dates:**

Planning Commission Public Hearing on March 20<sup>th</sup>

CAO Ordinance to City Council by April 2<sup>nd</sup>

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**ORDINANCE NO. D19-05**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, PIERCE COUNTY, WASHINGTON, AMENDING CHAPTERS 16.20, 16.22, 16.24, 16.26, 16.28, and 16.30 OF THE BONNEY LAKE MUNICIPAL CODE AND THE CORRESPONDING PORTIONS OF ORDINANCE NUMBERS 1070, 1189, 1252, 1301, 1325, 1491, 1505, 1523 and 1570 RELATED TO THE CITY'S CRITICAL AREAS REGULATION.**

**WHEREAS**, as part of the 2018 – 2019 Planning Work Plan, the City Council directed staff to review and revise the City's Critical Area Regulations codified in Title 16 Division II in the Bonney Lake Municipal Code; and

**WHEREAS**, the Public Services Director acting as the SEPA Responsible Official \_\_\_\_\_; and

**WHEREAS**, the Planning Commission reviewed the proposed amendments on \_\_\_\_\_ and held a public hearing on \_\_\_\_\_ as required by BLMC 14.10.090.C and recommended that the City Council approve the amendments to the fee schedule; and

**WHEREAS**, pursuant to RCW 36.70A.106(3)(b) the City requested review of this Ordinance from the Department of Commerce. The Department of Commerce review period concluded on \_\_\_\_\_;

**NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, WASHINGTON DO ORDAIN AS FOLLOWS:**

**Section 1. Findings of fact and conclusions.** The findings of fact set forth in Attachment "A", attached hereto and incorporated by this reference, are adopted in full by the City Council in support of its decision to adopt the amendments contained in this ordinance.

**Section 2.** Chapter 16.20 of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1070 § 2, Ordinance No. 1252 § 1, Ordinance No. 1301 § 1 through 3, Ordinance No. 1325 § 6 through 10, Ordinance No. 1491 § 18 and 19, and Ordinance No. 1505 § 16 are each hereby amended to read as follows:

**16.20.010 Finding.**

The city finds that critical areas' biological and physical functions benefit the city by protecting water quality, providing fish and wildlife habitat, supporting the food chain, storing and conveying flood waters, recharging groundwater, controlling erosion, and providing aesthetic values and recreation.

**16.20.020 Purpose.**

The purpose of this critical areas code is to:

- A. Protect the functions and values of ecologically sensitive areas while allowing for economically reasonable use of private property, through the application of the best available science;
- B. Implement the Growth Management Act and the ~~natural environment~~ goals of the comprehensive plan; and
- C. Protect the public from injury and loss due to slope failures, erosion, seismic events, volcanic eruptions, or flooding.

**16.20.030 Definitions.**

“100-year flood” means a flood having a one percent chance of being equaled or exceeded in any given year.

“Alter” means to change a critical area or its buffer, including grading, filling, dredging, clearing, construction, compaction, excavation, and pollution.

“Anadromous” refers to fish that spawn and rear in freshwater and mature in saltwater.

“Appeal” means a request for a review of the interpretation of any provision of this chapter or a request for a floodplain variance.

“Applicant” means a person who applies for a development permit from the city.

“Aquifer” means a geological formation capable of yielding water to a well or spring.

“Area of special flood hazard” means land in the floodplain within the city of Bonney Lake subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letter A or V.

“Base flood” means the flood having a one percent chance of being equaled or exceeded in any given year, and is also referred to as the “100-year flood.” Base flood is designated on Flood Insurance Rate Maps by the letter A.

“Base flood elevation” or “BFE” means the elevation of the base flood as designated on the Flood Insurance Rate Maps or as ascertained by the local administrator.

“Basement” means any area of the building having its floor sub-grade, or below ground level, on all sides; provided, that below-grade crawlspace construction that is in accordance with the requirements of this chapter will not be considered basements.

**Comment [JS1]:** These definitions are current in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

“Best management practices” means those practices which provide the best available and reasonable physical, structural, managerial, or behavioral activity to reduce or eliminate pollutant loads and/or concentrations leaving the site.

“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.

**Comment [JS2]:** This definition is current in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

“Buffer” means an area contiguous to and required for protection of a critical area.

“Channel migration zone” means the lateral extent of likely movement of a stream or river during the next 100 years as evidenced by movement over the past 100 years.

“Conservation easement” means a legal agreement that the property owner enters into to restrict uses of the land in a manner that conserves natural functions.

“Critical aquifer recharge area” means an area with a critical recharging effect on aquifers used for potable water, as discussed in WAC 365-190-080(2). Within such areas, pollutants seeping into the ground are likely to contaminate the water supply.

“Critical area” means those areas listed in BLMC 16.20.060.

“Critical areas variance” means the process through which an applicant may gain flexibility in the application of specific regulations of the critical areas code to a specific proposal, when all the criteria for a critical areas variance have been met.

“Critical facility” means a facility for which even a slight chance of flooding 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.

**Comment [JS3]:** This definition is current in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

“Development” means any land use or action that alters a means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, tree removal/clearing, excavation or drilling operations or storage of equipment or materials located within critical area or its buffer, including city approvals that establish patterns of use such as subdivisions, short subdivisions, rezones, and conditional use permits.

**Comment [JS4]:** This portion of the definition is current in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

It was combined with the existing definition of development and is consistent with the older term that was removed “land use or action that alters”. The addition clarifies the definition and results in a clearer standard.

“Elevated building” means, for insurance purposes, a nonbasement building that has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

“Elevation certificate” means the official form (FEMA Form 81-31) used to track development, provide elevation information necessary to ensure compliance with community floodplain management, and determine the proper insurance premium rate with Section B completed by community officials.

“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 is completed before the effective date of the adopted floodplain management regulations; including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.

“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 manufactured 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.

“Fish and wildlife habitat conservation area” are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Fish and wildlife habitat conservation areas do 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.

**Comment [JS5]:** These definitions are current in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

“Fish habitat” means habitat used by fish at any life stage at any time of the year.

“Flood” or “flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland waters; and/or
2. The unusual and rapid accumulation of runoff of surface waters from any source.

**Comment [JS6]:** Added per WAC 365-190-030

“Flood Insurance Rate Map (FIRM)” means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the city of Bonney Lake.

“Flood Insurance Study (FIS)” means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Insurance Rate Maps, and the water surface elevation of the base flood.

“Floodproofing” means the construction techniques that prevent or provide resistance to damage from flooding while allowing water to enter the structure.

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

“Functions and values” means the benefits conferred by critical areas, including water quality protection, fish and wildlife habitat, flood storage and conveyance, groundwater recharge, erosion control, and protection from hazards.

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

“Hazard tree” means a tree that has significant structural defects that are likely to lead to failure and possibly cause injury or damage as identified in a report from an International Society of Arboriculture (ISA) tree risk assessment qualified (TRAQ) arborist. In the case of steep slopes, a hazard tree can also be a tree that is a hazard to stability of the slope, as determined by a geotechnical engineer.

“Hazardous substance” means a liquid, solid, or gas that exhibits any of the properties described in WAC 173-303-090 or 173-303-100.

“Historic” means existing before the area was altered by human activity.

“Impact” means to adversely affect a natural system or increase the hazard which a natural system poses to human life and property.

“Impervious” refers to a hard surface area that retards the entry of water into the soil.

“Land disturbing activity” means any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, clearing, grading, filling and

**Comment [JS7]:** These definitions are current in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered a land disturbing activity. Vegetation maintenance practices are not considered land disturbing activity. Stormwater facility maintenance is not considered “land disturbing activity” if conducted according to established standards and procedures.

“Local administrator” means the public services department director or designee.

~~“Lowest floor” excludes unfinished enclosures usable only for parking, building access, or storage.~~

“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 nonelevation design requirements of this chapter found at BLMC 16.26.060(F)(1)(b), specifically provided adequate flood ventilation openings exist.

“Low impact development (LID)” means a stormwater and land use management strategy that strives to mimic predisturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

“Manufactured home” means a structure, transportable in one or more sections, that 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.

“Mean sea level” means the arithmetic mean of hourly heights of the sea observed over a 19-year period. This gives the 0.0 datum point given in the North American Vertical Datum of 1988 (NAVD-88).

“Minor work” means work that is exempt from review under the State Environmental Policy Act, such as planting wetland-compatible indigenous plants, the removal of invasive or noxious weeds, or pruning trees, all using hand labor or handheld equipment.

“Mitigation” means a requirement to replace or enhance critical functions and values destroyed or impacted by proposed land disturbances.

**Comment [JS8]:** This definition is currently in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

**Comment [JS9]:** Replaced with flood code version of definition

**Comment [JS10]:** These definitions are currently in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

“Monitoring” means assessing the performance of mitigation measures by collection and analysis of data on changes in natural systems.

“Native or equivalent vegetation” means species which are indigenous to the Puget Sound lowlands ecoregion; or a species that is equivalent in providing the same site-specific functional arrays as would the native species. “Functional arrays” may include forage, floodwater restraint, hiding habitat, or other physical or biologic roles in the ecosystem, that singly or in combination correspond to those of the native species. As with natives, the role of an equivalent species may vary depending on the site and its surrounding ecosystem. Invasive/exotic species shall not be considered equivalent species.

“New construction” means structures for which the start of construction commenced on or after the effective date of this chapter.

“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 is completed on or after the effective date of this chapter, including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.

“No net loss” means the maintenance of the aggregate total of the city’s critical areas functions and values over time. The no net loss standard requires that the impacts of a proposed use and/or development, whether permitted or exempt from permit requirements, be identified and mitigated on a project-by-project basis, so that as development occurs critical areas functions and values stay the same.

“Ordinary high water mark” means that mark on the bed or bank below which inundation is so common in ordinary years that the soil and/or vegetation are distinct from that of the abutting upland.

“Primary association” means a relationship between a species and a habitat area whereby the species regularly uses or otherwise needs the habitat area to thrive.

“Recreational vehicle” means a vehicle:

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

**Comment [JS11]:** These definitions are currently in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

“Rill” means a small, steep-sided channel caused by erosion.

“Riparian habitat” means stream-side areas that influence the aquatic ecosystem by providing shade, debris, or insects and provide habitat for riparian wildlife.

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

“Start of construction” includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. In relation to this term:

1. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation.

2. Permanent construction includes neither land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

3. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

“Structure” means a walled and roofed building, including a gas or liquid storage tank that is principally above ground.

“Substantial damage” means damage of any origin sustained by a structure for which 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 exceeds 50 percent of the structure’s market value before the improvement, or, if the structure was damaged, before the damage occurred.

**Comment [JS12]:** These definitions are currently in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

**Comment [JS13]:** These definitions are currently in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

**Comment [JS14]:** Replaced with flood version of “substantial improvement”. The new definition provides greater clarity.

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

1. Before the improvement or repair is started; or

2. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

3. The term excludes:

a. Any project for improvement of a structure to correct violations of state or local health, sanitary, or safety code specifications that were previously identified by the local code enforcement official and are the minimum necessary to assure safe living conditions; or

b. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

“Watercourse” means flowing waters of the state, perennial or intermittent, excluding artificial waterways such as ditches or canals not created by human alteration of a natural watercourse.

“Wellhead protection area” or “WHPA” means the zone of contribution associated with an approved public drinking water source as delineated for each well, wellfield, or spring with the six-month and one-, five- and ten-year time-of-travel boundaries marked, or boundaries established using alternate criteria approved by the Washington State Department of Health in those settings where groundwater time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.

“Wetland” or “wetlands” means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland 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.

**Comment [JS15]:** These definitions are currently in the City Flood Hazard Code (BLMC 16.26.020) and have been moved to these section so that all of the definitions are in one place. Staff is reviewing the definitions for consistency with FEMA requirements.

**Comment [JS16]:** Added per DOH comment

Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands.

“Wetland mitigation bank” means a site where wetlands are restored, created, or enhanced to mitigate in advance authorized impacts to similar resources.

“Variance” means a grant of relief from the requirements of this chapter that permits construction in a manner that would otherwise be prohibited by this chapter.

**16.20.040 Critical areas code.**

These Chapters 16.20 through 16.30 BLMC shall collectively be known as the critical areas code. This Chapter 16.20 BLMC shall establish the general framework for Chapters 16.22, 16.24, 16.28 and 16.30 BLMC. The director of ~~planning and community development~~ shall administer and interpret this critical areas code.

**16.20.045 Best available science.**

A. Criteria for best available science. The best available science is that scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, a qualified scientific professional or team of qualified scientific professionals consistent with criteria established in WAC 365-195-905 through WAC 365-195-925, as amended.

B. Protection for functions and value and anadromous fish. Critical area studies and decisions to alter critical areas shall rely on the best available science to protect the functions and value 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.

C. Absence of valid scientific information. Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the director shall take a “precautionary approach,” that strictly limits development and land use activities until the uncertainty is sufficiently resolved. The burden of proof that the action will cause no net loss or harm to persons or property falls on the applicant or the property owner.

**Comment [JS17]:** RCW 36.70A.172 requires that the City adopts regulations based on “best available science” and that when implemented those regulations the City consider best available science. This section was added to clearly define how the City will comply with this requirement.

**16.20.050 Fees.**

~~Chapter 3.68 BLMC establishes fees. The city shall by resolution establish fees by which the city shall recover its cost of reviewing development proposals, including the cost of~~

engineering review, planning review, inspections, and administration. The applicant shall be responsible for all required reports, assessments, studies, and plans.

**16.20.060 Applicability.**

A. Unless exempted in BLMC 16.20.070, this critical areas code shall apply to all developments (see definition) within one or more of the following critical areas or their associated buffers or building setback areas, regardless of whether the site has been previously identified as a critical area.

A1. Wetlands as designated in Chapter 16.22 BLMC;

B2. Critical aquifer recharge areas as designated in Chapter 16.24 BLMC;

3. Frequently flooded areas as designated in Chapter 16.26 BLMC;

C4. Geologically hazardous areas as designated in Chapter 16.28 BLMC; and

D5. Fish and wildlife habitat conservation areas as designated in Chapter 16.30 BLMC.

B. When any existing regulation, easement, covenant, or deed restriction conflicts with this critical areas code, that which provides more protection to the critical areas shall apply.

**16.20.065 Mitigation Sequencing.**

All proposed development, uses and activities subject to this chapter shall utilize one or more of the following methods, listed in preferential sequence (commonly known as “sequencing”). The methods used shall be those which are highest on the list yet consistent with the objectives of the proposed development.

A. Avoid the impact altogether by not taking a certain action or parts of an action;

B. Minimize impacts by limiting the action’s magnitude or changing the project design, location, or timing;

C. Rectify the impact by repairing, rehabilitating, or restoring the affected environment;

D. Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action;

E. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments; and

**Comment [JS18]:** For some reason this was left out of the list of Critical Areas.

F. Monitor the impact and take appropriate corrective measures.

**Comment [JS19]:** Currently the mitigation sequencing requirement is listed in BLMC 16.20.130.E and is typically over looked by applicants. Additionally the sequencing listed in the current code does not fully complete with BAS. The addition of this section was meant to clearly state was the sequencing methodology is and ensure that it is consistent with BAS.

**16.20.070 Exemptions.**

All exempted activities shall use reasonable methods to avoid potential impacts to critical areas. To be exempt from this Chapter 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. The following shall be exempt from this critical areas code upon receiving a written critical area exemption from the city:

- A. Emergency actions immediately necessary to prevent injury or property damage, provided the action minimizes impact to critical areas and buffers. The person undertaking the action shall notify the director(s) within one day following commencement of the emergency action. The director(s) shall determine if the action was allowable under this subsection and commence enforcement if not. Within one year of the date of the emergency, the person undertaking the action shall fully mitigate any resulting impacts to the critical area and buffers in accordance with an approved critical area report and mitigation plan;
- B. Normal operation, maintenance, or repair of existing structures, utilities, roads, levees, drainage systems, or similar improvements, including vegetation management, if the action does not alter or increase the impact to or encroach upon the critical area or buffer, and if the action accords with best management practices and maintenance, and does not impact an endangered or threatened species;
- C. Passive outdoor activities such as recreation, education, and scientific research that do not degrade the critical area;
- D. Forest practices in accordance with Chapter 76.09 RCW and WAC Title 222, other than forest practice conversions;
- E. Structural modifications of, additions to, or replacements of existing legal structures without altering or increasing the impact to the critical area; provided, that the work complies with city's regulations regarding legal nonconforming and if applicable, the standards of 16.26.060~~uses are complied with~~. Includes most tenant improvements;
- F. The following work within improved public rights-of-way or private street easements: construction, replacement, or modification of streets, utilities, lines, mains, equipment, or appurtenances, excluding electrical substations; provided, that actions that alter a wetland or watercourse, such as culverts or bridges, or result in the

transport of sediment or increased stormwater shall be subject to the following requirements wherever possible:

1. Critical area and/or buffer widths shall be increased equal to the width of the right-of-way improvement, including disturbed areas; and
  2. Native vegetation shall be retained and replanted along the right-of-way improvement;
- G. Minor utility projects such as placement of a utility pole, street sign, anchor, or vault, which do not significantly impact critical areas function or values, if constructed using best management practices;
- H. Removal with hand labor and light equipment of invasive or noxious plants as designated by the director(s), including, but not limited to:
1. English Ivy (*Hedera helix*);
  2. Himalayan blackberry (*Rubus discolor*, *R. procerus*); ~~and~~
  3. Evergreen blackberry (*Rubus laciniatus*); and
  4. Weeds listed on the Noxious Weeds Designated for Control or Eradication in Pierce County annual list by the Pierce County Noxious Weed Control Board.
- I. ~~Thinning or removal of hazard trees which a qualified arborist, landscape architect, or forester has documented as posing a threat to public safety and which do not provide critical habitat such as eagle perches;~~ provided, that removed trees and thinnings are left on-site where appropriate in wetland and habitat areas, and for each tree removed, two replacement trees shall be planted in the same or nearly same location within one year in accordance with a plan approved by the director(s). The replacement trees shall be of species native and indigenous to the site. Deciduous trees shall be at least one inch in diameter at breast height. Evergreen trees shall be at least six feet in height measured from the top of the root ball. When feasible, wildlife snags shall be created from hazard trees in wetlands and wetland or stream buffer areas;
- J. Measures to control 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 with the same or similar native species within one year in accordance with an approved plan;
- K. Application of herbicides, pesticides, or fertilizers, if necessary; provided, that their use shall conform to Department of Fish and Wildlife Management

Recommendations and the regulations of the Department of Agriculture and the U.S. Environmental Protection Agency;

- L. Minor clearing or digging necessary for surveys, soil logs, percolation tests, and similar activities, provided critical area impacts are minimized and disturbed areas are immediately restored;
- M. Navigational aids and boundary markers;
- N. Proposed developments that have undergone critical area review at a previous stage of permit review provided the earlier permit has not expired;
- O. Harvesting of wild crops without injuring their natural reproduction, tilling the soil, planting crops, applying chemicals, or altering the critical area;
- P. Conservation measures of soil, water, vegetation, fish, and other wildlife that do not adversely impact ecosystems;
- Q. Required environmental impact remediation;
- R. Existing and ongoing agricultural activities where the land has not lain idle so long that modifications to the hydrological regime are necessary to resume operations; and
- S. Development of Category IV wetlands less than 1,000 square feet in size if a critical area report demonstrates that (1) the wetland does not provide suitable habitat for amphibians and (2) the wetland does not possess unique characteristics that would be difficult to replicate.

**16.20.080 Review process.**

The ~~director(s)~~'s general sequence for administering this critical areas code shall be per the following table, which shows questions the city ~~director(s)~~ shall answer, and actions ~~the city he or she~~ shall take depending on the answer.

<b>Step 1</b>	<b>Does the development proposal contain critical areas or critical area buffers?</b> The director(s) shall check maps, review the environmental checklist, visit the site, and/or require scientific determinations as necessary to make this determination.	
	Yes	No
	Go to step 2.	Go to step 4.
<b>Step 2</b>	<b>Is the development proposal exempt per BLMC 16.20.070?</b>	

	Yes	No
	Go to step 4.	Require a critical area report. Do not issue determination of completeness until critical area report is received. Reference critical area report in any public notice.
<b>Step 3</b>	<b>Does the proposal, with conditions of approval, conform to BLMC 16.20.130, Substantive requirements, the substantive requirements for the critical area type, e.g., wetlands, the permit type processing requirements, and the rest of Bonney Lake Municipal Code?</b>	
	Yes	No
	Go to step 4.	Go to step 4.
<b>Step 4</b>	<b>Document the review process in a manner appropriate to, and filed with, the permit(s) required for the proposed development, and act on the permit application in accordance with the findings. Approval or disapproval and notices of decision shall be issued as required by the appropriate permit type.</b>	

**16.20.090 Critical area reports.**

Critical area reports shall be prepared for nonexempt proposed developments containing critical areas or their buffers. In addition to information required in specific critical area chapters, the critical area reports shall:

- A. Be prepared by qualified experts as defined in WAC 365-195-905(4). The following list shows the type of critical area report and the related professional discipline:
  - 1. Wetlands: wetland biologist.
  - 2. **Critical aquifer recharge areas: hydrogeologist, geologist, or engineer.**
  - 3. Floodplains: hydrologist or engineer.
  - 4. Geologically hazardous areas: engineer or geologist.
  - 5. Fish and wildlife habitats: biologist.
- B. Incorporate best available science.
- C. Cover a study area large enough to understand relationships with important off-site factors and identify any nearby critical area whose buffer extends onto the project site.

**Comment [JS20]:** Staff is recommend removing the mitigation plan as a specific component of a critical area report. A mitigation plan would only be required if impacts to the critical area are authorized. The reason is that if some submits a report to document the critical area and does not propose to impact that critical area then a mitigation plan is unwarranted. Mitigation plans would be submitted as a separate application; after the City reviews the critical areas report. This would prevent a property from spending money on a mitigation plan, in cases where is in sufficient justification to impact the critical area.

**Comment [JS21]:** The Washington State Department of Health recommends that, as applied to CARAs, a qualified professional be someone who is a currently licensed Washington State geologist holding a current specialty license in hydrogeology. A general practice geologist or PE, or one whose specialty lies in another area, may or may not have appropriate background to perform this work. (See Ch. 18.220 RCW & Ch. 308-15 WAC, generally, & specifically WAC 308-15-053 & -055.)

D. Contain the following:

1. Name and contact information of the applicant, description of the proposed development, and identification of required permits;
2. Site plan drawn to scale of no less than one inch equals 100 feet showing critical areas, buffers, existing structures, and proposed structures, clearing, grading, and stormwater management;
3. Characterization of critical areas and buffers;
4. Assessment of the probable impact of the development proposal on critical areas;
5. Analysis of site development alternatives;
6. ~~Description of efforts to avoid, minimize, and mitigate impacts to critical areas pursuant to BLMC 16.20.130(E) (“sequencing”)~~ Detail explanation how the project is consistent with each of the sequencing standards identified in BLMC 16.20.065;
7. An analysis of the anticipated impacts on functions and values;
- ~~7. Mitigation plans as needed, in accordance with BLMC 16.20.110;~~
8. Evaluation of compliance with this critical areas code’s substantive requirements applicable to the proposed development;
- ~~9. Financial guarantees to ensure compliance, such as a performance bond or deposit, if necessary;~~
9. If impacts to the buffer or critical area are proposed the report shall include
  - i. A strategy for mitigating the impacts, including site selection factors;
  - ii. An analysis of the existing and anticipated functions and values at the mitigation site, including an assessment of risks; and
  - iii. A review of the best available science relative to the proposed mitigation
10. Additional information as required in the chapter corresponding to the type of critical area;
11. Documentation of who prepared the report and when, with fieldwork and data sheets;

**Comment [JS22]:** The critical area report will include all of the analysis related to mitigation, if the applicant is proposing to impact a critical area or its buffer and is proposing mitigation. The mitigation plan, which would be the planting and monitoring portion would be submitted under a separate permit once the City has approved the option to impact the critical area and mitigate the impacts.

- 12. Statement specifying the accuracy of the report and assumptions relied upon;
- 13. Additional information as required by the ~~community development~~ director;
- 13. ~~Temporary and permanent erosion control plans.~~

E. When the content of a critical area report determines that a proposed development requires compensatory mitigation and the mitigation approach proposed is acceptable to the City, a separate stand-alone mitigation plan shall be prepared in accordance with BLMC 16.20.110. The mitigation plan will be submitted once the director accepts the findings of the critical area report.

**16.20.100 Previous studies.**

Critical area reports may rely upon, without duplication of effort, valid previous studies prepared for the site, taking into account any change in the site, the proposed development, or the surrounding area.

**16.20.110 Mitigation plan requirements.**

If the city allows conformance with this critical areas code’s substantive requirements to be achieved by mitigation, ~~the critical area report shall include a mitigation plan shall be submitted. Mitigation should provide equivalent or greater functions and values than those of the critical area and critical area buffer it replaces. The mitigation shall be near the impact site unless it is more cost-effective to mitigate lost functions at a larger scale, such as at a wetland mitigation bank within the impacted wetland’s drainage basin. The city reserves the right to disallow mitigation that would be located outside the UGA.~~ Components of a mitigation plan shall include consisting of:

- ~~A. An analysis of the anticipated impacts on functions and values;~~
- ~~B. A strategy for mitigating the impacts, including site selection factors;~~
- ~~C. An analysis of the existing and anticipated functions and values at the mitigation site, including an assessment of risks;~~
- ~~D. A review of the best available science relative to the proposed mitigation;~~
- ~~E. Specific standards for evaluating whether the mitigation is successful;~~

**Comment [JS23]:** This items will be addressed in the critical are report.

**Comment [JS24]:** Combined with the language in D.

~~F~~A. Detailed construction plans, including:

- 1. Construction timing;

2. Grading and excavation details;
3. Erosion and sediment control features;
4. Planting plan including species and spacing; and
5. Measures to protect plants until established and control invasive species;

GB. A program for monitoring the mitigation over at least five years;

C. A bond quantity worksheet including the estimated cost of installation, maintenance and monitoring of the mitigation for the duration of the monitoring period; and

HD. Specific performance standards for evaluating whether the mitigation is successful and potential corrective measures should the monitoring indicate the standards set per subsection E of this section are not being met.

**16.20.115 Financial Guarantee.**

A. Financial guarantees shall be provided for mitigation required pursuant to this chapter. Financial guarantees shall be sufficient to guarantee that all required mitigation measures will be completed no later than the time established by the city and shall be based on the bond quantity amount established in accordance with 16.20.110.C. The financial guarantee shall be in a form of an assignment of funds.

B. Depletion, failure or collection of the financial guarantee shall not relieve an applicant or violator from completing the required mitigation, maintenance, monitoring, or restoration as required under this chapter.

C. Public development proposals shall be relieved from having to comply with the provisions of this section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.

**16.20.120 Independent review of critical area report.**

The director(s) may have the critical area report evaluated by an independent qualified professional and/or request consultation from an agency with expertise. The cost of the independent review shall be borne by the applicant. If the report and evaluations disagree, the director(s) shall determine which to utilize.

**16.20.130 Substantive requirements.**

A. All treatment of critical areas shall be in accordance with best available science as defined in WAC 365-195-900 through 365-195-925, which is hereby adopted by

reference, along with the Washington State Department of Community Development's "Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas."<sup>3</sup>

**Comment [JS25]:** This is now addressed in the new section in BLMC 16.20.045

B.A. Critical areas, with the exception of critical aquifer recharge areas subject to the provisions of Chapter 16.24 BLMC, and their buffers shall be left undisturbed except the following may be permitted if best management practices are used:

**Comment [JS26]:** This was added as the request of DOH. The whole City is within a CARA, development can occur provided that the substantive requirements are met by the applicant.

1. Authorized functional restoration;
2. In buffers: utility poles and utility lines which do not require excavation;
3. In the outer 25 percent of buffers and at least 50 feet from the critical area edge: permeable-surfaced walkways, trails, and minimal wildlife viewing structures;
4. Developments authorized by a critical area variance pursuant to BLMC 16.20.145 for which mitigation is provided per subsection E of this section; and
5. Other uses specifically authorized by this critical areas code.

C. No development shall occur which results in a net loss of the functions or values of any critical area. The pre- and post-development functional comparison shall be on a per-function basis unless otherwise authorized by this critical areas code.

D. No development shall occur in critical areas and their buffers which results in an unreasonable hazard to the public health and safety.

E. Where a buffer has been previously established through city review, and is permanently recorded on title or placed within a separate tract, the buffer shall be as previously established, provided it is at least fifty percent (50%) of the required standard buffer distance.

~~E.~~ These substantive requirements shall be met via one or more of the following methods, listed in preferential sequence (commonly known as "sequencing"). The methods used shall be those which are highest on the list yet consistent with the objectives of the proposed development.

- ~~1. Avoid the impact altogether by not taking the proposed action;~~
- ~~2. Minimize the impact by limiting the action's magnitude or changing the project design, location, or timing;~~
- ~~3. Mitigate (compensate for) the impact on natural system functions and values by enhancing or replacing other natural systems and ensuring that the mitigation~~

~~serves its purpose over time. Mitigation should provide equivalent or greater functions and values than those of the critical area it replaces. The mitigation shall be near the impact site unless it is more cost-effective to mitigate lost functions at a larger scale, such as at a wetland mitigation bank within the impacted wetland's drainage basin. The city reserves the right to disallow mitigation that would be located outside the UGA.~~

**Comment [JS27]:** This is now addressed in BLMC 16.20.065 and as part of a critical area report, the applicant must demonstrate how the project is consistent with those requirements.

~~F.~~ As a condition of any permit approval for properties with wetlands and streams, the city shall require that the critical areas and/or buffer be placed in a critical area tract or conservation easement, the purpose of which is to set aside and protect the critical area. The critical area tract or conservation easement shall be:

1. Held by the city, a homeowner's association, a land trust or similar conservation organization, or by each lot owner within the development in an undivided interest;
2. Recorded on all documents of title of record for the affected parcels;
3. Noted on the face of any plat or recorded drawing; and
4. Delineated on the ground with permanent markers and signs in accordance with local survey standards. The outer edge of the critical area or buffer shall be signed and fenced to protect the resource.. The director(s) shall specify the design and sign message, if applicable, of such markers, signs, and fencing.

~~FG.~~ As a condition of any permit approval for properties with critical aquifer recharge areas, frequently flooded areas, or geologically hazardous areas, the city may shall require that the applicant file a Notice on Title with the Pierce County Assessor stating the presence of the critical area or buffer and the application of this critical areas code to the property, to inform subsequent purchasers of the property.:

- ~~1. The outer edge of the critical area or buffer be marked, signed, or fenced to protect the resource. Such protection may be temporary, during construction, or permanent such as to protect the resource from livestock or people. The director(s) shall specify the design and sign message, if applicable, of such markers, signs, and fencing;~~
- ~~2. The applicant file a notice with the county records and elections division stating the presence of the critical area or buffer and the application of this critical areas code to the property, to inform subsequent purchasers of the property;~~

3. ~~The critical area and/or buffer be placed in a critical area tract or conservation easement, the purpose of which is to set aside and protect the critical area. The critical area tract or conservation easement shall be:~~

- ~~a. Held by the city, a homeowner's association, a land trust or similar conservation organization, or by each lot owner within the development in an undivided interest;~~
- ~~b. Recorded on all documents of title of record for the affected parcels;~~
- ~~c. Noted on the face of any plat or recorded drawing; and~~
- ~~d. Delineated on the ground with permanent markers and/or signs in accordance with local survey standards.~~

GH. The city may allow averaging of standard wetland and stream buffer widths if a qualified professional demonstrates that:

- 1. Functions and values are not adversely affected;
- 2. The total buffer area is not reduced; and
- 3. At no location is the buffer width reduced by more than 40 twenty-five percent (25%) of the standard buffer width.

I. Where a legally established and constructed road, or other similar transportation infrastructure transects a wetland or stream buffer, the City may approve a modification of the standard buffer width to the edge of the linear feature closest to the critical area if the isolated part of the buffer does not provide additional protection of the wetland or stream and provides insignificant biological, geological or hydrological buffer functions.

HJ. Unless otherwise provided, buildings and other structures shall be set back a distance of 10 feet from the edges of all critical areas, with the exception of critical aquifer recharge areas subject to the provisions of Chapter 16.24 BLMC, and critical area buffers. The same protrusions into this setback area shall be allowed as the zoning code allows into property line setback areas.

IK. Lots created through subdivisions or short plats may shall not contain critical areas, with the exception of critical aquifer recharge areas, and buffers provided they contain adequate buildable area to build upon. Subdivision and short plats shall show, on their face, any applicable critical area limitations.

**Comment [JS28]:** BAS states the buffer width at any given point after averaging should be no smaller than 75% of the standard buffer.

**Comment [JS29]:** Per DOH comment.

**Comment [JS30]:** Allowing lots to contain critical areas simply burdens the future property owner with paying taxes on property that they cannot use. The City subdivision code requires critical areas to be put into separate tracts and critical areas are subtracted from the gross acreage to determine the net acreage which was what is used for density. So even if it was allowed on a lot, the area would not be used to calculate the density for the short plat or plat.

- J. ~~When any existing regulation, easement, covenant, or deed restriction conflicts with this critical areas code, that which provides more protection to the critical areas shall apply.~~
- K. When critical areas of two or more types coincide, the more restrictive buffer and requirements shall apply.
- L. The substantive requirements peculiar to the type of critical area shall also be complied with.

**16.20.140 ~~Buffer width averaging and~~ Minor restoration work.**

~~The city may permit~~ Restoration activity within critical areas in one of the following ways may be allowed upon approval of a critical areas permit:

- ~~A. A buffer width averaging may be granted in accordance with BLMC 16.20.130(G);~~
- BA. Native plants in critical areas may be installed; provided, that:
  1. Installation of plants on potential landslide hazard areas shall be in accordance with this chapter and Chapter 16.28 BLMC, and may require a geotechnical report that addresses existing slope stability and a provide a statement that the proposed planting activity will not likely undermine existing stability;
  2. Installation of native plants in wetlands or wetland buffers shall be in accordance with this chapter and Chapter 16.22 BLMC and may require biologists' or other experts' reports stating the appropriateness of the proposed plants for the proposed location;
- ~~CB.~~ Planting within wetlands or their buffers may be used as a future mitigation for other work on or adjacent to the wetland if the following criteria are met:
  1. The required wetland report identifies the long-term benefits to the wetland system;
  2. The proposed work improves the function and value of a wetland, a buffer, or its system as a natural ecosystem; and
  3. The proposed work is carefully monitored with documentation as required in BLMC 16.20.110.

**16.20.145 ~~Critical areas variances~~ Reasonable use exception.**

- A. If the application of this chapter would deny all reasonable use of the property, the applicant may apply for a reasonable use exception pursuant to this section. ~~An applicant for a development approval may submit a request for a critical areas variance to the hearing examiner.~~ A critical areas variancee reasonable use permit is a Type 3 permit. Development may be allowed which is consistent with the purpose of this title; provided, the hearing examiner, after public hearing, enters the following written findings, upon which the applicant shall have the burden of proof:
1. The provisions of this title would deny all reasonable economic use of the property;
  2. There is no other reasonable use with less impact on the critical area or its buffer than the use proposed by the applicant;
  - ~~3. The variance is the minimum necessary to allow a reasonable use of the property;~~
  3. The proposed development does not pose an unreasonable threat to the public health, safety, or welfare on or off the property;
  4. Any alterations to the critical area shall be the minimum necessary to allow for reasonable use of the property.
  5. Any impacts permitted to the critical area are mitigated in accordance with BLMC 16.20.065 and 16.20.110 to the greatest extent possible;
  - ~~5~~6. The proposal conforms with to all other applicable regulations and code provisions;
  7. The proposed development protects critical areas and/or buffer functions and values consistent with best available science;
  - ~~6. The applicant has proposed all reasonably possible mitigation pursuant to BLMC 16.20.130(E)(3), or has shown that no mitigation is reasonably possible;~~
  - ~~7~~8. The need for the variance exception is not the result of the applicant's deliberate actions;
  - ~~8~~9. The variance exception would not impact anadromous fish habitat;
  10. The development would not threaten the potability of public drinking water supply(ies); and

911. The application is sufficiently documented (for example, critical area report, mitigation plan, permit applications, and environmental documents) for the director or designee to make a determination regarding these criteria.

- B. If the director finds that impact to a critical area or its buffer would be reduced by encroaching into a zoning setback, the ~~zoning~~ building setback required by Title 18 BLMC up to half the minimum required may be reduced by half through the ~~critical area variance~~ reasonable use exception process.
- C. Any authorized alteration of a critical area shall be subject to conditions established by the Hearing Examiner to safeguard public health, safety, or welfare, ~~The hearing examiner shall impose all conditions necessary~~ to minimize the impact on the critical area and its buffer and further the purpose and goals of this title. Full mitigation shall be required under the city's environmental protection regulations adopted pursuant to SEPA.

**16.20.150 Enforcement and inspections.**

- A. In enforcing this critical areas code per Chapter 14.130 BLMC, the director(s) may require a restoration plan prepared by a qualified professional. Historic functions and values, soil configurations, and native vegetation shall be used as a guide for restoration. Flood and geological hazards shall be reduced to the predevelopment level.
- B. Reasonable access to the development shall be provided to agents of the city for critical area inspections, monitoring, restoration, or emergency action.

**16.20.160 –~~Record per WAC 365-195-915 and 365-195-920~~ Limited density transfer.**

~~Repealed by Ord. 1491.~~

A. Density Calculation. In residential development proposals a portion of the site encumber by a wetland, stream and/or corresponding buffers area can be included in the net acres for the purpose of calculating density; provided that the proposal does not include any reduction and/or modification in the required standard buffers. This provision does not apply in the Conservancy District, which does not use net acres to determine the maximum allowed density.

B. Formula. The calculation of the modified net acre is provided below:

[Net Acre] + [Undevelopable Area multiplied Development Factor] = Modified Net Acre.

C. Development Factor. The development factor is a number to be used in calculating the number of dwelling units or the maximum allowable floor area for a site which contains undevelopable critical areas. The development factor is derived from the following table:

<u>Undevelopable Environmentally Critical Area as Percentage of Site</u>	<u>Development Factor</u>
<u>1% – 10%</u>	<u>0.30</u>
<u>11% – 20%</u>	<u>0.27</u>
<u>21% – 30%</u>	<u>0.24</u>
<u>31% – 40%</u>	<u>0.21</u>
<u>41% – 50%</u>	<u>0.18</u>
<u>51% – 60%</u>	<u>0.15</u>
<u>61% – 70%</u>	<u>0.12</u>
<u>71% – 80%</u>	<u>0.09</u>
<u>81% – 90%</u>	<u>0.06</u>
<u>91% – 99%</u>	<u>0.03</u>

**16.20.170 Nonconforming uses.**

Developments or uses that upon initiation were legally permitted but which do not conform with this critical areas code may continue; provided, that they:

- A. Shall not be expanded or changed so as to increase the nonconformity;
- B. Shall not be resumed if discontinued for 12 consecutive months; and
- C. May be replaced or restored in the event of destruction by fire, explosion, or other casualty only if reconstruction is commenced within one year and completed within 18 months.

**Section 3.** Chapter 16.22 of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1007 § 2, Ordinance No. 1491 § 20 through 23, and Ordinance No. 1523 § 2 through 4 are each hereby amended to read as follows:

**16.22.010 Designation.**

Wetlands are those areas, designated in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region – Version

2.0 prepared by the U.S. Army Corps of Engineers (2010) or as revised. The ~~city Bonney Lake planning and community development department~~ has maps showing the approximate location and extent of wetlands. However, these maps are only a guide, and will be updated as wetlands become better known. The exact location of a wetland's boundary shall be determined in accordance with the above-stated manual as required by RCW 36.70A.175.

**16.22.020 Rating.**

Wetlands shall be rated Category I, II, III, or IV according to the Department of Ecology's "2014 Washington State Wetland Rating System for Western Washington" (Publication No. 14-06-29) as presently constituted or as may be subsequently amended. Wetland categories shall apply to the wetland as it exists on the date the city adopts the rating system, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities. Wetland rating categories shall not change due to illegal modifications.

**16.22.030 Contents of critical area reports.**

In addition to the requirements of BLMC 16.20.090, critical area reports for wetlands shall include:

A. Wetland delineation report including methodology, characterization using the rating methodology described in 16.22.020, field data sheets and wetland delineation map as surveyed in the field. Buffer boundaries shall be marked in the field by a licensed surveyor and protected consistent with BLMC 16.120.130.F using wood or steel posts, four to five feet tall above the ground surface, permanently affixed, carrying identification signs approved by the city, to be obtained from the planning and community development department. The charge for these signs shall be \$1.00 per sign.

**Comment [JS31]:** Under the general provision the applicant is required to install a fence along the buffer to protect the natural resource. This language is not required.

B. Assessment of wetlands, including acreage, category, required buffers, evidence of past illegal alterations, soil, topography, hydrology, ecology, and functional evaluation using a recognized method such as the Western Washington Wetland Rating System.

~~C. Discussion of measures to preserve wetland functions and values, including the "sequencing" set forth in BLMC 16.20.130(E).~~

**Comment [JS32]:** This is required for all critical area reports and does not need to be duplicated in this section.

~~D. If mitigation is proposed, a mitigation plan including the existing and proposed status of:~~

~~1. Wetland acreage;~~

~~2. Vegetation and fauna;~~

~~3. Surface and subsurface hydrology;~~

~~4. Soils, substrate, and topography;~~

~~5. Required wetland buffers; and~~

~~6. Property ownership.~~

~~E. Proposed wetland management and monitoring.~~

**Comment [JS33]:** This section is duplicative as the mitigation plan requirements are specifically provided in BLMC 16.20.110.

**16.22.040 Substantive requirements.**

In addition to the substantive requirements of BLMC 16.20.130, the following requirements shall apply to developments (see definitions) in wetlands except as exempted above:

- A. The higher the wetland category (Category I is highest), the greater shall be the emphasis on higher-priority “sequencing” methods per BLMC 16.20.130(E) ~~065~~.
- B. The following table establishes the standard buffer width that shall apply to each wetland category, depending on the intensity of the potential land use on the upland side of the buffer and the habitat score of the wetland as determined on the Wetland Rating Form for Western Washington Version 2, as presently constituted or as may be subsequently amended, completed by a qualified professional.

<b>Wetland Typing</b>		<b>Land Use Intensity<sup>1</sup> land-use on the upland side of the buffer</b>		
<b>Overall Wetland Rating</b>	<b>Wetland Characteristics</b>	<b>High<sup>12</sup></b>	<b>Moderate<sup>23</sup></b>	<b>Low<sup>34</sup></b>
Category I	Habitat score of 8 – 9 points	300 feet	225 feet	150 feet
Category I	Habitat score of <del>6</del> 6 – 7 points	150 feet	110 feet	75 feet
Category I	Water quality score of 8 – 9 points and a habitat score of less than <del>6</del> 5 points	100 feet	75 feet	50 feet
Category I	Wetlands that do not meet the characteristics described above for Category I wetlands	100 feet	75 feet	50 feet
Category II	Habitat score of 8 – 9 points	300 feet	225 feet	150 feet
Category II	Habitat score of <del>5</del> 5 – 7 points	150 feet	110 feet	75 feet

Category II	Water quality score of 8 – 9 points and a habitat score of less than <u>5</u> <u>6</u> points	100 feet	75 feet	50 feet
Category II	Wetlands that do not meet the characteristics described above for Category II wetlands	100 feet	75 feet	50 feet
Category III	Habitat score of 8 – 9 points	300 feet	225 feet	150 feet
Category III	Habitat score of <u>5</u> <u>6</u> – 7 points	150 feet	110 feet	75 feet
Category III	Habitat score of 3 – <u>5</u> <u>4</u> points	80 feet	60 feet	40 feet
Category IV <sup>45</sup>	Scores for all 3 basic functions are less than 16 points	50 feet	40 feet	25 feet

1. The land use intensity is the land use that will occur on the upland side of the buffer.
2. High intensity land uses include commercial, industrial, and retail developments; institutional use; residential developments at more than one unit per acre; high intensity recreation areas (golf course, ball fields, etc.); and hobby farms.
3. Moderate intensity land uses include residential developments at less than one unit per acre; moderate intensity open space (parks with biking, jogging, etc.); and paved trails and utility corridors with maintenance roads.
4. Low intensity land uses include low intensity open space (hiking, birdwatching, preservation of natural resources, etc.); and unpaved trails and utility corridors without maintenance roads.
5. For exemption of wetlands under 1,000 square feet see BLMC 16.20.070(S).

C. The standard buffer widths for proposed high intensity land use impacts may be reduced to those recommended for moderate-intensity impacts under the following conditions:

1. For wetlands that score moderate or high for habitat (6 or more points for habitat functions), the width of the buffer can be reduced if both of the following criteria are met:
  - a. A relatively undisturbed, vegetated corridor at least 100-foot wide is protected between the wetland and any other Priority Habitats located on the subject property as defined by the Washington Department of Fish and Wildlife. The corridor must be protected for the entire distance between the wetland and the

Priority Habitat by some type of legal protection such as a conservation easement.

b. The measures to minimize impacts to the wetland summarized in the table below are implemented.

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

Dust	<ul style="list-style-type: none"> <li>• Use best management practices to control dust</li> </ul>
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2. For wetlands that score less than 6 points for habitat, the buffer width can be reduced to that required for moderate land-use impacts by applying the minimization measures presented in the table in 16.22.040.C.1.B.

~~ED.~~ Buffers shall be measured from the wetland boundary as surveyed in the field. These buffer widths presume that healthy native plant communities dominate the buffer. If wetland enhancement is proposed, the category of the wetland after enhancement shall pertain.

~~D. Buffers shall be measured from the wetland boundary as surveyed in the field. If wetland enhancement is proposed, the category of the wetland after enhancement shall pertain.~~

**Comment [JS34]:** Repetitive to D above

E. The director(s) may increase the required buffer width and/or require buffer enhancement if a wetland professional determines that the wetland provides habitat for wildlife species that require greater protection than the standard buffer, or the buffer lacks healthy native vegetation or is otherwise handicapped in its ability to protect the wetland. Said determination shall take into account the score derived from the Wetland Rating System and such factors as topography, land use, and past disturbance.

F. The director(s) may reduce the standard buffer width through buffer averaging in accordance with BLMC 16.20.130(G) or BLMC 16.22.040.C. ~~if the function(s) served by the particular wetland needs less buffer width, as indicated by a wetland functional analysis.~~

**Comment [JS35]:** Ecology no longer supports straight buffer reduction. The amendments still allow a reduction based on standards that are consistent with BAS.

G. Except as provided elsewhere in this critical areas code, all existing native vegetation in wetland buffers shall be retained without disturbance, mowing, or hard surfacing, nor shall any action be taken to inhibit volunteer regrowth of native vegetation. Invasive weeds shall be removed for the duration of any mitigation bond. Stormwater management facilities and bioswales are permitted in the outer 25 twenty-five percent (25%) of the buffer of Category III or IV wetlands provided wetland functions and values are not significantly lost through fluctuations in wetland hydrology and construction integrates best management practices.

**16.22.050 Mitigation.**

A. Mitigation for alterations to wetlands may be satisfied by restoring former wetlands, creating wetlands, or enhancing degraded wetlands, consistent with Wetland

Mitigation in Washington State – Parts 1 and 2 (Washington State Department of Ecology Publication No. 06-06-011a and 06-06-011b) or as revised.

- B. Mitigation shall generally replace wetland functions lost from the altered wetland except that the city may permit out-of-kind replacement when the lost functions are minimal or less important to the drainage basin than the functions that the mitigation action seeks to augment.
- C. Mitigation shall be in the same drainage basin as the altered wetland. Wetland mitigation shall be in the same sub-basin unless a higher level of ecological functioning would result from an alternate approach. Mitigation proposals shall demonstrate how they are consistent with Selecting Wetland Mitigation Sites Using a Watershed Approach (Washington State Department of Ecology Publication No. 09-06-032), as revised.
- D. Mitigation projects shall be completed as quickly as possible consistent with such factors as rainfall and seasonal sensitivity of fish, wildlife, and flora.
- E. Mitigation projects shall be designed utilizing Wetland Mitigation in Washington State – Parts 1 and 2 (Washington State Department of Ecology Publication No. 06-06-011a and 06-06-011b) or as revised.
- F. Compensatory mitigation shall be determined using the methodology established in Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington (Washington Department of Ecology Publication No. 10-06-01); or the mitigation ratios found in Wetland Mitigation in Washington State – Parts 1 and 2 (Washington State Department of Ecology Publication No. 06-06-011a and 06-06-011b), as revised.
- G. Credits granted from a certified wetland mitigation bank shall be consistent with the bank’s certification and service area.
- H. The applicant shall provide an as-built plan of the mitigation site and monitor the site in accordance with BLMC 16.20.110(G).

**16.22.060 Lake Bonney and Lake Debra Jane.**

Lake Bonney and Lake Debra Jane are classified as wetlands due to their size and the vegetated wetland areas upland of open water along much of the shoreline. According to the WA Department of Ecology 2014 Wetland Rating System, both lakes are a Category III wetland with a habitat score of 5. Activities on or adjacent to Lake Bonney and Lake Debra Jane are regulated pursuant to Chapters 16.20 and 16.22, with the following additions and exceptions.

**Comment [JS36]:** The standards in this section are based on the existing conditions around the lakes which was developed prior to the adoption of critical area standards in the 1990s. The standards are also based on the intent of the regulations for Lake Tapps, which is considered a water body of statewide significance and regulated under the SMP. The standards require the preparation of critical areas report and mitigation to ensure that there is a no net loss of environmental functions.

A. Buffers. In accordance with documented ratings using the Ecology 2014 rating form and best available science, the standard buffer on Lake Bonney and Lake Debra Jane shall be 80 feet, measured from the delineated ordinary high water mark or wetland boundary.

B. Vegetation Conservation Area

1. The area 20 feet landward of the lake ordinary high water mark, or wetland edge shall be considered a vegetation conservation area. Existing native vegetation shall be preserved within the vegetation conservation area consistent with safe construction practices, and other provisions of this section. Native trees and shrubs shall be preserved to maintain and provide ecological functions.
2. Vegetation conservation areas shall be fully replanted with native vegetation pursuant to an approved vegetation planting plan, pursuant to BLMC 16.22.060.E as part of the following development proposal:
  - a. Construction of a new primary residential or recreational structure either on a vacant lot or a lot on which a primary structure was previously located.
  - b. Any development proposed waterward of an existing primary structure.
3. Twenty-five percent of the required vegetated conservation area may be cleared or thinned for view maintenance and waterfront access as described in BLMC 16.22.060.C; provided, a the property owner has received a critical areas written exemption and that seventy-five percent (75%)of the area remains vegetated. Invasive species may be removed, vegetation trimmed, and trees “limbed up” from the ground to provide views.

C. Allowed Uses and Encroachments in Buffer. The following developments and modifications may be located in the buffer provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland. A critical area report shall be prepared pursuant to BLMC 16.20.090 and 16.22.030 to assess impacts to critical areas. If any impacts are identified, a mitigation plan shall be prepared and implemented pursuant to BLMC 16.20.110, 16.22.050, and the vegetation conservation area planting requirements of BLMC 16.22.060.E.

1. A private access pathway constructed of pervious materials may be installed, a maximum of four (4) feet wide, through the buffer to the lake edge. Impervious materials may be used as needed to construct a safe, tiered pathway down a slope. Raised boardwalks shall be used through wetland areas to reach the open water or

a moorage structure constructed consistent with regulations in this chapter. A railing may be installed on one edge of the pathway, a maximum of 36 inches tall and of open construction. Pathways to the shoreline should take the most direct route feasible consistent with appropriate safety standards.

2. View maintenance. Following the approval of written critical areas exemption, nondestructive thinning of lateral branches to enhance views or trimming, shaping, thinning or pruning shall comply with National Arborist Association pruning standards. No more than twenty-five percent (25%) of the limbs of any single tree may be removed and no more than 20 percent of the canopy cover in any single stand of trees may be removed for view preservation.
3. Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife with appropriate permits.
4. Upon approval of a critical areas permit, appurtenances, dry boat storage and other similar, water-related accessory structures subject to the following:
  - a. Only one water-related structure that is 200 square feet or less is permitted within the buffer.
  - b. The structure shall maintain a minimum 20-foot setback from the lake or wetland edge.
  - c. No structures shall be allowed in the vegetation conservation area except as allowed by 16.22.060.C.1.

#### D. Allowed Uses Waterward of Perimeter Wetlands

1. Docks may be constructed, expanded or replaced upon approval of a critical areas permit consistent with the standards below:
  - a. Docks shall not extend farther than 25 feet waterward of the ordinary high water mark and no portion shall be wider than six feet;
  - b. Only one dock may be located on a subject property;
  - c. The structure must be accessory to an allowed use on the subject property;
  - d. Docks associated with a dwelling unit shall be for the exclusive use of the residents and guests of the associated dwelling unit. Structures shall not be leased, rented or sold;

- e. Docks shall not be treated with creosote or oil base or toxic substances;
- f. Any existing in-water structures abandoned or in disrepair must be removed as part of a new permit;
- g. A critical area report shall be prepared pursuant to BLMC 16.20.090 and 16.22.030 to assess impacts to critical areas due to construction and use of the docks. If any impacts are identified, a mitigation plan shall be prepared and implemented pursuant to BLMC 16.20.110 and 16.22.050; and
- h. For pedestrian access trails or boardwalks to access the moorage structure, see BLMC 16.22.060.C.1.

2. New boat launches are prohibited.

#### E. Small Lakes Shoreline Vegetation Planting Plan

Vegetation planting plans for Lake Bonney and Lake Debra Jane shall meet the following minimum requirements:

1. The plan shall be prepared by a qualified professional.
2. The plan shall be recorded with the Pierce County assessor's office as a covenant against the property after approval by the director. A copy of the recorded covenant shall be provided to the city.
3. The native vegetation shall consist of a mixture of trees, shrubs and groundcover and be designed to improve habitat functions. The following general planting regulations shall apply:

a Trees. A minimum of one native tree per 300 square feet of required vegetated area shall be provided or preserved. A minimum of 30 percent of the required trees shall be native coniferous trees.

i. Deciduous trees shall be a minimum of two-and-one-half-inch caliper as measured per American Standard for Nursery Stock (ANSI Z60.1-2004).

ii. Coniferous trees shall be at least six feet high at the time of planting.

b. Shrubs. A minimum of one shrub per 20 square feet of landscape area shall be provided. The minimum size of the shrub at the time of planting shall be at least two feet in height, with the plant covering the dimensions of the container.

- c. Vegetative Groundcover. Living groundcover plants of a minimum one-gallon size shall be planted in the landscaped area sufficient to cover the area within three years of planting.
  - d. Vegetation shall be fully established within three years. Areas which fail to adequately reestablish vegetation shall be replanted with approved plants until the plantings are viable.
  - e. The plan shall include limitations on the use of fertilizer, herbicides and pesticides as needed to protect water quality.
4. A five-year monitoring and maintenance program prepared by a qualified professional including, but not limited to, the following:
- a. An outline of the schedule for site monitoring;
  - b. Performance standards, including, but not limited to, 100 percent survival of newly planted vegetation within two years of planting, and 80 percent for years three or more;
  - c. Contingency plans identifying courses of action and any corrective measures to be taken if monitoring indicates performance standards have not been met; and
  - d. The period of time necessary to establish performance standards have been met, not to be less than five years.
5. The city may require a financial security pursuant as a guarantee that the enhancements, maintenance and monitoring are completed to the satisfaction of the city.

**Section 4.** Section 16.24.010 of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1070 § 2 are hereby amended to read as follows:

**16.24.010 Coordination with city engineer ~~public works department~~.**

The director(s) shall consult with the ~~public works department~~ city engineer when administering this chapter.

**Section 5.** Chapter 16.24 of the Bonney Lake Municipal Code is hereby renamed “Aquifer and Wellhead Protection”.

**Section 6.** Section 16.24.020 of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1070 § 2 are hereby amended to read as follows:

**16.24.020 Designation and susceptibility rating.**

- A. ~~The city of Bonney Lake Wellhead Protection and Monitoring Program Phase II, dated November 2000, identifies a one-year time-of-travel zone around all of the city's wells. Outside that circle it identifies a five-year time-of-travel zone. Outside that it identifies a 10-year time-of-travel zone. The time-of-travel zones also appear in the city's geographic information system. Maps thereof are available from the director(s). The city may update said maps as new scientific data become available without revising this code.~~
- B. ~~The city rates the one-year time-of-travel zones as having very high groundwater recharge (contamination) susceptibility, the five-year time-of-travel zones as having high susceptibility, and the 10-year time-of-travel zone as having moderate to low susceptibility.~~
- C. ~~The city hereby designates~~ The one-year, five-year, and 10-year time-of-travel of all Class A and B are classified as wellhead protection zones in addition to any identified as critical aquifer recharge areas. This chapter's requirements shall apply equally to all wellhead protection zones and critical aquifer recharge areas. time-of-travel zones unless stated otherwise.

**Section 7.** Section 16.24.050 of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1070 § 2 are hereby amended to read as follows:

**16.24.050 Hydrogeologic assessments – Level 2.**

- A. ~~In addition to Level 1,~~ A Level 2 hydrogeologic assessment shall be prepared, unless waived by the director following concurrency from the City Engineer for:
  - 1. Activities that divert, alter, or reduce the flow of surface or groundwaters, or otherwise significantly reduce the recharging of the aquifer;
  - 2. The use of hazardous substances other than household chemicals used according to the directions specified on the packaging;
  - 3. Injection wells; and
  - 4. Any other activity determined by the director(s) likely to have an adverse impact on groundwater quality or quantity.
  - 5. Infiltration of stormwater consistent with the most current version of the Pierce County Stormwater Manual adopted pursuant to BLMC 15.13.040 located within the one (1) year travel time of travel zones of a wellhead.

- B. Level 2 hydrogeologic assessments shall contain the contents of a Level 1 assessment as specified in BLMC 16.24.040 in addition to the item listed below at a minimum:
1. Historic water quality data for the area to be affected by the proposed development;
  2. Groundwater monitoring plan;
  3. Potential effects on water quality and quantity of nearby wells and water bodies; and
  4. Analysis of equipment or structures that could fail and regular inspection, repair, and replacement necessary to prevent failure.

**Section 8.** Section 16.24.060 of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1070 § 2 are hereby amended to read as follows:

16.24.060 Substantive requirements.

In addition to the substantive requirements of BLMC 16.20.130, the substantive requirements contained in BLMC 16.24.060 through 16.24.100 shall apply to critical aquifer recharge areas.

- A. Proposed developments shall not cause contaminants to enter the aquifer or significantly reduce the recharging of the aquifer, and shall comply with the water source protection requirements and recommendations of the U.S. Environmental Protection Agency, Washington State Department of Health, and county health department.
- B. Above ground facilities for storing hazardous substances shall be designed to prevent accidental release, shall have a primary containment enclosing or underlying the tank, and shall have a secondary containment built into the tank structure or consisting of an external dike.
- C. Vehicle repair and servicing shall be conducted over impermeable pads, within a covered structure capable of normal weather conditions. Chemicals shall be stored in a manner that protects them from weather and provides containment should leaks occur. Dry wells are prohibited.
- D. Application of household pesticides, herbicides, and fertilizers shall not exceed times and rates specified on the packaging.

- E. Surface percolation or injection of reclaimed water shall conform to adopted water or sewer comprehensive plans, RCW 90.46.010(10), 90.46.042, and 90.46.080(1).
- F. ~~Infiltration of stormwater consistent with Volume V, Section 3.3 of the 2001 Stormwater Management Manual for Western Washington shall be incorporated to the maximum extent possible to recharge the aquifer.~~
- G. Floor drains shall not drain to the stormwater system and shall conform to the Uniform Plumbing Code (UPC) adopted pursuant to BLMC 15.04.020.F Section 303.
- H. Roof venting carrying contaminants shall be pretreated as described in the UPC adopted pursuant to BLMC 15.04.020.F ~~Section 304(b).~~
- I. Nonresidential vehicle washing shall be either self-contained or pretreated then discharged to the city’s sanitary sewer system, with city permission. This use shall meet UPC adopted pursuant to BLMC 15.04.020.F ~~Sections 708 and 711 requirements.~~
- J. Where appropriate, activities shall utilize integrated pest management practices for pest control and best management practices for fertilizing as described by the Washington State University/Pierce County Cooperative Extension.
- ~~K. For new uses served by on-site septic systems, nitrate levels at the down-gradient property line shall not exceed 2.5 mg/L.~~
- L. The city may require emergency measures as necessary to protect aquifer water quantity or quality.
- M. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

**Comment [JS37]:** DOH comment: While this has good intentions, it becomes problematic as an up-front requirement. 13.08.010 says OSS/septic tank is required “except as otherwise provided in this chapter.” 13.12.060 is entitled “use of public sewers required” but the nothing in the provisions thereunder actually requires that. Instead that’s under 13.12.130.A which says all new development must connect (with some exceptions). So I assume there’s still some new dev going in with OSS(?) In such cases, the nitrate levels at down-gradient property line wouldn’t be known without specific testing & ongoing monitoring. This is challenging because that relies on owner permission & is usually in response to a suspected failure – in other words, can only be detected after the fact - & the issue may or may not be a product of the OSS on a particular site (vs. something transiting from somewhere else). Meanwhile 13.12.150 has been repealed (although under WAC 246-272A-0025, requiring OSS abandonment & transferring to public sewer connection should be under TPCHD).

Statutes, Regulations, and Guidance Regarding Groundwater-Impacting Activities	
Activity	Statute – Regulation – Guidance
Above Ground Storage Tanks	WAC 173-303-640
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, <del>Best Management Practices for Vehicle and Equipment Discharges, Best Management Practices Manual</del> (Washington Department of Ecology WQ-R-95-56, <u>Revised</u>

Statutes, Regulations, and Guidance Regarding Groundwater-Impacting Activities	
Activity	Statute – Regulation – Guidance
	November 2012)
Below Ground Storage Tanks	Chapter 173-360A WAC
Chemical Treatment Storage and Disposal Facilities	WAC 173-303- <del>182</del> WAC (Dangerous Waste Regulations)
Hazardous Waste Generator	Chapter 173-303 WAC (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, <del>Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities</del> <u>Vehicle and Metal Recyclers, A Guide for Implementing the Industrial Stormwater General National Pollutant Discharge Elimination System Permit Requirements.</u> (Washington Department of Ecology 94-146, Revised March 2011)
Oil and Gas Drilling	WAC 332-12-450, Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC, <u>Chapter 246-272B WAC</u>
On-Site Sewage Systems (<14,500 gal/day)	Chapter 246-272 <u>A</u> WAC, Local Health Ordinances
<u>Fertilizers, Minerals, and Pesticide Storage and Use</u>	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, Chapter 173-304 WAC, <del>Best Management Practices to Prevent Stormwater Pollution at Log Yards</del> <u>Industrial Stormwater General Permit, Implementation Manual for Log Yards</u> (Washington Department of Ecology, <del>95-53</del> 04-10-031, Revised December 2016)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	WAC 332-18-015
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, Washington Department of Ecology Land Application Guidelines, Best Management Practices for Irrigated Agriculture

**Comment [JS38]:** Subsection .182 does not exist, refer to main section

**Section 9.** Chapter 16.26 of the Bonney Lake Municipal Code is hereby renamed “Frequently Flooded Areas.”

**Section 10.** Section 16.26.040.B of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1570 § 4 and Ordinance No. 1301 § 5 are hereby amended to read as follows:

B. Application for Development Permit. Application for a development permit shall be made on forms furnished by the city and may include, but not be limited to, plans ~~in duplicate~~ drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, in addition to the requirements of BLMC 16.20.090, critical area reports for frequently flooded areas shall include the following information is required:

1. Elevation in relation to mean sea level, of the lowest floor of all structures shown on a current elevation certificate, including the basement;
2. Elevation in relation to mean sea level to which any structure has been floodproofed;
3. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet floodproofing criteria in BLMC 16.26.060(F)(2);
4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development;
5. If the projects involves the alteration or relocation of a water course or the placement of fill within a floodplain, the a model shall be provided to demonstrate that there is not a loss of storage within the water course or floodplain.
56. Biological assessment or consultation as required under the Endangered Species Act.

**Section 11.** Section 16.28.010.B of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1007 § 2 and Ordinance No. 1189 § 1 are hereby amended to read as follows:

B. Landslide hazard areas are areas subject to landslides based on geology, soils, topography, and hydrology. The following are indicators:

**Comment [JS39]:** The change in the name of the chapter is to bring the code into better alliance with how these areas are discussed in other state regulations. The current name of the chapter is Floodplains, which is a specific type of flood hazard area.

**Comment [JS40]:** The City no longer accepts paper plans so there would be no need to require duplicate drawings.

1. Areas delineated by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a severe limitation for building site development;
2. Areas mapped by the Washington State Department of Natural Resources (slope stability mapping) as unstable (U or class 3), unstable old slides (UOS or class 4), or unstable recent slides (URS or class 5);
3. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Washington State Department of Natural Resources;
4. Areas where the following coincide: slopes steeper than 15 percent, a relatively permeable sediment overlying a relatively impermeable sediment or bedrock, and groundwater seepage;
5. Areas that have shown movement in the past 10,000 years or that are underlain or covered by mass wastage debris of that time frame;
6. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
7. Slopes steeper than 80 percent subject to rock fall during seismic shaking;
8. Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action;
9. Areas at risk from snow avalanches;
10. Canyons or active alluvial fans subject to debris flows or catastrophic flooding; and
11. Slopes of 30 percent or steeper with a vertical relief of 10 or more feet except areas composed of consolidated rock and engineered constructed slopes for which no land use change is proposed other than engineered slopes in the Sky Island, Panorama Heights and Panoramas West communities which are critical areas where they meet the criteria stated above.

**Section 12.** Section 16.28.050 of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1007 § 2 and Ordinance No. 1189 § 4 are hereby amended to read as follows:

**16.28.050 Substantive requirements.**

In addition to the substantive requirements of BLMC 16.20.130, the following requirements shall apply to geologic hazard areas:

- A. Developments may occur in geologic hazard areas or the associated buffers only to the extent supported by a valid critical area report without increasing the long-term risk of or exposure to geological hazard on-site or off-site.
- B. Hazard mitigation shall not rely on actions that require extensive maintenance.
- C. Development near an erosion or landslide hazard area shall:
  - 1. Observe a buffer of fifty (50) feet from the top of slope and seventy-five (75) feet from the toe of slope unless a qualified professional demonstrates in the Critical Areas Report that a smaller buffer is adequate from the edges thereof, of adequate width to comply with the substantive requirements, as determined by a qualified professional in a Critical Areas Report.
  - 2. Not decrease the factor of safety for landslides below the limits of 1.5 for static conditions and 1.1 for dynamic conditions. Analysis of dynamic conditions may be based on a minimum horizontal acceleration as established by the International Building Code;
  - 3. Cluster structures and improvements as necessary to avoid hazard areas;
  - 4. Use retaining walls that allow the retention of existing natural slopes when possible rather than graded artificial slopes;
  - 5. Place utility lines and pipes in erosion and landslide hazard areas only when no other alternative is available and when the line or pipe can be installed above ground in such a manner as to remain intact without leaks in the event of a slide;
  - 6. Discharge water from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area only if:
    - a. Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels; or
    - b. Dispersed upslope of the steep slope onto a low-gradient undisturbed buffer of adequate infiltrate capacity without increasing saturation of the slope; and
  - 7. Locate any on-site sewage drain fields outside the hazard area and related buffers.
- D. If a geotechnical report contains specific recommendations to mitigate hazards, the geotechnical engineer shall monitor construction sufficiently to ensure compliance

with said recommendations, and prior to issuance of a certificate of occupancy shall submit to the city a monitoring report verifying compliance.

**Section 13.** Chapter 16.30 of the Bonney Lake Municipal Code is hereby renamed “Fish and Wildlife Habitat Conservation Areas.”

**Comment [JS41]:** The change in the name of the chapter is to bring the code into better alliance with how these areas are discussed in other state regulations. The current name of the chapter is Habitat Conservation Areas.

**Section 14.** Section 16.30.030 of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1070 § 2 are hereby amended to read as follows:

**16.30.030 Mapping.**

The following maps, which may be continuously updated, may be used as a guide for locating habitat conservation areas:

- A. Washington Department of Fish and Wildlife Priority Habitat and Species maps;
- B. Washington State Department of Natural Resources, Official Water Type Reference maps;
- C. Washington State Department of Natural Resources Shorezone Inventory;
- D. Washington State Department of Natural Resources Natural Heritage Program mapping data;
- E. Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors reports published by the Washington Conservation Commission; and
- F. Washington State Department of Natural Resources State Natural Area Preserves and Natural Resource Conservation Area maps.
- G. City of Bonney Lake Stream Classification Map in the Environmental Stewardship Element of the Comprehensive Plan.

**Section 15.** Section 16.30.050 of the Bonney Lake Municipal Code and the corresponding portions of Ordinance No. 1007 § 2, Ordinance No. 1252 § 2 and Ordinance No. 1491 § 24 are hereby amended to read as follows:

**16.30.050 Substantive requirements.**

In addition to the substantive requirements of BLMC 16.20.130, the following shall apply to habitat conservation areas:

- A. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat conservation area except with approval of a state or federal agency with expertise.
- B. Preference in mitigation shall be given to contiguous wildlife habitat corridors.
- C. In reviewing development proposals, the city shall seek opportunities to restore degraded riparian fish and wildlife functions such as breeding, rearing, migration, and feeding.
- D. The city shall require buffers of undisturbed native vegetation adjacent to habitat conservation areas as necessary. Buffer widths shall reflect the sensitivity of the habitat and may reflect the intensity of nearby human activity.
- E. When a species is more sensitive to human activity during a specific season of the year, the city may establish an extra outer buffer from which human activity is excluded during said season.
- F. No development shall be allowed within a habitat conservation area or buffer with which state or federal endangered, threatened, or sensitive species have a primary association, except in exchange for restoration as approved by the director(s) or as provided in a management plan approved by a state or federal agency with appropriate expertise.
- G. When a development permit is applied for on land containing or adjacent to a bald eagle nest or communal roost, the property owner is required to comply with the requirements of the Bald and Golden Eagle Protection Act and the U.S. Fish and Wildlife Service National Bald Eagle Management Guidelines (2007) ~~the city shall notify the Washington Department of Fish and Wildlife and otherwise comply with WAC 232-12-292.~~
- H. No development shall be permitted which degrades the functions or values of anadromous fish habitat, including structures or fills which impact migration or spawning.
- I. Construction and other activities shall be seasonally restricted as necessary to protect the resource. Activities shall be timed to occur during work windows designated by the Washington Department of Fish and Wildlife for applicable fish species.
- J. Shoreline erosion control adjacent to lakes or streams not regulated under the shoreline code shall use bioengineering methods or soft armoring in accordance with an approved critical area report.

- K. The following table establishes the standard width of stream buffers (also known as riparian habitat areas) that shall apply to each stream type. The Bonney Lake planning and community development department has maps showing streams of each type. Widths shall be measured outward in each direction, on the horizontal plane, from the ordinary high water mark, or from the top of bank if the ordinary high water mark cannot be identified, or from the outer edge of the channel migration zone when present.

Stream type	Standard buffer width
Type S (subject to Shoreline Management Act)	<del>200 Feet</del> See Title 16 Division III-Shoreline Code
Type F (fish-bearing other than S)	150 feet
Type Np (nonfish, perennial)	100 feet
Type Ns (nonfish, seasonal)	35 feet

- L. The director(s) may increase the standard buffer width as necessary to fully protect riparian functions. For example, the buffer may be extended to the outer edge of the floodplain or windward into an area of high tree blowdown potential.
- M. The director(s) may reduce the standard buffer width ~~in exchange for restoration of degraded areas in accordance with an approved plan, or for through~~ buffer averaging in accordance with BLMC 16.20.130(G). The director(s) may also reduce the standard buffer width by up to 25% wherever the proposed adjoining upland land use is of low intensity and low impact, such as passive use parks.
- N. If the stream enters an underground culvert or pipe, and is unlikely to ever be restored above ground, the director(s) may waive the buffer along the undergrounded stream; provided, that where the stream enters and emerges from the pipe the opposite outer edges of the buffer shall be joined by a radius equal to the buffer width, with said radius projecting over the piped stream.
- O. To the extent facilities are allowed in habitat conservation areas, the following regulations shall apply:
1. Trails. See BLMC 16.20.130(~~BA~~)(3).

2. Road bridges and culverts shall be designed according to the Washington Department of Fish and Wildlife “Fish Passage Design at Road Culverts,” 1999, and the National Marine Fisheries Service “Guidelines for Salmonid Passage at Stream Crossings,” 2000.
  3. Utility lines shall be accomplished by boring beneath the scour depth and hyporheic zone (the saturated zone beneath and adjacent to streams that filters nutrients and maintains water quality). Utilities shall avoid paralleling streams or changing the natural rate of shore or channel migration.
  4. New and expanded public flood protection measures shall require a biological assessment approved by the agency responsible for protecting federally listed species.
  5. In-stream structures such as high-flow bypasses, sediment ponds, in-stream ponds, retention and detention facilities, tide gates, dams, and weirs shall be allowed only as part of an approved restoration project.
  6. ~~Stormwater conveyance structures shall incorporate fish habitat features and the sides of open channels and ponds shall be vegetated to retard erosion, filter sediments, and shade the water.~~
76. Watercourse Alterations. See BLMC 16.26.040(F)

**Section 16. Repealer.** The previously codified provisions of Section 16.26.020 and the corresponding portion of Ordinance No. 1570, § 2 and Ordinance No. 1301 § 5 are each repealed.

**Section 17.** This Ordinance shall take effect and be in force five (5) days from and after its passage, approval and publication, as required by law.

**PASSED BY THE CITY COUNCIL this \_\_\_\_\_ day of \_\_\_\_\_, 2019**

\_\_\_\_\_  
Neil Johnson, Jr., Mayor

AUTHENTICATED:

\_\_\_\_\_  
Harwood T. Edvalson, City Clerk

APPROVED AS TO FORM:

**Comment [JS42]:** This is the definition in the flood hazard code that were moved to the definition section in the general provisions section.

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Kathleen Haggard, City Attorney

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