Chapter 15.27

CRITICAL AREAS*

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Part One. General Provisions

15.27.100 Chapter and authority.

This chapter is established pursuant to RCW 36.70A.060 (Growth Management Act Natural Resource Lands and Critical Areas—Development Regulations), RCW Chapter 43.21C (State Environmental Policy Act), and federal requirements for eligibility in the National Flood Insurance Program, pursuant to Title 42 of the Code of Federal Regulations (CFR). This chapter shall be known as the "critical areas ordinance of the city of Yakima, Washington."

15.27.110 Language interpretation.

Unless specifically defined in Part Two (YMC 15.27.200), words, phrases and terms in this chapter shall be interpreted to provide meaning and to give this chapter its most reasonable application.

- 1. "Shall" is mandatory;
- 2. "May" is discretionary and does not impose a requirement;
- 3. "Should" is always advisory;
- 4. "Include(s)" means the containment within as a subordinate part of a larger whole.

When not inconsistent with the context, words used in the present tense include the future; the singular includes the plural; and the plural, the singular.

15.27.120 Purpose of chapter.

The purpose of this chapter is to establish a single, uniform system of procedures and standards for development within designated critical areas outside of shoreline jurisdiction within the incorporated city of Yakima.

15.27.130 Intent of chapter.

A. This chapter establishes policies, standards, and other provisions pertaining to development within designated critical areas regulated under the provisions of the Growth Management Act (RCW 36.70A) and development regulated under the National Flood Insurance Program. Flood hazard areas, fish and wildlife habitat conservation areas, wetlands, geologically hazardous areas, and areas with a critical recharging effect on aquifers used for potable water constitute the city of Yakima's critical areas pursuant to WAC 365-190-030. These areas are of special concern to the people of the city of Yakima and the state of Washington because they are environmentally sensitive lands, or hazardous areas, which comprise an important part of the state's natural resource base. The policies, standards, and procedures of this chapter are intended to:

1. Preserve development options within designated critical areas where such development will result in the level of "no net loss" of the functions and values of the critical areas;

2. Where appropriate, avoid uses and development which are incompatible with critical areas;

3. Prevent further degradation of critical areas unless the degradation has occurred beyond feasible protection;

- 4. Conserve and protect essential or important natural resources;
- 5. Protect the public health, safety, and general welfare;
- 6. Further the goals and policies of the Comprehensive Plan 2040;

7. Implement the goals and requirements of the Washington Growth Management Act (RCW 36.70A), and the National Flood Insurance Program (CFR Title 42);

8. Recognize and protect private property rights; and

9. Provide development options for landowners of all existing lots to the greatest extent possible, through the establishment of adjustment, reasonable use, and nonconforming use and facility provisions.

B. The policies, standards and procedures of this chapter are not intended to:

1. Regulate the operation and maintenance of existing, legally established uses and structures, including but not limited to vegetative buffers on existing uses that have been reduced in width prior to the effective date of this chapter;

2. Result in an unconstitutional regulatory taking of private property;

3. Require the restoration of degraded critical areas for properties in a degraded condition prior to the effective date of this chapter, unless improvement of the buffer is needed for new development proposed on the property;

- 4. Presume that regulatory tools are the only mechanism for protection; or
- 5. Prohibit the use of valid water rights.

15.27.140 Applicability.

A. The provisions of this chapter shall apply to any new development, construction, or use within the incorporated portion of the city of Yakima, outside of shoreline jurisdiction, designated as a critical area and upon any land mapped and designated as a special flood hazard area under the National Flood Insurance Program. However, this chapter does not apply to the situations below, except that the flood hazard protection provisions of Part Four of this chapter will continue to apply as determined by YMC 15.27.400 through 15.27.406:

1. Within designated critical areas, there may exist lots, structures, and/or uses which were lawfully established prior to the adoption of this chapter, as provided below, but which would be subsequently prohibited, regulated, or restricted under this chapter. Such existing lots, structures, and/or uses shall be classified as legally nonconforming uses.

2. It is the intent of this chapter to permit these pre-existing legally nonconforming uses and structures to continue until such time as conformity is possible:

a. Critical areas on federally owned lands are not subject to the provisions of this chapter;

b. Minor, temporary, or transient activities (including those of a recreational nature) that do not alter the environment or require a dedicated staging area, use area, or route (including temporary signs) are not subject to this chapter;

c. Mining, as defined in YMC 15.27.200, which is carried out under a Washington Department of Natural Resources reclamation permit is not subject to the geologically hazardous areas provisions of this chapter for erosion hazard areas, oversteepened slope hazard areas, landslide hazard areas and suspected geologic hazard areas. Other critical areas provisions continue to apply.

- B. The adoption and amendment dates of the relevant regulations are provided below:
 - 1. Critical areas ordinance adopted 1998;
 - 2. Flood hazard ordinance adopted 1981; and

3. Other rules and regulations, including the city of Yakima subdivision ordinance (YMC Title 14), the city of Yakima urban area zoning ordinance (YMC Title 15), and the buildings ordinance (YMC Title 11), shall

remain in full force and effect as they apply to a designated critical area. Wherever the requirements of this chapter conflict with the requirements of the Yakima urban area zoning ordinance, the subdivision ordinance or any other lawfully adopted municipal rules or regulations, the most restrictive standards shall apply.

15.27.150 Science and protection of anadromous fish.

This chapter has been updated consistent with the requirements for using the best available science and protection of anadromous fish as required by:

A. RCW 36.70A.172, Critical Areas—Designation and Protection—Best Available Science to Be Used; and

B. WAC 365-195-900 through 365-195-925, Growth Management Act—Procedural Criteria for Adopting Comprehensive Plans and Development Regulations—Part 9—Best Available Science.

15.27.160 Administrative authority.

A. The city of Yakima community and economic development department—code administration and planning division shall be responsible for the general administration of this chapter. The director of the community and economic development department or the director's designee shall serve as the administrative official of this chapter. The administrative official shall establish procedures for implementation of this chapter.

B. A written request for an interpretation of any provision of this chapter may be submitted to the administrative official. Each request shall set forth the specific provision(s) to be interpreted, and the facts of the specific situation giving rise to the request. Interpretations shall be processed in accordance with YMC Chapter 15.22, Interpretations.

15.27.170 Severability.

If any provision of this chapter or its application to any person or legal entity or circumstances is held to be invalid, the remainder of said chapter or the application of the provision to other persons or legal entities or circumstances shall not be affected.

Part Two. Definitions

15.27.200 Definitions generally.

Definitions listed in Part Two of this chapter shall be applied to the regulation, review, and administration of all critical areas, including flood hazard areas, unless the definition itself identifies the term as applying to flood hazard administration, in which case the definition only applies to that situation.

"Abutting" means bordering upon, to touch upon, or in physical contact with. Sites are considered abutting even though the area of contact may be only a point.

"Adjacent" means to be nearby and not necessarily abutting.

"Alluvial fan" is a low, outspread, relatively flat to gently sloping feature, shaped like an open fan or a segment of a cone, deposited by a stream at the place where it issues from a valley upon a plain or broad valley; where a tributary stream is near or at its junction with the main stream; or wherever a constriction in a valley abruptly ceases or the gradient of the stream suddenly decreases. It is steepest near the mouth of the valley where its apex points upstream and it slopes gently and convexly outward with gradually decreasing gradient.

"Alteration of watercourse" means any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

"Applicant" means a person, party, firm, corporation, or other legal entity that proposes development, construction, or use on a parcel of property.

"Aquifer" means a saturated geologic formation, which will yield a sufficient quantity of water to serve as a private or public water supply.

"Area of shallow flooding" is a designated zone AO, AH, AR/AO or AR/AH on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. Also referred to as the sheet flow area.

"Area of special flood hazard" is the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as zone A, AO, AH, A1-30, AE, A99, AR. "Special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

"ASCE 24" is the most recently published version of ASCE 24, Flood Resistant Design and Construction, published by the American Society of Civil Engineers.

"Bank" means the land surface above the ordinary high water mark that abuts a body of water and contains it to the bankfull depth.

"Bank stabilization" means the construction or modification of bulkheads, retaining walls, dikes, levees, riprap, breakwaters, jetties, groins, weirs, and other structures along a bank, for the purpose of controlling stream undercutting or bank erosion.

"Bankfull depth" means the average vertical distance between the channel bed and the estimated water surface elevation required to completely fill the channel to a point above which water would enter the floodplain or intersect a terrace or hillslope. In cases where multiple channels exist, the bankfull depth is the average depth of all channels along the cross-section.

"Base flood," for purposes of administering Part Four, means the flood having a one percent chance of being equaled or exceeded in any given year. (See IBC Section 1612.2.)

"Base flood elevation," for purposes of administering Part Four, means the elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum, North American Vertical Datum, or other datum specified on the Flood Insurance Rate Map. (See IBC Section 1612.2.)

"Basement," for purposes of administering Part Four, means any area of the building having its floor subgrade (below ground level) on all sides. (See IBC Section 1612.2.)

"Bed" means the land below the ordinary high water lines of state waters. This definition shall not include irrigation ditches, canals, stormwater run-off devices, or other artificial watercourses except where they exist in a natural watercourse that may have been altered by unnatural means.

"Bedrock" means the solid rock underlying unconsolidated surface materials.

"Berm" means a mound or wall of earth material used as a protective barrier or to control the direction of water flow.

"Best management practices" or "BMPs" means schedules of activities, practices, maintenance procedures, and structural and/or managerial practices that, when used singly or in a combination, prevent or reduce adverse impacts to the environment.

"Bioengineering" means project designs or construction methods, which use live woody vegetation or a combination of live woody vegetation and specially developed natural or synthetic materials to establish a complex root grid within the existing bank which is resistant to erosion, provides bank stability, and maintains a healthy riparian environment with habitat features important to fish life. Use of wood structures or limited use of clean angular rock may be allowable to provide stability for the establishment of vegetation.

"Breakwater" means a fixed or floating in-water structure that protects the bank from the forces of waves or currents.

"Bulkhead" means a vertical or nearly vertical erosion protection structure placed parallel to the bank consisting of concrete, timber, steel, rock, or other permanent material not readily subject to erosion.

"Building official" means the manager of the code administration and planning division or a designee.

"Channel" means an open conduit, either naturally or artificially created, which periodically or continuously contains moving water, or which forms a connecting link between two bodies of water.

"Classification" means value and hazard categories to which critical areas and natural resource lands will be assigned.

"Clearing" means the removal of timber, brush, grass, ground cover or other vegetative matter from a parcel of land.

"Compaction" means compressing soil or other material through some mechanical means to make it denser.

"Construction" means the assembly, placement, or installation of structures, roadways, transmission lines, and other improvements within a parcel of land.

"Construction materials," for the purpose of Part Four, means all new construction and substantial improvements shall be constructed with material and utility equipment resistant to flood damage. See Technical Bulletin 2-93 for qualifying materials. (FEMA Section 60.3(a)(3)(ii))

"Construction methods," for the purpose of Part Four, means all new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

"Critical aquifer recharge area" means an area with a critical recharging effect on an aquifer(s) used for potable water or areas where a drinking water aquifer is vulnerable to contamination that would affect the potability of the water.

"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 which produce, use, or store hazardous materials or hazardous waste.

"Designated" means formal legislative action to identify and describe a critical area.

"Department" means the city of Yakima department of community and economic development.

"Development" means the division of land into lots or parcels in accordance with the city's subdivision ordinance (YMC Title 14), and any clearing, excavation, dredging, drilling, filling, dumping, removal of earth and mineral materials, or other permanent or temporary modification of a parcel of land up to, but not including, "construction" as defined in this chapter. For the purpose of YMC 15.27.400 through 15.27.436, "development" also means any manmade change to improved or unimproved real estate located within a special flood hazard area, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling, temporary or permanent storage of equipment or material and "works" as defined in this chapter. (See IBC Section G 201.2)

"Dike" means an embankment to prevent flooding by a stream or other water body. A dike is also referred to as a levee.

"Dock" means a structure built over or floating upon the water and used as a landing place for boats and other marine transport, fishing, swimming, and other recreational uses.

"Dredging" means removal of earth from the bed of a stream, lake, or pond for the purpose of increasing the depth of surface water or obtaining minerals, construction aggregate, or landfill materials. This definition does not include excavation for mining within a pond created by a mining operation approved under this chapter or under a local zoning ordinance, or a mining operation in existence before zoning, shorelines, or critical areas permits were required for such operations.

"Earth material" means any rock, natural soil, organic material or combination thereof.

"Elevated Building" means, for insurance purposes, a non-basement building that has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

"Elevation Certificate" means an administrative tool of the National Flood Insurance Program (NFIP) that can be used to provide elevation information, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).

"Enhance" means to strengthen any of the basic functional properties listed in YMC 15.27.504 that exist but do not perform at optimum efficiency. "Optimum" refers to the most favorable or best performance of each function achievable for a specific segment of stream corridor.

"Ephemeral stream" means a stream that flows only in response to precipitation with no groundwater association, usually thirty days or less per year. The lack of any groundwater association results in a lack of distinctive riparian vegetation compared to the surrounding landscape.

"Erosion" means the wearing away of the earth's surface as a result of the movement of wind, water, or ice.

"Essential Facility" this term has the same meaning as "Essential Facility" defined in ASCE 24. Table 1-1 in ASCE 24-14 further identifies building occupancies that are essential facilities.

"Excavation" means the mechanical removal of earth material.

"Existing Manufactured Home Park or Subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the community.

"Expansion to an Existing Manufactured Home Park or Subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the 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).

"Fill" means the addition of any material, such as (by way of illustration) earth, clay, sand, rock, gravel, concrete rubble, rubble, wood chips, bark, or waste of any kind, which is placed, stored or dumped upon the surface of the ground resulting in an increase in the natural surface elevation. The physical structure of a bank stabilization structure shall not be considered fill. However, fill placed behind the structure is considered fill. Stream bed manipulation for irrigation diversions shall not be considered fill.

"Fish and wildlife habitat conservation" means land management for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. This does not mean maintaining all individuals of all species at all times, but it does mean not degrading or reducing populations or habitats so that they are no longer viable over the long term. Counties and cities should engage in cooperative planning and coordination to help assure long term population viability.

"Fish and wildlife habitat conservation areas" 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. Counties and cities may also designate locally important habitats and species. Fish and wildlife habitat conservation areas does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

"Flood or Flooding " means:

- 1) a general and temporary condition of partial or complete inundation of normally dry land areas from: a. The overflow of inland or tidal waters
 - <u>b.</u> <u><u>+</u>The unusual and rapid accumulation <u>of or</u> runoff of surface waters from any source.</u>

- <u>c.</u> Mudslides (i.e. mudflows) which are proximately caused by flooding as defined in paragraph (1)(b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- 2) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (1)(a) of this definition.

"Flood elevation study" means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).

"Flood hazard permit" means written approval applied for and obtained in accordance with such rules and regulations as are established under this chapter.

"Flood insurance rate map (FIRM)" means the official map on which the Federal Emergency Management Agency Insurance Administrator has delineated both the areas of special flood hazards and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM),

"Flood insurance study" means the official report provided by the Federal Emergency Management Agency that includes flood profiles, the flood boundary floodway map, and the water surface elevation of the base flood.see "Flood Elevation Study."

"Floodplain or flood-prone area" means a land area adjoining a river, stream, watercourse or lake which has been determined likely to flood. The extent of the floodplain may vary with the frequency of flooding being considered as per FEMA FIRM maps. "Floodplain" is synonymous with the one hundred year floodplain and means that land area is susceptible to inundation with a one percent chance of being equaled or exceeded in any given year. Any land area susceptible to being inundated by water from any source. See "Flood or flooding."

"Floodplain Administrator" is the community official designated by title to administer and enforce the floodplain management regulations.

"Floodplain management regulations" means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance and erosion control ordinance) and other application of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

"Flood-prone" means a land area for which a floodway and floodplain has not been determined with respect to any specific flood frequency, but for which the potential for flooding can be identified by information observable in the field, such as soils or geological evidence, or by materials such as flood studies, topographic surveys, photographic evidence or other data.

"Floodproofing," means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents. Floodproofed structures are those that have the structural integrity and design to be impervious to floodwater below the Base Flood Elevation.for purposes of administering Part Four, means any combination of structural and nonstructural changes or adjustments to structures, which reduce or lessen flood damages to lands, water or wastewater treatment facilities, structures and contents of buildings.

"Floodway" means the regular channel of a river, stream, or other watercourse, plus 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 a designated height. Also referred to as "Regulatory Floodway."

"Floodway fringe," for purposes of administering Part Four, means that portion of a floodplain which is inundated by floodwaters but is not within a defined floodway. Floodway fringes serve as temporary storage for floodwaters.

"Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities.

"Grade" means the vertical location of the ground surface.

"Grade, existing" is the current grade in either its undisturbed, natural condition or as disturbed by some previous modification.

"Grade, finish" is the final grade of the site which conforms to an approved plan.

"Grade, natural" is the grade as it exists or may have existed in its original undisturbed condition.

"Grade, rough" is a stage where grade conforms approximately to an approved plan.

"Grading" means any excavation, filling, or combination thereof.

"Groundwater" means water that occurs beneath the land surface, also called subsurface water or subterranean water. Groundwater includes water in the zone of saturation of a water-bearing formation.

"Habitats of local importance" are designated as fish and wildlife habitat conservation areas based on a finding by the city that they are locally important.

"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"Historic structure" means any structure that is:

 Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district:

3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

"Hyporheic" means a groundwater area adjacent to and below channels where water is exchanged with channel water and water movement is mainly in the downstream direction.

"Intermittent stream" means a stream which flows only during certain times of the year, with inputs from precipitation and groundwater, but usually more than thirty days per year. Groundwater association generally produces an identifiable riparian area. This definition does not include streams that are intermittent because of irrigation diversion or other manmade diversions of the water.

"Lake" or "pond" means an inland body of standing water. The term can include the reservoir or expanded part of a river behind a dam.

"Lowest floor," for purposes of administering Part Four, means the lowest floor of the lowest enclosed area (including 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.

"Manufactured home" means a structure fabricated on a permanent chassis that is transportable in one or more sections; is designed to be used with or without a permanent foundation when connected to the required facilities and is used for human occupancy as a residential dwelling. The term "manufactured home" shall include "mobile home" for regulatory purposes under this chapter. The term shall not include "recreation vehicle," "commercial coach," "camping vehicle," "travel trailer," "park trailer," "tip-out," and any other similar vehicle, which is not intended, designed, constructed, or used as a single-family dwelling.

"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 pursuant to this title.

"Manufactured home park or subdivision, existing" means a manufactured home park or subdivision that was completed before December 15, 1981, the effective date of the floodplain management regulations.

"Mean Sea Level" means, for purposes of the National Flood Insurance Program, the vertical datum to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

"Minerals" mean gravel, sand, and metallic and nonmetallic substances of commercial value.

"Mining" means the removal of naturally occurring minerals and materials from the earth for commercial value. Mining includes processing and batching. Mining does not include large excavations for structures, foundations, parking areas, etc. (See YMC 15.27.518.)

"Minor revision" includes minor changes in facility orientation or location, minor changes in structural design that do not change the height or increase ground floor area, and minor accessory structures (such as equipment covers or small sheds near the main structure, etc.).

"Native" means indigenous to or originating naturally within the city of Yakima and surrounding areas.

"Natural conditions" mean those conditions which arise from or are found in nature and not modified by human intervention.

"New construction," for purposes of administering Part Four of this chapter<u>and for the purposes of determining</u> insurance rates, structures for which the "start of construction" commenced on or after the effective date of the initial Flood Insurance Rater Map or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures for which the "start of construction" commenced on or after the effective date of the ordinance codified in 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 (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of adopted floodplain management regulations adopted by the community.

"Nonconforming structure," for purposes of administering Part Four of this chapter, means a structure which was lawful prior to the adoption or amendment of this chapter, but which fails by reason of such adoption or amendment to conform to the present requirements of the zoning district in which it is located. In addition, the structure may not be permitted as a new structure under the terms of this chapter because the structure may not be in conformance with the applicable elevation and/or floodproofing requirements.

"Nonconforming use," for purposes of administering Part Four of this chapter, means a use of land or structure which was lawfully established and maintained prior to the adoption or amendment of this chapter, but does not conform to this chapter for the zoning district in which it is located. In addition, the use may not be permitted as a

new use under the terms of this chapter because the use may not be in conformance with the applicable elevation and/or floodproofing requirements.

"Normal appurtenances" include: garages, decks, driveways, utilities, fences, and grading, which do not exceed two hundred fifty cubic yards.

"Normal repair" means to restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction.

"One-hundred-year-flood or 100-year flood" See "Base flood."

"Ordinary high water mark" means a mark on lakes and streams which can be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in ordinary years as to mark upon the soil or vegetation a character distinct from the abutting upland. Provided, that in any area where the ordinary high water line cannot be found, the ordinary high water line is the elevation of the mean annual flood.

"Perennial stream" means a stream that flows year-round in normal water years.

"Priority habitat" means a habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes: comparatively high fish or wildlife density, comparatively high fish or wildlife species diversity, fish spawning habitat, important wildlife habitat, important fish or wildlife seasonal range, important fish or wildlife movement corridor, rearing and foraging habitat, refuge, limited availability, high vulnerability to habitat alteration, unique or dependent species, or shellfish bed. A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife. A priority habitat may also be described by a successional stage. Alternatively, a priority habitat may consist of a specific habitat element (such as talus slopes, caves, or snags) of key value to fish and wildlife. A priority habitat may contain priority and/or nonpriority fish and wildlife.

"Priority species" means species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels. Priority species are those that meet any of the criteria listed below:

- A. Washington State (State) Listed or State Proposed Species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State proposed species are those fish and wildlife species that will be reviewed by WDFW (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.
- B. Vulnerable Aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to congregate.
- C. Species of Recreational, Commercial, and/or Tribal Importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.
- D. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

"Project site" means that portion of any lot, parcel, tract, or combination thereof which encompasses all phases of the total development proposal.

"Qualified professional" means a person with experience, training, expertise, and related work experience appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4). The professional shall provide their qualifications to the administrative official to ensure the professional has the acceptable level of qualifications and experience for the relevant critical area they will be working in. "Reasonably Safe from Flooding" means development that is designed and built to be safe from flooding based on consideration of current flood elevation studies, historical data, high water marks and other reliable data known to the community. In unnumbered A zones where flood elevation information is not available and cannot be obtained by practicable means, reasonably safe from flooding means that the lowest floor is at least two feet above the Highest Adjacent Grade.

"Recreation vehicle" means a vehicle which is:

- 1. Built on a single chassis;
- 2. Four hundred square feet or less when measured at the largest horizontal projection;
- 3. Designed to be self-propelled or permanently towable by a light-duty truck; and

4. Designed primarily for temporary living quarters used during recreational, camping, travel, or seasonal conditions.

"Restore," "restoration" or "ecological restoration" means the reestablishment or upgrading of impaired functions, such as those listed in YMC 15.27.504 that have been lost or destroyed through natural events or human activity. This may be accomplished through measures including, but not limited to, revegetation, removal of intrusive structures, and removal or treatment of toxic materials. Restoration does not imply a requirement for returning the site to aboriginal or pre-European settlement conditions.

"Revetment" means a facing placed on a bank or bluff to protect a slope, embankment, or structure against erosion by wave action or currents.

"Riparian vegetation" means the terrestrial vegetation that grows beside rivers, streams, and other freshwater bodies and that depends on these water sources for soil moisture greater than would otherwise be available from local precipitation.

"Riprap" means a layer, facing, or protective mound of rubble or stones randomly placed to prevent erosion, scour, or sloughing of a structure or embankment; also the stone used for this purpose.

"Scour" means the removal of underwater material by waves and currents, especially at the base or toe of a bank stabilization or other in-water structure.

"Shoreline," as used in this chapter, means those water areas, the associated features, and the land areas that are subject to the State Shoreline Management Act, as defined in RCW 90.58.030 and the city of Yakima's current shoreline master program (YMC 17.01.090).

"Single-family residence" means a detached dwelling designed for and occupied by one family, including those structures and developments which are a normal appurtenance.

"Slope" means an inclined ground surface the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

"Solid waste" means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, wood waste, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, and discarded commodities.

"Special flood hazard area" means the land in the floodplain identified by the Federal Emergency Management Agency that is subject to a one percent or greater chance of flooding in any given year, commonly known as the one-hundred-year floodplain.

"Species of local importance" are those species that are of local concern due to their population status or their sensitivity to habitat alteration or that are game species.

"Start of construction," for purposes of administering Part Four, 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 one hundred eighty days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of pipespiles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include the excavation for a basement, footings, piers or foundations, or the erection of temporary forms; nor does it include-or the erection installation of temporary accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or structural part of a building, whether or not that alteration affects the external dimensions of the building.

"Stream" means water contained within a channel either perennial, intermittent, or ephemeral. Streams include both natural watercourses or those modified by man (example: stream flow manipulation, channelization, and relocation of the channel). They do not include irrigation ditches, wasteways, drains, outfalls, operational spillways, canals, stormwater runoff facilities, or other artificial watercourses except those that are located within existing wetland or streams.

"Structure" means anything constructed or erected, which requires location on the ground, or attached to something having a location on the ground, but not including fences or walls used as fences less than six feet in height, and including gas or liquid storage tanks when located aboveground. For purposes of administering Part Four, means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

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

"Substantial improvement," for purposes of administering Part Four, means any repair, reconstruction, <u>addition</u>, or <u>other</u> improvement of a structure, the cost of which equals or exceeds fifty percent of the assessed value of the structure <u>eitherbefore the "start of construction" of the improvement</u>. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include <u>either:</u>

- 1. Before the improvement or repair is started; or
- 2. Before the damage occurred to a structure.

For the purposes of this definition, "substantial improvement" occurs 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. The total value of all improvements to an individual structure undertaken subsequent to March 4, 1986, the effective date of this title, shall be used to define "substantial improvement" for said structure. The term does not, however, include either:

1. Any project for improvement to a structure to <u>correct previously identified</u> <u>comply with</u> existing <u>violations</u> <u>of</u> state or local health, sanitary or safety code specifications <u>that have been identified by the local code</u> <u>enforcement official and that</u> <u>which</u> are solely necessary to assure safe living conditions; or

2. Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places. "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Use. See "use" as defined in YMC Chapter 15.02.

"Utility equipment," for the purposes of Part Four, means all electrical, heating, ventilation, plumbing and airconditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

"Variance" means a grant of relief by a community from the terms of a floodplain management regulation.

"Vegetative buffer" or "buffer" means an area extending landward from the ordinary high water mark of a lake or stream and/or from the edge of a wetland which is maintained or otherwise allowed to provide support for the performance of the basic functional properties of a fish and wildlife habitat conservation area and wetlands as set forth in YMC 15.27.504 and 15.27.603.

"Waters of the state" are all lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

"Water surface elevation" means the height, in relation to vertical datum utilized in the applicable flood insurance study of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

"Wetland" 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 nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands.

"Wildlife" means all species of the animal kingdom whose members exist in Washington in a wild state, which includes, but is not limited to, any mammal, bird, reptile, amphibian, fish, or invertebrate, at any stage of development.

"Wildlife habitat" means an area of climate, soils, vegetation, relationship to water, location and/or other physical properties which are identified as having a critical importance to the maintenance of wildlife species.

"Works" means any dam, wall, wharf, embankment, levee, dike, berm, pile, bridge, improved road, abutment, projection, excavation, channel rectification, or improvement.

Part Three. Application and Review Procedures

Article I. General Provisions

15.27.300 Critical area development authorization required.

A. No new development, construction or use shall occur within a designated critical area without obtaining a development authorization in accordance with the provisions of this chapter, except for those provided for in YMC 15.27.303. Exemptions, as provided for in YMC 15.27.304 through 15.27.306, shall be considered as development authorization.

B. With respect to application and review procedures, it is the intent of this chapter to streamline and coordinate development authorization within a critical area and recognize other requirements by local, state and/or federal permits or authorizations. Development, construction or use occurring within a designated critical area shall be processed according to the provisions of this chapter, unless determined to be exempt.

C. Approval of a development authorization under this chapter shall be in addition to, and not a substitute for, any other development permit or authorization required by the city of Yakima. Approval of a development authorization under this chapter shall not be interpreted as an approval of any other permit or authorization required of a development, construction or use.

D. Development authorizations issued in accordance with this chapter shall continue with the land and have no "sunset clause" unless otherwise stated in the development authorization.

E. Coordination with Other Jurisdictions.

1. Where all or a portion of a standard development project site is within a designated critical area and the project is subject to another local, state or federal development permit or authorization, the administrative official shall determine whether the provisions of this chapter can be processed in conjunction with a local, state or federal development permit or authorization, or whether a separate critical area development authorization application and review process is necessary. The decision of the administrative official shall be based upon the following criteria:

a. The nature and scope of the project and the critical area features involved or potentially impacted;

b. The purpose or objective of the permit or authorization and its relationship to protection of the critical area;

c. The feasibility of coordinating the critical area development authorization with other permitting agency;

d. The timing of the permit or authorization.

2. When a determination has been made that provisions of this chapter can be handled through another applicable development permit or authorization process, project proponents may be required to provide additional site plans, data and other information necessary as part of that process to ensure compliance with this chapter. The administrative official's decision on the critical area development authorization shall be coordinated to coincide with other permits and authorizations. The administrative official may determine to accept the development authorization and/or permits from the other reviewing agencies as complete compliance with the city's critical area ordinance.

Article II. Inquiry and Early Assistance

15.27.301 Critical area identification form and critical area report requirements.

A. Prior to the review of any applicable proposed development, construction or use, the applicant shall provide the city with a critical areas identification form and site plan and any other information the city may require to determine if a critical area is present.

B. Upon receipt of a critical area identification form and site plan, the administrative official or designee may conduct a site examination to review critical area conditions. The administrative official or designee shall notify the property owner of the site examination prior to the site visit. Reasonable access to the site shall be provided by the property owner.

C. The administrative official or designee shall review the available information pertaining to the proposal and make a determination whether any critical areas may be affected. If so, a more detailed critical area report shall be submitted in conformance with YMC 15.27.314 and 15.27.315, except as provided below:

1. No Critical Areas Present. If the administrative official or designee is able to sufficiently determine a critical area does not exist within or adjacent to the project area and/or a critical area report is not required.

2. Critical Areas Present, but No Impact. If the administrative official or designee is able to determine the existence, location and type of critical area and the project area is not within the critical area and/or the project will not have an indirect impact on the function of an adjacent wetland.

3. Critical Areas May Be Affected by a Proposal. The administrative official or designee may waive the requirement for a critical areas report utilizing the technical expertise of other reviewing agencies if:

a. The administrative official is sufficiently able to determine the existence, location and type of the critical area;

b. The project scale or nature is such that a specialist is not necessary to identify impacts and mitigation; and

c. The applicant agrees to provide mitigation the administrative official deems adequate to mitigate for anticipated impacts.

- D. Reports will generally fall into the following groups:
 - 1. Determining the absence of a critical area;
 - 2. Determining the existence, location and type of a critical area;
 - 3. Determining impacts of an encroachment on a critical area and general mitigation measures; and
 - 4. Developing a compensatory mitigation plan.

15.27.302 Preapplication conference.

Any new development or use falling under the provisions of this chapter may be subject to a preapplication conference. Prior to the preapplication conference, the project proponent must submit a critical area identification form and preliminary site plan.

A project review for flood hazards shall follow the preapplication requirements established to administer Part Four, Flood Hazard Areas.

The preapplication conference is intended to allow the administrative official or designee to:

A. Establish the scope of the project and identify potential concerns that may arise;

B. Identify permits, exemptions, and authorizations which the project proponent may need to obtain;

C. Determine whether the project will be processed through the development procedures of this chapter or coordinated with the review procedures of another development permit or authorization;

D. Provide the proponent with resources and technical assistance (such as maps, scientific information, other source materials, etc.); and

E. Determine whether there is a need for a preliminary site assessment.

Article III. Abbreviated Review Alternatives

15.27.303 Minor activities allowed without a permit or exemption.

This chapter shall be inapplicable to the following actions (YMC 15.27.140(B)):

A. Maintenance of existing, lawfully established areas of crop vegetation, landscaping, paths, and trails or gardens within a regulated critical area or its buffer. Examples include: mowing lawns, weeding, garden crops, pruning, and planting of noninvasive ornamental vegetation or indigenous native species to maintain the general condition and extent of such areas;

B. Minor maintenance and/or repair of structures that do not involve additional construction, earthwork or clearing, <u>unless within a Special Flood Hazard Area</u>. Examples include painting, trim or facing replacement, reroofing, etc. Cleaning, operation and maintenance of canals, ditches, drains, wasteways, etc., is not considered additional earthwork, as long as the cleared materials are placed outside the stream corridor, wetlands, and buffers;

C. Low impact activities such as hiking, canoeing, viewing, nature study, photography, hunting, fishing, education or scientific research;

D. Creation of private trails that are less than two feet wide that do not cross streams or wetlands and do not involve placement of fill or grubbing of vegetation, <u>unless within a Special Flood Hazard Area</u>;

E. Maintenance and normal work of the greenway pathway and grounds;

F. Planting of native vegetation;

G. Noxious weed control outside vegetative buffers identified in YMC 15.27.511; and

H. Noxious weed control within vegetative buffers, if the criteria listed below are met. Control methods not meeting these criteria may still apply for a restoration exemption, or other authorization as applicable:

1. Hand removal/spraying of individual plants or other acceptable method approved by the administrative official;

2. No area-wide vegetation removal/grubbing.

15.27.304 Documented exemption—Procedural requirements.

The following development activities are exempt from standard development permits when located outside of the Special Flood Hazard Area, except that flood hazard exemptions shall follow the exemption procedures found in YMC 15.27.403. Exemption from this chapter shall follow subsection (F)(1) of this section, and does not under any circumstances 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, according to YMC 15.27.521.

A. Exemptions shall be construed narrowly and any exempted development shall be consistent with the policies and provisions of this chapter.

B. If any part of a proposed development is not eligible for an exemption, then a development permit is required for the entire proposed project.

C. The burden of proof that a development or use is exempt is on the applicant.

D. When a development or use is proposed that does not comply with the bulk, dimensional and performance standards of this chapter, such development must also obtain an adjustment.

E. All exempted activities shall use reasonable methods to avoid potential impacts to critical areas.

F. The proponent of an exempt activity shall submit a written request for a documented exemption which states the following:

- 1. Why the exemption is being sought.
- 2. A project description that demonstrates the following:
 - a. The sequence of activities to be conducted;
 - b. The equipment to be used (hand or mechanical);
 - c. The best management practices to be used;
 - d. The efforts employed to minimize adverse impacts; and
 - e. Restoration for disturbed areas and mitigation for lost critical areas functions following the activity.

G. The administrative official or designee shall approve or deny the exemption. A formal letter of exemption shall be provided when an exempt activity is approved under this chapter. If an exemption cannot be granted, the administrative official or designee shall notify the applicant in writing, stating the reason for denial of the exemption, at which time the applicant may pursue other permit processes under this chapter or modify the activity to a level that would justify reconsideration.

H. The following activities are exempt from the standard development permit process and identified in the following locations. However, this provision does not exempt an activity from other parts, permits or reviews required under this chapter:

- 1. Those activities listed in YMC 15.27.305;
- 2. Those activities listed in YMC 15.27.306; and

3. Those activities listed in YMC 15.27.403 are exempt from the flood hazard permit requirements of Part Four of this chapter, Flood Hazard Areas.

15.27.305 Documented exemptions for fish and wildlife habitat conservation areas and wetlands. The following development activities are exempt from standard development permits when located outside the Special Flood Hazard Area, except that flood hazard exemptions shall follow the exemption procedures found in YMC 15.27.403:

A. Construction of a single-family residence and appurtenances where the residence and appurtenances meet all requirements of the city of Yakima and do not lie within a designated critical area or buffer (see "single-family residence" and "normal appurtenances" definitions, YMC 15.27.200). Applications for development within critical areas or their buffers shall follow the procedures of YMC 15.27.317.

1. Construction shall not involve placement of fill in any wetland or at locations waterward of the ordinary high water mark; and

2. Construction authorized under this exemption shall be located landward of the ordinary high water mark;

B. Single-family residence bulkheads, which include those structural and nonstructural developments installed at or near, and parallel to, the ordinary high water mark of non-shoreline waters for the sole purpose of protecting the single-family residence and appurtenant structures from loss or damage by erosion.

1. Normal protective bulkheads are not exempt if constructed for the purpose of creating dry land.

2. Bioengineering options shall be considered by the administrative official or designee prior to exemption of subsections (B)(3) and (B)(4) of this section.

3. When repairing an existing bulkhead by construction of a vertical wall, it shall be constructed no further waterward of the existing bulkhead.

4. Bioengineered erosion control projects may be considered a bulkhead when the project has been approved by the Department of Fish and Wildlife;

C. Normal maintenance or repair of existing structures or development, including damage by accident, fire, or elements, are exempt, but may require a building permit. (See YMC 15.27.200.)

- 1. Except where repair involves total replacement or causes substantial adverse effects to the environment.
- 2. Replacement of nonconforming uses or facilities may also be subject to YMC Chapter 15.19;

D. Emergency construction for protecting property from damage by the elements. The following criteria must exist to qualify any action under an emergency provision:

1. There must be an immediate threat to life, public or private property, or the environment arising from a natural condition or technical incident.

2. The emergency response must be confined to the action necessary to protect life or property from damage.

3. The scope of the emergency response must be limited to the work necessary to relieve the immediate threat.

4. The emergency response applies only to the period of time when the actual emergency exists.

5. The request must be accompanied by a permit application or for an emergency exemption. Submittal requirements may be waived until after the emergency is deemed abated, and at that time the property owner shall submit an emergency mitigation summary to the city of Yakima;

E. Construction of a dock in a non-shoreline waterbody for the use of a single-family or multiple-family residence;

F. The construction of canals, waterways, drains, reservoirs, or other manmade facilities as a part of an irrigation system;

G. Any project with certification from the governor pursuant to RCW Chapter 80.50 (Energy Facilities—Site Locations);

H. Watershed restoration projects pursuant to RCW 89.08.460;

I. Site exploration and investigation activities required for a development permit; provided, that:

- 1. The activity will have no significant adverse impact on the environment;
- 2. The activity does not involve the installation of any structure; and

3. Upon completion of the activity, the vegetation and land configuration of the site are restored to conditions as they existed prior to the activity;

J. The process of removing or controlling aquatic noxious weeds, as defined in RCW 17.26.020 (control of spartina and purple loosestrife), through the use of an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Department of Agriculture or the Department of Ecology jointly with other state agencies under RCW Chapter 43.21C (SEPA);

K. A public or private project to improve fish or wildlife habitat or fish passage in a non-shoreline waterbody, if:

1. The project has been approved by the Department of Fish and Wildlife;

2. The project has received hydraulic project approval by the Department of Fish and Wildlife pursuant to RCW Chapter 75.20 (Hydraulics Code);

3. The administrative official has determined that the project is consistent with this chapter;

4. Fish habitat enhancement projects that conform to the provisions of RCW 77.55.181 (Fish Habitat Enhancement Projects) are deemed to be consistent with this chapter;

LK. Hazardous substance remedial actions pursuant to RCW Chapter 70.105D (Model Toxics Control Act);

<u>ML</u>. The removal of trees which are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private or public property, from critical areas and their buffers.

15.27.306 Documented exemptions for geologically hazardous areas development authorizations. The following development activities are exempt from standard development permits that are required for geologically hazardous areas:

A. Additions to or alteration of existing single-family residences;

B. Uses and surface disturbances (clearing and grubbing) that do not include excavation, fill or irrigation;

C. Structures less than one hundred twenty square feet; and

D. Oil, gas, wind, or other exploration that does not include explosions, road construction, excavation or fill.

15.27.307 Mitigation requirements.

A. All mitigation shall be sufficient to maintain the functions and values of the critical area;

B. All development shall demonstrate that reasonable efforts have been examined to avoid and minimize impacts to critical areas;

C. When an alteration to a critical area is proposed, it shall be avoided, minimized, or mitigated for in the following order of preference:

1. Avoiding the impact;

2. Minimizing impacts by limiting the degree or magnitude of the action, by using appropriate technology (i.e., project redesign, relocation or timing, to avoid or reduce impacts);

- 3. Rectifying the impact by repairing, rehabilitating or restoring the affected environment as appropriate;
- 4. Reducing or eliminating the impact by preservation and maintenance operations;
- 5. Compensating for the impact by replacing or providing substitute resources or environments; and
- 6. Monitoring the impact and taking appropriate corrective measures;

D. If an alteration to a critical area is unavoidable, all adverse impacts to that critical area and its buffers shall be mitigated for in accordance with an approved mitigation plan; and

E. Except as specified in YMC 15.27.605, mitigation shall be in-kind and on-site, whenever possible, and may be out-of-kind and/or off-site when deemed appropriate by the administrative official or designee.

Article IV. Review Process

15.27.308 Application submittal.

A. Applications for development authorizations under this chapter shall be made on forms provided by the department. Application submittals shall include a site plan drawn to an engineering scale of one to twenty showing:

- 1. Dimensions of all sides of the parcel;
- 2. Size and location of existing and proposed structures;
- 3. Excavation, fill, drainage facilities, impervious surfaces, topography, slope;
- 4. Other information as needed to determine the nature and scope of the proposed development; and
- 5. Location of all critical areas such as those identified in YMC 15.27.314.

B. The submittal shall also include all required critical areas reports prepared in conformance with YMC 15.27.314 and 15.27.315.

C. To be complete, a critical area development authorization application must include all maps, drawings and other information or data specified by this chapter or requested on the basis of the preapplication conference (YMC 15.27.302).

15.27.309 Determination of review process.

A. The administrative official or designee shall determine from the application submittal, and other available information, what type of permit and/or review will be required under this chapter.

B. Specific information of permit type, review and process can be found in subsequent sections of Part Three of this chapter. However, a description of each type of permit or review is provided in Table 27.3-1. More than one permit or review may be needed for a project dependent upon project complexity.

General Permits or Reviews

Standard Development. Standard development projects include any development not subject to RCW Chapter 90.58, the Shoreline Management Act.

Documented Exemptions. Documented exemptions are described as minor activities that do not need to go through a permit process. Exemptions from this chapter may be found in YMC 15.27.305 through 15.27.306 and 15.27.403.

Specific Permits

Adjustment. An administrative adjustment is used outside shoreline jurisdiction when a project requires a reduction or adjustment to a development standard.

Nonconforming Use or Facility Alteration. A nonconforming use or facility alteration is necessary when an existing use that currently does not conform to this chapter is to be altered.

Minor Revisions to an Existing Permit. A minor revision to an existing permit allows a simplified review of certain changes to a project that has previously received a permit.

Reasonable Use Exception. A reasonable use exception provides an alternative to landowners when all reasonable use of a property has been prohibited.

Flood Hazard Permit. A flood hazard permit is required for activities within floodplains. It may include many of the specific permit types noted above, which are described in Part Four, YMC 15.27.400 through 15.27.436. It is focused mainly on construction methods, but may include site design to minimize impacts to adjacent properties or resources, or to locate the proposed development in areas where depth and velocity of floodwaters during the base flood do not exceed the current standards for construction of human-occupied structures or safe access.

15.27.310 Development authorization—Review procedure.

Upon submittal and acceptance of a completed development authorization application, the administrative official or designee shall process and review the application as follows. Except: permits or reviews under Part Four shall follow the development regulations and procedures of YMC 15.27.400 through 15.27.436.

A. Development authorizations shall be processed in accordance with notice procedures in YMC Title 16 and with specific requirements provided in YMC 15.27.316 through 15.27.320, including but not limited to:

- 1. Submittals;
- 2. Completeness review;
- 3. Notices;
- 4. Hearings;
- 5. Decisions; and
- 6. Appeals.

B. Development authorizations shall be reviewed in conformance with the applicable development standards of YMC 15.27.321 and with Parts Five through Eight.

C. Decisions on a development authorization shall be consistent with YMC 15.27.311 and 15.27.312, and with any specific decision criteria provided under the section for each relevant permit type, as provided in YMC 15.27.316 through 15.27.321.

15.27.311 Authorization decisions—Basis for action.

The action on any development authorization under this chapter shall be based upon the following criteria:

- A. Impact of the project to critical area features on and abutting the property;
- B. Danger to life or property that would likely occur as a result of the project;
- C. Compatibility of the project with the critical area features;
- D. Conformance with applicable development standards;
- E. Compliance with flood hazard mitigation requirements of YMC 15.27.400 through 15.27.436;
- F. Adequacy of the information provided by the applicant or available to the department;
- G. Based upon the project evaluation, the administrative official shall take one of the following actions:
 - 1. Grant the development authorization;

2. Grant the development authorization with conditions, as provided in YMC 15.27.312, to mitigate impacts to the critical area feature(s); or

- 3. Deny the development authorization;
- H. The decision by the administrative official or designee shall include written findings and conclusions.

15.27.312 Conditional approval of development authorization.

In granting any development authorization, the administrative official or designee may impose conditions to:

- A. Accomplish the purpose and intent of this chapter;
- B. Eliminate or mitigate any identified negative impacts of the project; and
- C. Protect critical areas from damaging and incompatible development.

15.27.313 Fees and charges.

The Yakima city council shall establish the schedule of fees and charges listed in YMC Chapter 15.26 (City of Yakima Fee Schedule), for development authorizations, variances, appeals and other matters pertaining to this chapter.

Article V. Critical Areas Reports

15.27.314 Critical areas report requirements.

A. The administrative official or designee may require a critical areas report, paid for by the applicant, when it is determined necessary.

B. A qualified professional shall prepare the report consistent with best available science. The intent of these provisions is to require a reasonable level of technical study and analysis sufficient to protect critical areas. The analysis shall be appropriate to the value or sensitivity of a particular critical area and relative to the scale and potential impacts of the proposed activity.

- C. The critical area report shall:
 - 1. Demonstrate the proposal is consistent with the purposes and standards of this chapter;

2. Describe all potential risks to critical areas, and assess impacts on the critical area from the activities and uses proposed; and

3. Identify mitigation and protective measures.

D. The critical areas report shall include information addressing the supplemental report requirements (see YMC 15.27.315).

E. The administrative official or designee shall review the critical areas report for completeness and accuracy and shall consider the recommendations and conclusions to assist in making decisions on development authorizations, appropriate mitigation, and protective measures.

F. Critical areas reports shall be valid for a period of five years, unless it can be demonstrated that a previous report is adequate for current analysis. Reports prepared for adjacent properties may be utilized for current analysis only when it can be shown through a supplemental report or site investigation that conditions on site are unchanged.

G. The administrative official or designee may require the preparation of a new critical area assessment or a supplemental report if the initial assessment is in error.

H. The administrative official or designee may reject or request revision of the critical areas report when it can be demonstrated that the assessment is inaccurate, incomplete or does not fully address the critical areas impacts involved.

I. Applicants shall provide reports and maps to the city in both electronic and paper formats. In addition, all critical area delineations/maps shall be provided to the city by means of a GPS projected coordinate system data set, such as NAD 27 or NAD 83. The city may waive this requirement for single-family developments. Applicants are encouraged to coordinate with the administrative official or designee regarding electronic submittal guidelines.

J. At a minimum, a critical areas report shall include the following information:

1. A site plan showing the proposed development footprint and clearing limits, and all relevant critical areas and buffers;

2. A written summary of the critical areas, including their size, type, classification or rating, condition, disturbance history, and functions and values. For projects on or adjacent to geologically hazardous areas or areas subject to high floodwater depth or velocity, the description shall identity the type and characteristics of the hazard;

3. An analysis of potential adverse impacts and how they will be mitigated or avoided. Geologically hazardous areas are additionally required to assess the risks posed by the development to critical areas, public and private properties, and both associated and unassociated nearby facilities and uses;

4. When impacts cannot be avoided, the report shall include a plan describing mitigation to replace critical area functions and values. For projects on or adjacent to geologically hazardous areas or areas subject to high floodwater depth or velocity, the mitigation shall additionally address the site, other public and private properties, and both associated and unassociated nearby facilities and uses potentially affected;

5. The dates, names, and qualifications of the persons preparing the report and documentation of analysis methods including any fieldwork performed on the site; and

6. Additional reasonable information requested by the administrative official or designee.

K. A critical area report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site.

L. The administrative official or designee may limit the geographic area of the critical area report as appropriate.

M. Compensatory Mitigation Plans. When compensatory mitigation, as described in YMC 15.27.307, is proposed for wetlands or fish and wildlife habitat conservation areas, the applicant shall submit a mitigation plan as part of the critical area report, which includes:

1. A written report identifying environmental goals and objectives of the proposed compensation including a description of:

- a. The anticipated impacts to the critical areas;
- b. The mitigating actions proposed;
- c. The purpose of the compensation measures, including site selection criteria;
- d. The compensation goals and objectives;
- e. The desired resource functions;
- f. Construction activities' start and completion dates; and
- g. Analysis of anticipated success of the compensation project;
- 2. A review of the best available science supporting the proposed mitigation;

3. A description of the report and the author's experience to date in restoring or creating the type of critical area report proposed;

4. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating the goals and objectives to ensure the mitigation project has been successfully attained;

5. Detailed Construction Documents. The mitigation documents shall include written specifications and plans describing the mitigation proposed, such as:

- a. The proposed construction sequence, timing, and duration;
- b. Grading and excavation details;
- c. Erosion and sediment control features;
- d. A planting plan specifying plant species, quantities, locations, sizes, spacing, and density;
- e. Measures to protect and maintain plants until established; and

f. Documents should include scale drawings showing necessary information to convey both existing and proposed topographic data, slope, elevations, plants and project limits;

6. Monitoring Program. The mitigation plan shall include:

a. A program for monitoring both construction of the compensatory project and its completion and survivability;

b. A plan which details how the monitoring data will be evaluated to determine if the performance standards are being met;

c. Reports as needed to document milestones, successes, problems, and contingency actions of the compensation project; and

d. Monitoring for a period necessary to establish that performance standards have been met, but not for a period less than five years;

7. Contingency Plan. Identification of the potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met;

8. Financial Guarantees. A financial guarantee ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with YMC 15.27.321(A).

N. Innovative Mitigation.

1. Advanced mitigation or mitigation banking are examples of alternative mitigation projects allowed under the provisions of this section. One or more applicants or an organization with demonstrated capability may undertake a mitigation project together if it is demonstrated that all of the following circumstances exist:

a. Creation or enhancement of a larger system of critical areas and open space is preferable to the preservation of many individual habitat areas;

b. The applicant demonstrates the organizational and fiscal capability to act cooperatively;

c. The applicant demonstrates that long-term management of the habitat area will be provided;

d. There is a clear potential for success of the proposed mitigation at the identified site;

e. There is a clear likelihood for success of the proposed plan based on supporting scientific information and demonstrated experience in implementing similar plans;

f. The proposed project results in equal or greater protection and conservation of critical areas than would be achieved using parcel-by-parcel regulations and/or traditional mitigation approaches;

g. The plan is consistent with the general purpose and intent of this section;

h. The plan shall contain relevant management strategies which are within the scope of this section; and

i. The plan shall contain clear and measurable standards for achieving compliance with the purposes of this section, a description of how such standards will be monitored and measured over the life of the plan, and a fully funded contingency plan if any element of the plan does not meet standards for compliance.

2. Conducting mitigation as part of a cooperative process does not reduce or eliminate the required wetland replacement ratios.

3. Projects that propose compensatory wetland mitigation shall also use the standards in YMC 15.27.604. For those situations where a mitigation bank may provide an opportunity for mitigation, the requirements in YMC 15.27.605 shall apply.

15.27.315 Supplemental report requirements for specific critical areas.

A. Fish and Wildlife Habitat Conservation Areas. When a critical areas report is required for a fish and wildlife habitat conservation area, it shall include the following:

1. A habitat and native vegetation conservation strategy that addresses methods to protect the functional properties listed in YMC 15.27.504; and

2. Where proposed construction lies within an immediate zone of potential channel migration, a hydrologic analysis report may be required. The report shall assume the conditions of the one-hundred-year flood, include on-site investigative findings, and consider historical meander characteristics in addition to other pertinent facts and data.

3. A discussion of any federal, state or local management recommendations which have been developed for the species or habitats in the area, and how they will be incorporated into the project.

B. Wetlands. When a critical areas report is required for wetlands, it shall include the following:

1. The exact location of a wetland's boundary and wetland rating as determined through the performance of a field investigation by a qualified wetland professional applying the approved federal wetland delineation manual and applicable regional supplements as required by RCW 36.70A.175 and the most recent version of the Washington State Wetland Rating System for Eastern Washington;

2. All delineated wetlands and required buffers within two hundred feet of the project area shall be shown on the site plan. Available information should include, but not be limited to, aerial photos, land-based photos, soils maps, or topographic maps;

3. An analysis of the wetlands including the following site-related information:

a. A statement specifying the accuracy of the report and all assumptions made and relied upon;

b. Documentation of fieldwork performed on the site, including field data sheets for delineations, wetland rating forms, baseline hydrologic data, etc.;

c. A description of the methodologies used to conduct the wetland delineations or impact analyses, including references;

d. Wetland category, including vegetative, faunal, and hydrologic characteristics; and

4. For projects that will affect the wetland or buffer, provide the following:

a. A habitat and native vegetation conservation strategy that addresses methods to protect or enhance onsite habitat and wetland functions and values listed in YMC 15.27.504 and 15.27.603(A); and

b. Mitigation sequencing, pursuant to YMC 15.27.307, to avoid, minimize, and mitigate impacts shall result in "no net loss" of acreage or functional values of wetlands and shall follow the guidance provided in YMC 15.27.604.

C. Geologically Hazardous Areas. When a critical areas report is required for a geologically hazardous area, it shall include the following:

1. A description of the site features, including surface and subsurface geology;

2. A description of the geologic processes and hazards affecting the property, including a determination of the actual hazard types for any suspected and risk unknown hazards identified in the affirmative determination of hazard;

3. A description of the vulnerability of the site to seismic and other geologic processes and hazards; and

4. A description of any potential hazards that could be created or exacerbated as a result of site development;

5. For developments in or affecting landslide hazard areas the report shall also include:

a. Assessments and conclusions regarding slope stability including the potential types of landslide failure mechanisms (e.g., debris flow, rotational slump, translational slip, etc.) that may affect the site. The stability evaluation shall also consider dynamic earthquake loading and shall use a minimum horizontal acceleration as established by the current version of YMC Title 11 (Building Code);

b. An analysis of slope recession rate shall be presented in those cases where stability is impacted by stream meandering or other forces acting on the toe of the slope; and

c. Description of the run-out hazard of landslide debris to the proposed development that starts up-slope and/or the impacts of landslide run-out on down-slope properties and critical areas.

D. Flood Hazards. Prior to authorization of any construction within a floodplain, which can be anticipated to displace floodwaters or alter the depth or velocity of floodwaters during the base flood, an engineering report shall be prepared by a licensed engineer in the state of Washington that establishes any new flood elevations that would result for the one-hundred-year flood frequency if the project were implemented.

E. Critical Aquifer Recharge Areas. The approach of the City critical area regulations is to require a level of study and analysis commensurate with potential risks to wellhead protection zones associated with particular sites and

particular proposals. At a minimum, all applicants shall review the history of the site and conduct a surface reconnaissance. The purpose of a critical aquifer recharge area report is to evaluate the actual geologic conditions and determine the site's proximity to or location within a wellhead protection zone; evaluate the safety and appropriateness of proposed activities; and recommend appropriate construction practices, monitoring programs, and other mitigation measures required to ensure achievement of the purpose and intent of these regulations. The information required by this report should be coordinated with the study and reporting requirements for any other critical areas located on the site. A critical aquifer recharge area report shall be prepared by a qualified professional who is a hydrogeologist, geologist, or engineer who is licensed in the State of Washington and who has experience in preparing hydrogeologic assessments.

1. Level One Hydrological Assessment: At sites located within Wellhead Protection Zones 1 through 3, defined in Section 15.27.820.A.1, a critical aquifer recharge areas report shall contain a level one hydrological assessment which includes the following site- and proposal-related information at a minimum:

a. Information regarding geologic and hydrogeologic characteristics of the site, including the surface location of all critical aquifer recharge areas located on-site or immediately adjacent to the site, and permeability of the unsaturated zone based on existing data.

- b. Groundwater depth, flow direction, and gradient based on available information.
- c. Currently available data on wells and springs within 1,300 feet of the project area.
- d. Location of other critical areas, including surface waters, within 1,300 feet of the project site.
- e. Available historic water quality data for the area to be affected by the proposed activity.
- f. BMPs proposed to be utilized.
- 2. Level Two Hydrogeologic Assessment.

a. A level two hydrogeologic assessment shall be required for any of the following proposed activities at sites located within Wellhead Protection Zones 1 through 3:

i. Activities that result in 5,000 square feet or more impervious site area.

ii. Activities that divert, alter, or reduce the flow of surface or groundwaters, including dewatering or otherwise reduce the recharging of the aquifer.

iii. The storage, handling, treatment, use, production, recycling, or disposal of deleterious substances or hazardous materials, other than household chemicals used according to the directions specified on the packaging for domestic applications.

iv. The use of injection wells, including on-site septic systems, except those domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per one acre.

v. Any other activity determined by the Director of Community Development likely to have an adverse impact on groundwater quality or quantity, or on the recharge of the aquifer.

b. A level two hydrogeologic assessment shall include the following site and proposal-related information at a minimum, in addition to the requirements for a level one hydrogeological assessment:

i. Historic water quality and elevation data for the area to be affected by the proposed activity compiled for at least the previous five-year period.

ii. Groundwater monitoring plan provisions.

iii. Discussion of the effects of the proposed project on the groundwater quality and quantity, including:

(a) Predictive evaluation of groundwater withdrawal effects on nearby wells and surface water features.

(b) Predictive evaluation of contaminant transport based on potential releases to groundwater.

iv. Identification of the type and quantities of any deleterious substances or hazardous materials that will be stored, handled, treated, used, produced, recycled, or disposed of on the site, including but not limited to materials, such as elevator lift/hydraulic fluid, hazardous materials used during construction, materials used by the building occupants, proposed storage and manufacturing uses, etc.

v. Proposed methods of storing any of the above substances, including containment methods to be used during construction and/or use of the proposed facility.

vi. Proposed plan for implementing YMC 15.27.820.C.3.f, *Protection Standards During Construction*.

vii. A spill plan that identifies equipment and/or structures that could fail, resulting in an impact. Spill plans shall include provisions for regular inspection, repair, and replacement of structures and equipment that could fail.

viii. A complete discussion of past environmental investigations, sampling, spills, or incidents that may have resulted in or contributed to contaminated soil or groundwater at the site. Attach copies of all historical and current reports, and sampling results.

Article VI. Permit Review Criteria

15.27.316 Standard development permit.

A. Classification Criteria. Standard development permits include any development not subject to RCW Chapter 90.58 (Shoreline Management Act).

B. Process. Standard development permits shall be processed as a Type (1) review if exempt, as a Type (2) review for all Class (2) uses and non-exempt activities, and as a Type (3) review for all Class (3) uses or applications that are of a significant size or scope as determined by the administrative official. Examples of such projects include those that typically require environmental review (SEPA), filling or excavating a stream channel or wetland, involve large amounts of fill, require large amounts of parking, etc.

C. Decision Criteria. Decisions on standard development permits shall be based on the general decision criteria found in YMC 15.27.311.

15.27.317 Adjustment.

A. Classification Criteria. For projects not required to be processed under RCW Chapter 90.58 (Shoreline Management Act) and Title 17 YMC (Shoreline Master Program Regulations), the administrative official or designee is authorized to administratively adjust the development standards. Existing structures, parcel size, property boundaries, and other constraints may preclude conformance with building setbacks and vegetative buffers. Given such constraints, administrative adjustments may be authorized where the site plan and project design include measures to ensure the protection and performance of the functional properties identified in YMC 15.27.504. Vegetative buffer standards may be reduced to the minimum buffer width provided in YMC 15.27.510 and 15.27.604. Reductions below the minimum may be considered but require stricter criteria be met in subsection (C)(4) of this section. Adjustments to prohibited use limits are not allowed.

B. Process. Requests for an adjustment permit shall be processed as a Type (2) review. Requests for adjustments of development standards shall be made in writing and shall specify the standard(s) that an adjustment is sought for, along with the reasons why the adjustment is sought.

C. Decision Criteria. Decisions on adjustment permits shall be based on the general decision criteria found in YMC 15.27.311 together with the criteria below.

1. A particular standard may be reduced or modified as long as the administrative official determines that the adjustment and/or reduction:

a. Is consistent with the purpose of this chapter;

- b. Is consistent with the intent of the standard; and
- c. Will not result in degradation of the critical area.
- 2. The administrative official or designee shall consider the following:
 - a. The proximity and relationship of the project to any critical area and its potential impacts;
 - b. The functions and values that the critical area performs;
 - c. The overall intensity of the proposed use;
 - d. The presence of threatened, endangered, or sensitive species;
 - e. The site's susceptibility to severe erosion; and

f. The use of buffer averaging or buffer enhancement plans by the applicant using native vegetation or other measures to enhance the functions and values of the fish and wildlife habitat conservation area or wetland.

3. When granting an adjustment, the administrative official or designee may require, but is not limited to, the following alternative measures to protect the functions and values of the fish and wildlife habitat conservation area or wetland:

a. Restoration of impaired channels and banks to conditions which support natural stream flows, fish habitat, and other values;

b. Restoration, enhancement, and preservation of soil characteristics and the quantity and variety of native vegetation;

c. Provisions for erosion control and the reduction and filtration of stormwater runoff into the fish and wildlife habitat conservation area, wetland, or buffer;

d. Removal or alteration of existing manmade facilities associated with stream channels or drainage ways which improve stream flow or exchange of surface waters;

e. Replacement of lost fish and wildlife habitat conservation area and wetland functions and values in accordance with best available science;

f. Conservation easements for key portions of fish and wildlife habitat conservation areas, wetland, or buffers and/or their inclusion within public or private conservation programs; or

g. Vegetative buffer averaging may be modified by averaging buffer widths. Buffer averaging is preferred in the use of mitigation sequencing (YMC 15.27.307) over a reduction in the buffer standards.

4. The following additional criteria must be met to reduce the critical areas stream and wetland buffers below the minimum identified in YMC 15.27.510 and 15.27.604:

a. There is a hardship related to maintenance of the minimum buffer width that results from parcel boundaries or existing on-site development;

b. When warranted under subsection A of this section, the buffer width shall be the maximum possible while meeting the minimum need of the proposal; and

c. The applicant shall prepare a mitigation plan which addresses the decrease of wetland or stream function due to the decrease in buffer size.

15.27.318 Reasonable use exception.

A. Classification Criteria. If the application of this chapter would deny all reasonable economic use of the subject property, the property owner may apply for a reasonable use exception.

B. Process. A reasonable use exception shall be processed as a Type (3) review with a public hearing.

C. Decision Criteria. The reasonable use request shall be accompanied by conformance criteria. Failure to satisfy any one of the criteria shall result in denial of the request and the burden of proof shall be on the applicant. Decisions on a reasonable use request shall be based on the general decision criteria found in YMC 15.27.311 together with the criteria below:

1. The application of this chapter would deny all reasonable use of the property; provided, that the inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant;

- 2. No other reasonable use of the property has less impact on the critical area; and
- 3. Any alteration is the minimum necessary to allow for reasonable use of the property.

15.27.319 Minor revisions to approved uses or development.

A. Classification Criteria. Minor revisions as described in YMC 15.27.200 to a project that has been previously approved under a critical area permit are allowed under the following circumstances:

1. Changes that are not substantive are not required to obtain a revision and may be allowed; and

2. Substantive changes are those that materially alter the project in a manner that relates to its conformance with the permit requirements. Such changes may be approved as a minor revision, if the administrative official or designee determines that the proposed revision is within the scope and intent of the original permit, and meets the criteria listed below. Failure to meet the criteria below will require a new permit:

a. Lot coverage and height may be increased by a maximum of ten percent from the provisions of the original permit; provided, that:

i. Revisions involving new structures not shown on the original site plan shall require a new permit; and

ii. Any revisions authorized under this subsection shall not exceed height, lot coverage, setback, or any other requirements of this chapter;

b. Landscaping may be added without an application for a new permit; provided, that it is consistent with conditions of the original permit;

- c. The use authorized pursuant to the original permit has not changed; and
- d. No additional significant adverse environmental impacts will be caused by the project revision.
- B. Process. Minor revisions to existing permits shall be processed under Class (1) review procedures.

C. Decision Criteria. Decisions on permit revisions shall be based on the general decision criteria found in YMC 15.27.311.

15.27.320 Nonconforming uses and facilities.

Nonconforming uses and facilities are classified as either conforming uses with nonconforming structures or areas, or as nonconforming uses, both of which have different review processes and decision criteria, as provided for in YMC Chapter 15.19.

15.27.321 General critical areas protective measures.

The standards below apply to all permits and reviews performed under this chapter.

A. Financial Guarantees. Financial guarantees may be required to ensure mitigation, maintenance, and monitoring.

1. When required mitigation pursuant to a development proposal is not completed prior to the city of Yakima's final permit approval, the administrative official or designee may require the applicant to post a financial guarantee to ensure that the work will be completed.

2. If a development proposal is subject to compensatory mitigation, the applicant must post a financial guarantee to ensure mitigation is fully functional.

3. All financial guarantees shall be in the amount of one hundred twenty-five percent of the estimated cost of the uncompleted actions and/or the estimated cost of restoring the functions and values of the critical area that are at risk.

4. The financial guarantee may be in the form of a surety bond, performance bond, assignment of savings account, irrevocable letter of credit guaranteed by an acceptable financial institution, or other form acceptable to the administrative official or designee, with terms and conditions acceptable to the city of Yakima attorney.

5. The financial guarantee shall remain in effect until the administrative official or designee determines that the standards bonded for have been met. Financial guarantees for wetland or stream compensatory mitigation shall be held for a minimum of five years after completion of the work to ensure that the required mitigation has been fully implemented and demonstrated to function.

6. If public funds have previously been committed for mitigation, maintenance, monitoring, or restoration, a financial guarantee will not be required.

7. Failure to satisfy critical area requirements shall constitute a default, and the administrative official or his or her designee may demand payment of any financial guarantee.

8. Any funds recovered pursuant to this section shall be used to complete the required mitigation. Such funds shall be deposited in a separate account. The city of Yakima will use such funds to arrange for completion of the project or mitigation, and follow-up corrective actions.

9. Depletion, failure, or collection of financial guarantees shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.

B. Subdivision Standards. The following standards apply to all permits or reviews under the subdivision ordinance (YMC Title 14) that contain critical areas:

1. All subdivisions that contain critical areas shall be eligible for density bonuses or other development incentives, as provided in the subdivision ordinance (YMC Title 14) and zoning ordinance (this title);

2. Critical areas shall be actively protected through the following:

a. Roads and utilities for the subdivision shall avoid critical areas and their buffers, as much as possible;

b. When geologically hazardous areas (excluding erosion, oversteepened slopes of intermediate risk, stream undercutting, and earthquake hazards), FEMA floodways, channel migration zones (CMZs), streams, wetlands and/or vegetative buffers fall within the boundary of a subdivision:

i. Said critical areas shall be protected by placing them entirely within a separate critical area tract or by including them entirely within one of the developable parcels. Other options, such as conservation easements and building envelopes, may be deemed appropriate by the administrative official as meeting this provision when special circumstances obstruct the viability of this provision;

ii. For those new lots that do contain said critical areas, usable building envelopes (five thousand square feet or more for residential uses) shall be provided on the plat that lies outside said critical areas.

c. New lots partially within the floodplain shall provide a usable building envelope (five thousand square feet or more for residential uses) outside the floodplain.

d. New lots entirely within the floodplain shall be at least one acre in area;

e. For new lots containing streams, wetlands, and/or vegetative buffers, outdoor use envelopes shall be provided on the plat that lie outside said critical areas;

f. Degraded vegetative buffers shall be restored, or provided with protection measures that will allow them to recover;

g. Floodplains and critical areas shall be depicted on preliminary subdivision plats and relevant information about them disclosed on the final plat.

h. Lots or parcels that lie entirely within geologically hazardous areas (excluding erosion, oversteepened slopes of intermediate risk, stream undercutting, and earthquake hazards), FEMA floodways, channel migration zones (CMZs), streams, wetlands, and/or vegetative buffers may not be further divided.

Part Four. Flood Hazard Areas

Article I. Flood Hazard Areas—General Provisions

15.27.400 Flood hazard areas established.

The special flood hazard areas identified by the Federal <u>Insurance Administrator in a scientific and engineering</u> report entitled, "The Flood Insurance Study for Yakima County, Washington and Incorporated Areas" dated October 21, 2021, and any revisions thereto, <u>Emergency Management Agency</u> (FEMA) in the "Flood Insurance Study for Yakima County and Incorporated Areas" dated November 18, 2009, with accompanying Flood Insurance Rate Maps (FIRMs), and any <u>amendmentrevisions</u> thereto <u>made by the Federal Emergency Management Agency</u> are here<u>byin</u> adopted by reference and declared to be part of Part Four of the city of Yakima's Critical Areas Ordinance. The Flood Insurance Study and <u>FIRMs</u>maps are on file at 129 N 2nd Street, 2nd Floor, with the city of Yakima, Washington, <u>98901</u>.

15.27.401 Principles.

Part Four recognizes the right and need of river and stream channels to periodically carry more than the normal flow of water and establishes regulations to minimize loss of life and property, restrict uses and regulate structures consistent with the degree of flood hazard. In advancing the above principles, the intent of Part Four is:

A. To alert the county assessor, appraisers, owners, potential buyers and lessees to the natural limitations of flood-prone land;

B. To meet the minimum requirements of the National Flood Insurance Program; and

C. To implement state and federal flood protection programs.

15.27.402 Applicability.

The guidelines and regulations set forth herein and in YMC Title 11 and related building codes shall apply to all special flood hazard areas.

A. The provisions of Part Four of this chapter shall apply to any development proposed in a special flood hazard area;

B. Flood hazard permits shall be approved by the city of Yakima. Approval shall only be granted in accordance with Part Four of this chapter and other applicable local, state, and federal regulations;

C. Topographic, engineering and construction information necessary to evaluate the proposed project shall be submitted to the department for approval; and

D. The granting of a permit for any development or use does not constitute a representation, guarantee or warranty of any kind or nature by the city of Yakima, or its employees, of the practicality or safety of any structure or proposed use, and shall not create liability upon or cause action against the above-mentioned body, or employee, for any damage that may result.

15.27.403 Documented exemptions.

The following uses and activities are exempt from the provisions of Part Four of this chapter:

A. The alteration or substantial improvement of any structure listed on the National Register of Historic Places or state inventory of historic places;

B. The installation and maintenance of aboveground utility transmission lines and poles; and

C. Private driveways, fences and other accessory activities and/or uses necessary for agricultural uses which the administrative official determines will not unduly decrease flood storage or capacity, significantly restrict floodwaters, create a substantial impoundment of debris carried by floodwaters, and will resist flotation and collapse. (Ord. 2008 46 § 1 (part), 2008).

15.27.404 Interpretations.

A. In the interpretation and application of Part Four of this chapter, the provisions shall be considered as minimum requirements; and shall be strictly construed in favor of the policies and standards herein; and deemed neither to limit nor repeal any other powers granted under state statute. Its provisions shall be applied in addition to and as a supplement to provisions of Yakima Municipal Code Title 11, Buildings; Title 12, Development Standards; Title 14, Subdivisions; and this title, Yakima Urban Area Zoning Ordinance. YMC 15.27.400 through 15.27.436 are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. Where these ordinances and other ordinances conflict or overlap, the standard imposing the more stringent requirement shall prevail.

B. In an interpretation as to an exact location of the boundaries of the special flood hazard areas (i.e., conflict between a mapped boundary and actual field conditions), the person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation. Such appeals shall be granted consistent with the standards of the National Flood Insurance Program Section 60.6 (See 44 CFR 59, et seq., and IBC Section 104.1).

15.27.405 <u>Penalties for Non</u>Compliance.

No structure or land shall hereafter be used, constructed, located, extended, converted, or altered without full compliance with the terms of Part Four of this chapter and other applicable regulations. <u>Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions), shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than five hundred dollars or imprisoned for not more than 90 days, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the City of Yakima from taking such other lawful action as is necessary to prevent or remedy any violation.</u>

15.27.406 Warning and disclaimer of liability.

The degree of flood protection required by Part Four of this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. Part Four does not imply that land outside the area of special flood hazards or permitted uses within such area will not be subject to flooding or flood damage. <u>This ordinance shall not create liability on the part of the City of Yakima, any officer or employee thereof, or the Federal Insurance Administrator, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.</u>

Article II. Flood Hazard Protection Standards

15.27.407 General standards.

The following regulations shall apply in all special flood hazard areas pursuant to the IBC, ASCE-24, and HUD 24 CFR Part 3280:

A. Anchoring and Construction Techniques. All <u>new construction and substantial improvements, including those</u> <u>related to manufactured homes, <u>mustshall likewise-be</u> anchored to prevent flotation, collapse or lateral movement<u>of</u> <u>the structure resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy</u>, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors. (For additional information please refer to guidebook, FEMA-85.) Anchoring shall meet the specifications set forth below for structures located within one hundred feet of a floodway or the ordinary high water mark if no floodway has been established.</u>

B. Construction Materials and Methods.

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

2. All new and substantial improvements shall be constructed using methods and practices that minimize flood damage.

3. Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during the conditions of flooding.

C. All new construction and any improvements or additions to existing floodproofed structures that would extend beyond the existing floodproofing located within one hundred feet of the floodway or one hundred feet of the ordinary high water mark if no floodway has been established shall be elevated to a height <u>equal to one foot</u> or greater than the base flood, using zero-rise methods such as piers, posts, columns, or other methodology, unless it can be demonstrated that non-zero-rise construction methods will not impede the movement of floodwater or displace a significant volume of water. The size and spacing of any support devices used to achieve elevation shall be designed to penetrate bearing soil, and be sufficiently anchored, as specified above in subsections A and B of this section, provided therefrom, if the original building permit required a floodproofing certificate, then the floodproofing certificate must be updated. Also provided therefrom, if any part of the project is in a floodway, the floodway standards in this code still apply.

D. Except where otherwise authorized, all new construction and substantial improvements to existing structures shall require certification by a registered professional engineer, architect or surveyor that the design and construction standards are in accordance with adopted floodproofing techniques.

E. Utilities.

1. All new and replacement water supply systems and sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and on-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

2. Water wells shall be located on high ground that is not in the floodway.

F. Subdivision Proposals and development. All <u>Ssubdivision proposals</u>, as well as new development shall:

1. Be consistent with the need to minimize flood damage;

2. Have roadways, public utilities and other facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;

3. Have adequate drainage provided to reduce exposure to flood damage;

4. Include base flood elevation data; and

5. In the cases where base flood elevation is not available and the subdivision <u>proposal and other proposed</u> <u>development</u> is greater than five acres or fifty lots (whichever is lesser), a step-back water analysis shall be required to generate the base flood elevation data.
G. Watercourse Alterations. The flood-carrying capacity within altered or relocated portions of any watercourse shall be maintained. Prior to the approval of any alteration or relocation of a watercourse in riverine situations, the department shall notify adjacent communities, the Department of Ecology and FEMA of the proposed development.

H. Storage of Materials and Equipment.

1. The storage or processing of materials that could be injurious to human, animal, or plant life if released due to damage from flooding is prohibited in special flood hazard areas.

2. Storage of other material or equipment may be allowed if not subject to damage by floods and if firmly anchored to prevent floatation, or if readily removable from the area within the time available after flood warning.

I. Critical Facility. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the SFHA (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above BFE or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Flood proofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the BFE shall be provided to all critical facilities to the extent possible.

J. Livestock Sanctuary Areas. Elevated areas for the purpose of creating a flood sanctuary for livestock are allowed on farm units where livestock is allowed. Livestock flood sanctuaries shall be sized appropriately for the expected number of livestock and be elevated sufficiently to protect livestock. Proposals for livestock flood sanctuaries shall meet all procedural and substantive requirements of this chapter. To be "elevated sufficiently to protect livestock" typically means to be elevated at lease one foot above the BFE.

15.27.408 Specific standards.

In all special flood hazard areas where base elevation data has been provided as set forth in YMC 15.27.400, the following regulations shall apply, in addition to the general standards of YMC 15.27.407:

A. Residential Construction. (See IRC Section 323.2.)

1. <u>In AE and A1-30 zones or other A zones where the BFE has been determined or can be reasonably</u> <u>obtained</u>. <u>Nn</u>ew construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated <u>at a minimum to or</u><u>one foot or more</u> above the <u>BFE</u><u>base flood elevation</u>. Mechanical equipment and utilities shall be waterproofed or elevated at least one foot above the BFE.

2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;

b. The bottom of all openings shall be no higher than one foot above grade; and

c. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.

d. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to all for the entry and exit of floodwaters.

3. Residential construction within one hundred feet of a floodway, or the ordinary high water mark if no floodway has been established, shall also meet the requirements of YMC 15.27.407(C).

4. New construction and substantial improvement of any residential structure in an AO zone shall meet the requirements in Section 15.27.408(H).

5. New construction and substantial improvement of any residential structure in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained shall be reasonably safe from flooding, but in all cases the lowest floor shall be at least two feet above the Highest Adjacent Grade.

B. Nonresidential Construction (44 CFR 60.3(C)(3) and (4)). New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the base flood elevation meet the standards in subsection (A) of this section; or, together with attendant utility and sanitary facilities, shall:

1. Be <u>dry</u> floodproofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water <u>or dry floodproofed to the elevation required by</u> <u>ASCE 24, whichever is greater;</u>

2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official set forth in Section 15.27.437; and

4. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in subsection (A)(2) of this section.

5. If located in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained, the structure shall be reasonably safe from flooding, but in all cases the lowest floor shall be at least two feet above the Highest Adjacent Grade.

C. Manufactured Homes. <u>All Mmanufactured homes to be placed or substantially improved on sites shall be</u> <u>elevated on a permanent foundation such that the lowest floor is elevated one foot or more above the base flood</u> <u>elevation, and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse</u> <u>and lateral movement in accordance with subsection (A) of this section.</u> <u>shall be elevated in accordance with IBC</u> <u>Section 501.1, Appendix "G."</u>

D. Recreational Vehicles. Recreational vehicles placed on sites are required to either:

1. Be on the site for fewer than one hundred eighty consecutive days;

2. Be fully licensed and ready for highway use, on wheels or jacking system, attached to the site only by quick-disconnect-type utilities and security devices, and have no permanently attached additions; or

3. Meet the anchoring requirements of subsection C of this section.

E. Enclosed Area Below the Lowest Floor. If building or manufactured homes are constructed or substantially improved with fully enclosed areas below the lowest floor, the areas shall be used solely for parking of vehicles, building access, or storage.

F. Appurtenant Structure (Detached Garages & Small Storage Structures) For A Zones (A, AE, A1-30, AH, AO):

1. Appurtenant structures used solely for parking of vehicles or limited storage may be constructed such that the floor is below the BFE, provided the structure is designed and constructed in accordance with the following requirements:

a. Use of the appurtenant structure must be limited to parking of vehicles or limited storage;

b. The portions of the appurtenant structure located below the BFE must be built using flood resistant materials;

c. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement;

d. Any machinery or equipment servicing the appurtenant structure must be elevated or flood proofed to or above the BFE;

e. The appurtenant structure must comply with the floodway encroachment provisions in Section 15.27.411(B);

<u>f.</u> The appurtenant structure must be designed to allow for the automatic entry and exit of floodwaters in accordance with Section 15.27.408(A)(2);

g. The structure shall have low damage potential;

<u>h.</u> If the structure is converted to another use, it must be brought into full compliance with the standards governing such use; and,

i. The structure shall not be used for human habitation.

2. Detached garages, storage structures, and other appurtenant structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 15.27.408(A)(1).

3. Upon completion of the structure, certification that the requirements of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

G. AE and A1-30 Zones with Base Flood Elevations but No Floodways. In areas with BFEs (when a regulatory floodway has not been designated), no new construction, substantial improvements, or other development (including fill) shall be permitted within zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

H. Standards for Shallow Flooding Areas (AO Zones). Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In addition to other provisions in this code, the following additional provisions shall apply in AO zones:

1. New construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement and mechanical equipment) elevated above the highest adjacent grade to the structure, one foot or more above* the depth number specified in feet on the community's FIRM (at least two feet above the highest adjacent grade to the structure if no depth number is specified).

2. New construction and substantial improvements of nonresidential structures within AO zones shall either:

a. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above* the depth number specified on the FIRM (at least two feet if no depth number is specified); or

b. Together with attendant utility and sanitary facilities, be completely flood proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer, or architect as in Section 15.27.408(B)(5). 3. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

4. Recreational vehicles placed on sites within AO zones on the community's FIRM either:

a. Be on the site for fewer than 180 consecutive days, or

b. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

c. Meet the requirements of subsections (1) and (3) above and the anchoring requirements for manufactured homes (Section 15.27.407(B).

Article III. Floodway Fringe Uses

15.27.409 Permitted uses.

The following uses are permitted in the floodway fringe areas:

A. Permitted Uses. Any use permitted in the zoning district in accordance with this title, unless prohibited by YMC 15.27.410; provided, that said use is in compliance with the flood hazard protection standards of YMC 15.27.407 and 15.27.408 and other applicable provisions of this chapter and will have a negligible effect upon the floodway in accordance with the floodway encroachment provisions of YMC 15.27.412(B).

B. All new encroachments, including fill, new construction and other development, if certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the effect of the subject encroachment together with the cumulative effects of all similar potential encroachments shall not materially cause water to be diverted upland of the established floodway fringe, cause erosion, obstruct the natural flow of water, reduce the carrying capacity of the floodway, or result in any increase in flood levels during the occurrence of the base flood discharge;

C. All new encroachments, including fill, new construction and other development, if:1. The new encroachment is separated from the waterbody by an existing public ro5adway or legal development.

2. The new encroachment is located in a residential zone with a density of greater than 1 unit per acre.

D. Utility Transmission Lines. Utility transmission lines shall be permitted when consistent with this title and where not otherwise inconsistent with Part Four of this chapter; except that when the primary purpose of such a transmission line is to transfer bulk products or energy through a floodway fringe or special flood hazard area, such transmission line shall conform to the following:

1. Electric transmission lines shall cross floodway fringe and special flood hazard areas by the most direct route feasible. When support towers must be located within floodway fringe or special flood hazard areas, they shall be placed to avoid high floodwater velocity and/or depth areas, and shall be adequately floodproofed.

2. Buried utility transmission lines transporting hazardous materials, including but not limited to crude and refined petroleum products and natural gas, shall be buried a minimum of four feet. Such burial depth shall be maintained within the floodway fringe or special flood hazard area to the maximum extent of potential channel migration as determined by hydrologic analyses. All such hydrologic analyses shall conform to requirements of YMC 15.27.411(C)(3).

3. Beyond the maximum extent of potential channel migration, utility transmission lines transporting hazardous and nonhazardous materials shall be buried below existing natural and artificial drainage features.

4. Aboveground utility transmission lines, not including electric transmission lines, shall only be allowed for the transportation of nonhazardous materials. In such cases, applicants must demonstrate that line placement will have no appreciable effect upon flood depth, velocity or passage. Such lines shall be adequately protected from flood damage.

5. Aboveground utility transmission line appurtenant structures, including valves, pumping stations or other control facilities, shall not be permitted in floodway fringe or special flood hazard areas except where no other alternative is available, or in the event a floodway fringe or special flood hazard location is environmentally preferable. This does not apply to domestic water and regional wastewater transmission pipes. In such instances, aboveground structures shall be located so that no appreciable effect upon flood depth, velocity or passage is created, and shall be adequately floodproofed.

E. Any use permitted in the zoning district in accordance with this title, unless prohibited by YMC 15.27.410, that is unable to adhere to the standards contained in YMC 15.27.409(A-D) above may be permitted if a critical areas report is prepared by a qualified professional, in accordance with YMC 15.27.314, that addresses whether the encroachment would have an adverse impact on fish and wildlife and/or floodplain functions.

15.27.410 Prohibited uses.

The following uses are prohibited in the floodway fringe areas:

A. Any structure, including manufactured homes and the expansion of manufactured home/parks, designed for or to be used for human habitation of a permanent nature (including temporary dwellings authorized by YMC 15.04.130 and 15.04.140) that does not meet the criteria in YMC 15.27.409(A-E);

B. Any encroachments, including fill, new construction, <u>substantial improvements</u>, and other development, unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the effect of the subject encroachment together with the cumulative effects of all similar potential encroachments shall not materially cause water to be diverted upland of the established floodway fringe, cause erosion, obstruct the natural flow of water, reduce the carrying capacity of the floodway, or result in any increase in flood levels during the occurrence of the base flood discharge;

C. Construction or reconstruction of residential structures within the designated floodway fringe, except for:

1. Repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and

2. Repairs, reconstruction or improvements to a structure, the cost of which does not exceed fifty percent of the assessed value of the structure either:

- a. Before the repair, reconstruction or improvement is started; or
- b. If the structure has been damaged and is being restored, before the damage occurred.

3. Work done on structures to correct existing violations of existing health, sanitary or safety codes, or to structures identified as historic places, shall not be included in the fifty percent.

4. If subsection B of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Part Four.

Article IV. Floodway Uses

15.27.411 Permitted uses.

The following uses are permitted in the floodway fringe areas:

A. Any use permitted in the zoning district in accordance with this title; provided, that said use is in compliance with the flood hazard protection standards of YMC 15.27.407 and 15.27.408 and other applicable provisions of this chapter and will have a negligible effect upon the floodway in accordance with the floodway encroachment provisions of YMC 15.27.412(B). Permitted uses include:

B. All new encroachments, including fill, new construction and other development, if certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analysis performed in accordance

with standard engineering practice that the effect of the subject encroachment together with the cumulative effects of all similar potential encroachments shall not materially cause water to be diverted from the established floodway, cause erosion, obstruct the natural flow of water, reduce the carrying capacity of the floodway, or result in any increase in flood levels during the occurrence of the base flood discharge;

C. Surface mining; provided, that the applicant can provide clear evidence that such uses will not divert flood flows causing channel-shift or erosion, accelerate or amplify the flooding of downstream flood hazard areas, increase the flooding threat to upstream flood hazard areas, or in any other way threaten public or private properties. When allowed, such removal shall comply with the provisions of this title;

D. Utility transmission lines, unless otherwise prohibited by this chapter; except that when the primary purpose of such a transmission line is to transfer bulk products or energy through a floodway en route to another destination, as opposed to serving customers within a floodway, such transmission lines shall conform to the following:

1. All utility transmission lines shall cross floodways by the most direct route feasible, as opposed to paralleling floodways;

2. Electric transmission lines shall span the floodway with support towers located in flood fringe areas or beyond. Where floodway areas cannot be spanned due to excessive width, support towers shall be located to avoid high floodwater velocity and/or depth areas, and shall be adequately floodproofed;

3. Buried utility transmission lines transporting hazardous and nonhazardous materials, including but not limited to crude and refined petroleum products and natural gas, shall be buried a minimum of four feet below the maximum established scour of the waterway, as calculated on the basis of hydrologic analyses. Such burial depth shall be maintained horizontally within the hydraulic floodway to the maximum extent of potential channel migration as determined by hydrologic analyses. In the event potential channel migration extends beyond the hydraulic floodway, conditions imposed upon floodway fringe and special flood hazard areas shall also govern placement. All hydrologic analyses are subject to acceptance by the city of Yakima, which shall assume the conditions of a one-hundred-year frequency flood as verified by the U.S. Army Corps of Engineers, and shall include on-site investigations and consideration of historical meander characteristics in addition to other pertinent facts and data;

4. Beyond the maximum extent of potential channel migration, utility transmission lines transporting hazardous and nonhazardous materials shall be buried below existing natural and artificial drainage features; and

5. Aboveground utility transmission lines, not including electric transmission lines, shall only be allowed for the transportation of nonhazardous materials where an existing or new bridge or other structure is available and capable of supporting the line. When located on existing or new bridges or other structures with elevations below the one-hundred-year flood level, the transmission line shall be placed on the downstream side and protected from flood debris. In such instances, site-specific conditions and flood damage potential shall dictate placement, design and protection throughout the floodway. Applicants must demonstrate that such aboveground lines will have no appreciable effect upon flood depth, velocity or passage, and shall be adequately protected from flood damage. If the transmission line is to be buried except at the waterway crossing, burial specifications shall be determined as in subsection (C)(3) of this section;

E. Construction or reconstruction of residential structures only as authorized in YMC 15.27.412(E);

F. Improvements to existing residential structures that are not substantial improvements per YMC 15.27.200, provided the improvement complies with the requirement set forth in YMC 15.27.412(B);

G. Water-dependent utilities and other installations which by their very nature must be in the floodway. Examples of such uses are: dams for domestic/industrial water supply; wastewater treatment and collection systems; stream crossings or wetlands; flood control and/or hydroelectric production; water diversion structures and facilities for water supply; irrigation and/or fisheries enhancement; floodwater and drainage pumping plants and facilities; hydroelectric generating facilities and appurtenant structures; and structures and nonstructural uses and practices; provided, that the applicant shall provide evidence that a floodway location is necessary in view of the objectives of

the proposal; and provided further, that the proposal is consistent with other provisions of this chapter. In all instances of locating utilities and other installations in floodway locations, project design must incorporate floodproofing and otherwise comply with subsection C of this section; and,

H. Roads and bridges, subject to the regulations of subsections (D)(1) through (5) of this section.

15.27.412 Prohibited uses.

The following uses/developments are prohibited in the floodway:

A. Any structure, including manufactured homes, designed for or to be used for human habitation of a permanent nature (including temporary dwellings authorized by YMC 15.04.130 and 15.04.140);

B. Any encroachments, including fill, new construction, <u>substantial improvements</u>, and other development, unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the effect of the subject encroachment together with the cumulative effects of all similar potential encroachments shall not materially cause water to be diverted from the established floodway, cause erosion, obstruct the natural flow of water, reduce the carrying capacity of the floodway, or result in any increase in flood levels during the occurrence of the base flood discharge;

C. Aboveground utility transmission line appurtenant structures, including valves, pumping stations, or other control facilities, shall not be permitted in the floodway, except for domestic water and regional wastewater facilities where necessary;

D. Where a floodway has not been determined by preliminary Corps of Engineers' investigations or official designation, a floodway shall be defined by qualified engineering work by the applicant on the basis of a verified one-hundred-year flood event;

E. <u>All other building standards apply in the floodway.</u> If section 15.27.410(B) is satisfied or construction is allowed pursuant to 15.27.412(J), all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Part Four – Flood Hazard Areas.</u> Construction or reconstruction of residential structures within designated floodways, except for:

1. Repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and

2. Repairs, reconstruction or improvements to a structure, the cost of which does not exceed fifty percent of the assessed value of the structure either:

a. Before the repair, reconstruction or improvement is started; or

b. If the structure has been damaged and is being restored, before the damage occurred.

3. Work done on structures to correct existing violations of existing health, sanitary or safety codes, or to structures identified as historic places, shall not be included in the fifty percent.

4. If subsection B of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Part Four.

F. The construction or storage of any object subject to flotation or movement during flood level periods;

G. The following uses, due to their high degree of incompatibility with the purpose of establishing and maintaining a functional floodway, are specifically prohibited:

1. The filling of wetlands, except as authorized under Part Five, Fish and Wildlife Habitat and the Stream Corridor, and Part Six, Wetlands;

2. Solid waste landfills, dumps, junkyards, outdoor storage of vehicles, and/or materials; and

3. Damming or relocation of any watercourse that will result in any downstream increase in flood levels during the occurrence of the base flood discharge (see YMC 15.27.509).

H. The construction of new dikes.

I. The listing of prohibited uses in this section shall not be construed to alter the general rule of statutory construction that any use not permitted is prohibited.

J. Residential Construction in Floodways. Construction or reconstruction of residential structures is prohibited within designated floodways*, except for (i) repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and (ii) repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure either, (A) before the repair, or reconstruction is started, or (B) if the structure has been damaged, and is being restored, before the damage occurred. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or to structures identified as historic places, may be excluded in the 50 percent.

15.27.413 Nonconforming uses and facilities.

A. Within the special flood hazard areas established by this chapter or amendments thereto, there may exist structures and uses of land and structures which were lawful before these sections were adopted or amended, but which would be prohibited or restricted under the terms of Part Four of this chapter or future amendment.

B. It is the intent of YMC Chapter 15.19 to permit these lawful preexisting nonconformities to continue until they are removed by economic forces or otherwise, but not to encourage their survival except in cases where continuance thereof would not be contrary to the public health, safety or welfare, or the spirit of this chapter.

Article V. Flood Hazard Protection Administration

15.27.414 <u>Designation of the Floodplain Administratorion</u>.

The administrative official is vested with the duty of administering the rules and regulations relating to flood hazard protection in accordance with the provisions of Part Four and may prepare and require the use of such forms as are essential to such administration.

15.27.415 Authority.

Upon application, the administrative official shall have the authority to grant a flood hazard permit when compliance with the applicable conditions as set forth in Part Four of this chapter and in other applicable local, state and federal regulations has been demonstrated and the proposal is found to be consistent with the purpose of the policies of the critical areas ordinance.

15.27.416 Permit—Required.

Prior to any development within a special flood hazard area, a flood hazard permit shall be obtained. <u>The permit</u> shall be for all structures including manufactured homes, as set forth in "Definitions," and for all development including fill and other activities, also set forth in the "Definitions." This permit may be in addition to the critical area development authorization as set forth in Part Three of this chapter.

15.27.417 Permit—Application.

All persons applying for a flood hazard permit shall submit a written application, accompanied by an application fee as specified in YMC Title 11, using the forms supplied. The application shall not be considered complete until the following minimum information is provided as identified below and in YMC 15.11.050:

- A. Name, address and telephone number of applicant and property owner if different;
- B. Project description and taxation parcel identification number;

- C. Name of the stream or body of water associated with the floodplain in which the development is proposed; and
- D. Site plan map drawn to an engineering scale showing:
 - 1. Actual dimensions and shape of the parcel to be built on;
 - 2. Sizes and location of existing structures on the parcel;
 - 3. Location and dimensions of the proposed development, structure or alteration;
 - 4. Location, volume and type of any proposed fill; and

5. The application shall include other information as may be required by the administrative official to clarify the application for the enforcement of Part Four of this chapter:-

6. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; and

7. Elevation in relation to mean sea level to which any structure has been floodproofed.

<u>E.</u> Where a structure is to be floodproofed, certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet floodproofing criteria in Section 15.09.408(B).

F. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

<u>G.</u> Where development is proposed in a floodway, an engineering analysis indicated no rise of the Base Flood <u>Elevation</u>.

15.27.418 Permit—Review.

<u>Duties and Responsibilities of the Floodplain Administrator hazard permit applications will shall include, but not be limited to reviewinged all development permits to determine:</u>

- A. Thate the elevation, and floodproofing, and other requirements of Part Four of this chapter have been satisfied;
- B. The proposed development's location in relation to the floodway and any encroachments, YMC 15.27.412(B);
- C. Alteration or relocation of a watercourse;
- D. That the proposed development is a permitted use under Part Four of this chapter and YMC Title 15; and

E. That all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

F. That the site is reasonably safe from flooding.

G. Notify FEMA when annexations occur in the Special Flood Hazard Area.

H. Notify FEMA of changes to the base flood elevation within six months of when technical information of such changes becomes available. Such notification shall include technical or scientific information.

15.27.419 Use of available data.

When base flood elevation data has not been provided (in A zones) in accordance with YMC 15.27.400, Flood hazard areas established, the <u>Floodplain Administratoreity</u> shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer YMC 15.27.408, 15.27.412, and Chapter 15.25.

15.27.420 Limitations.

Permits issued on the basis of plans and applications approved by the administrative official authorize only the use, arrangement and construction set forth in such approved plans and applications, and no other use, arrangement or

construction. Use, arrangement or construction at variance with that authorized is a violation of Part Four and punishable as provided by YMC Chapter 15.25.

15.27.421 Permit—Expiration and cancellation.

If the work described in any permit has not begun within one hundred eighty days from the date of issuance thereof, the permit shall expire and be canceled by the administrative official.

15.27.422 Performance bonds.

A. The city may require bonds in such form and amounts as may be deemed necessary to assure that the work shall be completed in accordance with approvals under Part Four of this chapter. Bonds, if required, shall be furnished by the property owner or other person or agent in control of the property.

B. In lieu of a surety bond, the applicant may file a cash bond or instrument of credit with the city in an amount equal to that which would be required in the surety bond.

15.27.423 Appeals.

The decision to grant, grant with conditions, or deny a flood hazard permit shall be final and conclusive unless the applicant appeals the decision pursuant to the procedure established for appeals in Part Three.

15.27.424 Coordination.

Upon application, the administrative official shall have the authority to grant a flood hazard permit when compliance with the applicable conditions as set forth in Part Four of this chapter and in other applicable local, state and federal regulations has been demonstrated and the proposal is found to be consistent with the purpose of this chapter.

Article VI. Elevation and Floodproofing Certification

15.27.425 Applicability.

Certification for elevation and floodproofing shall be required only for the new construction or substantial improvement of any residential, commercial, industrial, or nonresidential structure located in a special flood hazard area.

15.27.426 Certification form.

The form of the elevation and floodproofing certificate shall be specified by the administrative official and shall be generally consistent with that required by FEMA for the administration of the National Flood Insurance Program.

15.27.427 Information to be obtained and maintained.

The elevation and floodproofing certificate shall verify the following flood hazard protection information:

A. The actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;

B. The actual elevation (in relation to mean sea level) of floodproofing of all new or substantially improved nonresidential floodproofed structures; and

C. Where a base flood elevation has not been established according to YMC 15.27.400, or where elevation data is not available either through the flood insurance study, FIRM, or from another authoritative source, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available.

15.27.428 Certification responsibility.

The project proponent shall be responsible for providing required certification data to the administrative official prior to the applicable construction inspection specified in the certification form. All elevation and floodproofing data specified in YMC 15.27.427 must be obtained and certified by a registered professional engineer, architect, or surveyor. The elevation and floodproofing certification shall be permanently maintained by the administrative official.

Article VII. Flood Hazard Variances

15.27.429 Procedure.

Any person seeking a variance from the requirements of Part Four authorized under YMC 15.27.430 shall make such request in writing to the planning department on the forms they supply. Upon receipt of a completed application and application fee for the variance, a notice of the variance request shall be forwarded to all landowners of adjacent property within twenty-eight days of the receipt of a completed application and payment of fees. The notice shall solicit written comment on the variance request and specify a time period not less than twenty days from the date of mailing, during which written comments may be received and considered. The notice shall also state that copies of the administrative official's final decision will be mailed upon request. The administrative official may also solicit comments from any other person or public agency he or she feels may be affected by the proposal.

15.27.430 Variance limitations<u>Criteria</u>.

A. <u>In considering \forall variances applications, the City of Yakima shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this Ordinance, and shall be limited solely to the consideration of:</u>

1. <u>The danger that materials may be swept onto other lands to the injury of others</u>Elevation requirements for lowest floor construction;

2. <u>The danger to life and property due to flooding or erosion damage</u> Elevation requirements for floodproofing; and

3. <u>The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner; The type and extent of floodproofing.</u>

4. The importance of the services provided by the proposed facility to the community;

5. The necessity to the facility of a waterfront location, where applicable;

6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;

7. The compatibility of the proposed use with existing and anticipated development;

8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area:

9. The safety of access to the property in time of flood for ordinary and emergency vehicles;

10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site; and,

<u>11.</u> The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical, water system, and streets and bridges.

B. Variances shall not be considered for any procedural or informational requirements or use prohibitions of Part Four of this chapter.

15.27.431 Conditions for authorization.

Before a variance to the provisions of Part Four may be authorized, it shall be shown that:

A. There are special circumstances applicable to the subject property or to the intended use, such as size, topography, location or surroundings, that do not apply generally to other property in the same vicinity and zone;

B. The granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity and zone in which the subject property is located;

C. Such a variance is the minimum necessary, considering the flood hazard, to afford relief;

- D. Failure to grant the variance would result in exceptional hardship to the applicant; and
- E. The granting of such a variance will not result in:
 - 1. Increased flood heights;
 - 2. Additional threats to public safety;
 - 3. Creation of nuisances;
 - 4. Extraordinary public expense; or
 - 5. Conflicts with other existing local laws or ordinances.

F. For the repair, rehabilitation, or restoration of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

G. Upon a showing of good and sufficient cause.

H. Upon a showing that the use cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes only facilities defined in Section 15.27.200 of this Ordinance in the definition of "Functionally Dependent Use."

I. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.

J. Additional Requirements for the Issuance of a Variance.

1. Any applicant to whom a Variance is granted shall be given written notice over the signature of a community official that:

a. The issuance of a Variance to construct a structure below the BFE will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage; and,

b. Such construction below the BFE increases risks to life and property.

2. The Floodplain Administrator shall maintain a record of all Variance actions, including justification for their issuance.

3. The Floodplain Administrator shall condition the Variance as needed to ensure that the requirements and criteria of this chapter are met.

Variances as interpreted in the NFIP are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from flood elevations should be quite rare.

15.27.432 Administrative official's decision.

After considering any comments received from other agencies, jurisdictions or adjoining property owners, the administrative official shall approve, approve with conditions, or deny the variance request. The administrative official shall prepare written findings and conclusions stating the specific reasons upon which the decision is based.

15.27.433 Notification and final decision.

The decision shall be issued within seven days from the end of the comment period. Further, the administrative official shall mail the findings and decision to the applicant and to other parties of record requesting a copy.

15.27.434 Power to refer decisions.

In exercising the duties and powers of implementing and administrating Part Four of this chapter, the administrative official may refer any variance application to the hearing examiner for action at a public hearing.

15.27.435 Appeals.

Any decision by the administrative official to approve or deny a variance request may be appealed subject to the procedures set forth in YMC Chapter 15.16.

15.27.436 Federal flood hazard map correction procedures.

The procedures for federal flood hazard map correction, as provided in federal regulations 44 CFR 70 of the National Flood Insurance Program, are hereby adopted by reference.

15.27.437 Information to be Obtained and Maintained

A. Where the base flood elevation data is provided through the FIS, FIRM, or required as in Section 15.27.419, obtain and maintain a record of the actual (as-built) elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.

<u>B.</u> For all new or substantially improved flood proofed non-residential structures where the base flood elevation data is provided through the FIS, FIRM, or as required in Section 15.27.419:

1. Obtain and maintain a record of the elevation (in relation to mean sea level) to which the structure was flood proofed.

2. Maintain the flood proofing certifications required in Section 15.27.417(E).

- C. Certification required by Section 15.27.412(B) (floodway encroachments).
- D. Records of all variance actions, including justification for their issuance.
- E. Improvement and damage calculations.
- F. Maintain for public inspection all records pertaining to the provisions of this Ordinance.

Part Five. Fish and Wildlife Habitat Conservation Areas

Article I. Introduction

15.27.500 Purpose and intent.

Policies and standards to help conserve and protect fish and wildlife habitat conservation areas are designed to accomplish the following:

A. Meet the requirements of the Growth Management Act (RCW 36.70A.172) regarding best available science;

B. Require consideration of alternatives for necessary development, construction, and uses within fish and wildlife habitat conservation areas;

C. Prevent decline in the quantity and quality of surface and subsurface waters;

D. Conserve, restore, and protect fish and wildlife habitats, vegetation, and ecological relationships;

E. Protect fish and wildlife habitat conservation areas from the potential negative effects of development through coordinated land use planning; and,

F. Protect fish and wildlife habitat conservation areas through voluntary agreements or government incentives.

15.27.501 Protection approach.

To maintain fish and wildlife habitat, there must be adequate environmental conditions for reproduction, foraging, resting, and dispersal of animals. Factors affecting both habitat and its quality include the presence of essential resources such as food, water, cover, and lack of disturbance and diseases. The city of Yakima protects fish and wildlife habitat through:

1. Designation of fish and wildlife habitat conservation areas; and

2. Application of development standards based on best available science to proposed activity and development in or near fish and wildlife habitat conservation areas.

Article II. Designation and Mapping

15.27.502 Designation.

A. Designation: Fish and wildlife habitat conservation areas are those habitat areas outside of shoreline jurisdiction that meet any of the criteria listed below.

1. Areas with which state and federal endangered, threatened, and sensitive species have a primary association;

2. Habitats and species of local importance;

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

4. Waters of the state, including any required buffers and associated Federal Emergency Management Agency-mapped floodplains and floodways;

- 5. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; and
- 6. State natural area preserves, natural resource conservation areas, and state wildlife areas.
- B. Habitat and habitats of local importance.

1. All species and habitats identified by WDFW's *Priority Habitats and Species* program that may be found in the city of Yakima are designated as fish and wildlife habitat conservation areas and afforded protection under this chapter.

2. Species and habitats of local importance may be identified for protection under this chapter. State or local agencies, individuals or organizations may identify and nominate for consideration specific species and habitats, or a general habitat type, including streams, ponds or other features. Proponents shall have the burden of presenting evidence concerning the criteria set forth below. The nomination shall be processed once a year through the annual comprehensive plan amendment cycle.

- a. The decision for changes to species and habitats of local importance shall consider:
 - i. Concern due to population status;
 - ii. Sensitivity to habitat manipulation;
 - iii. Importance to the local community; and
 - iv. Criteria used to identify state priority species, which include:

(a) State candidate species that are defined by WDFW Policy M-6001 to include fish and wildlife species that WDFW will review for possible listing as state endangered, threatened, or sensitive;

(b) Vulnerable aggregations, which includes those species or groups of animals susceptible to significant population declines, within a specific area, by virtue of their inclination to aggregate;

(c) Species of recreational, commercial, and/or tribal importance that are vulnerable; and

(d) The economic impact both positive and negative to the applicant's property or surrounding property. Economic impact is to be determined by a properly qualified individual or firm using industry standards.

b. Nominated habitats and habitats for species of local importance shall consider the following and must include maps to illustrate the proposal:

i. A seasonal range or habitat element which, if altered, may reduce the likelihood that the species will maintain or reproduce over the long term;

ii. Areas of high relative density or species richness, breeding habitat, winter range, and movement corridors;

iii. Habitat with limited availability or high vulnerability to alteration; and

iv. Whether these habitats are already identified and protected under the provisions of this or other local ordinances or state or federal law.

c. Habitat management recommendations shall be included for use in the administration of this section.

3. Development Standards. Projects located within habitats of local importance or within 200 feet of species of local importance, as designated in subsection B.1 and B.2 of this section, shall comply with the applicable development standards in YMC 15.27.508 through 15.27.521. In addition, projects shall be designed using management recommendations established for the species or habitat by federal and state agencies, or those adopted for species and habitats of local importance by the city of Yakima. The department shall consider the extent such recommendations are used in its decision on the proposal, and may consider recommendations and advice from agencies with expertise.

15.27.504 Functional properties.

A. Aquatic fish and wildlife habitat conservation areas require a sufficient riparian area to support one or more of the following functional properties:

- 1. Stabilizing banks;
- 2. Providing a sufficient shade canopy to maintain water temperatures that support fish and their habitat;
- 3. Moderating the impact of stormwater runoff;
- 4. Filtering solids, nutrients and harmful substances;
- 5. Preventing surface erosion;
- 6. Providing and maintaining migratory corridors for wildlife;
- 7. Supporting a diversity of wildlife habitats; or

8. Allowing for the natural occurrence of woody debris and organic matter to collect in the aquatic environment.

- B. Stream channels assist in one or more of the following functional properties:
 - 1. Groundwater recharge and/or discharge;
 - 2. Water transport;
 - 3. Sediment transport and/or storage;

- 4. Biochemical functions;
- 5. Channel migration and the protection of habitats; or
- 6. Food and habitat.

C. Lakes, ponds and wetlands generally provide similar functions and generally provide one or more of the following functional properties:

1. Biogeochemical functions that improve water quality;

2. Hydrologic functions maintaining the water regime in a watershed (flood flow attenuation, decreasing erosion, and groundwater recharge); or

- 3. Food and habitat.
- D. Floodplains generally provide one or more of the following functional properties:
 - 1. Floodwater storage;
 - 2. Floodwater passage and the movement of high-velocity waters;
 - 3. Sediment storage and recruitment;
 - 4. Food and habitat;
 - 5. Nutrient sink and/or source; or
 - 6. Groundwater recharge and discharge.

E. Habitat for wildlife consists of the arrangement of food, water, cover, and space. Wildlife habitat generally includes one or more of the following functional properties:

- 1. Reproduction and/or nesting;
- 2. Resting and refuge;
- 3. Foraging for food; or
- 4. Dispersal and migration.

F. Some functions require larger areas, which may not be achievable due to existing development and construction constraints, especially in urban areas. In these instances, adjustments to the minimum standards to accommodate such constraints may be necessary. Where adjustments may be necessary, reductions of standards should be offset by enhancement, restoration or preservation measures which replace the lost functions or values or strengthen other functional values if replacement is not possible.

15.27.505 Water typing system.

For purposes of this chapter, the city of Yakima hereby adopts a stream, lake and pond typing system, for those features designated as critical areas in YMC 15.27.502, as follows:

A. Type 1 waters are those waters, within their ordinary high water mark (OHWM), meeting the criteria as "shorelines of the state" and "shorelines of statewide significance" under RCW Chapter 90.58. Waters associated with Type 1 waters as defined in RCW Chapter 90.58 are not included;

B. Type 2 waters are those perennial, salmonid-bearing surface water features which require protection due to the nature of their contributions to the functional properties listed in YMC 15.27.504 and are considered "streams, lakes and/or ponds of local importance," as listed in Appendix B of this title;

C. Type 3 waters include all perennial, non-salmonid bearing surface water features within the city of Yakima not classified as Type 1 or 2. (See YMC 15.27.200, "perennial stream");

D. Type 4 waters are all non-fish-bearing intermittent surface water features within the city of Yakima not classified as Type 1, 2 or 3. (See YMC 15.27.200, "intermittent stream");

E. Type 5 waters are all ephemeral streams within the city of Yakima not classified as Type 1, 2, 3 or 4. Type 5 waters are not regulated as fish and wildlife habitat conservation areas. (See YMC 15.27.200, "ephemeral stream"); and

F. Lakes and Ponds.

1. Lakes and ponds not designated as a shoreline that receive water from the OHWM of a Type 2, 3, or 4 stream shall have the same surface water type as the highest stream type from which the lake or pond receives water.

2. Natural lakes and ponds, not designated as a shoreline, that do not receive water from the OHWM of a Type 1, 2, 3, or 4 stream shall be Type 3 ponds.

15.27.507 Maps.

Certain fish and wildlife habitat conservation areas have been inventoried and are depicted on a series of paper and electronic maps. The maps do not officially define the extent or characteristics of specific critical areas, but rather the potential physical boundaries and characteristics. Maps may be both regulatory and nonregulatory in nature as described below:

A. Regulatory maps include any floodway or floodplain identified as a special flood hazard area by the Federal Emergency Management Agency (FEMA) as identified in the flood insurance studies (FIRMs).

B. Informational maps indicate the approximate presence, location and/or typing of the potential critical area. Informational maps include, but are not limited to, the following:

- 1. Wetlands;
- 2. Streams;
- 3. Channel migration zone; and

4. Species and habitats of local importance. Note: This map will be generated at such a time when the city of Yakima formally adopts a species or habitat of local importance.

C. Other nonregulatory information sources include maps or other data sources, but are not limited to:

- 1. Comprehensive flood hazard management plans;
- 2. Soil survey of the city of Yakima;
- 3. Surface geologic maps;
- 4. Historic and current aerial photo series; and
- 5. Geohydraulic studies—geologic cross-sections showing aquifers and confining units.

Article III. General Development Standards

15.27.508 Prohibited uses.

The following uses and activities are prohibited within fish and wildlife habitat conservation areas:

A. Storage, handling, and disposal of material or substances that are dangerous or hazardous with respect to water quality and life safety;

B. The placement of mining tailings, spoilage, and mining waste materials, except for that associated with the mining of gravel;

C. The draining or filling of a wetland, lake or pond, except as provided for in YMC 15.27.519;

D. The removal and transport of material for fill outside of the stream corridor;

E. Site runoff storage ponds, holding tanks and ponds, and other similar waste disposal facilities. Note: This provision does not include regional wastewater plant facilities, collection pipes, septic systems approved by a local or state agency, and other related facilities;

F. Solid waste disposal sites;

G. Automobile wrecking yards;

H. Fill for the sole purpose of increasing land area within the stream corridor;

I. Uses located within the floodway fringe that are listed in YMC 15.27.410; and

J. Uses located within the floodway that are listed in YMC 15.27.412.

15.27.509 General policies and standards.

The following policies and standards shall apply to any development, construction, or use carried out within a designated fish and wildlife habitat conservation area:

A. The ordinary high water mark of a stream or lake, and the edge of a wetland, shall be marked on the ground before any development, construction, or use is initiated;

B. Existing vegetation and any vegetative species pertinent to the critical area identified on the project site within the stream corridor shall only be disturbed to the minimum extent possible;

C. Nesting areas and other sensitive habitat identified within a stream corridor shall be disturbed to the minimum extent possible;

D. Projects within the stream corridor shall be scheduled to occur at times and during seasons having the least impact to spawning, nesting, or other sensitive wildlife activities. Scheduling recommendations from the appropriate state and/or federal agency may be considered;

E. Developments that obtain a stormwater permit approved by a local, state or federal agency and transportation projects using the Eastern Washington stormwater manual are exempt from:

1. Excavation, grading, cut/fills, compaction, and other modifications which contribute to erosion of soils shall be confined to the minimum necessary to complete the authorized work and avoid increased sediment load;

2. The removal of ground-cover vegetation, excavation, and grading shall be scheduled for periods when soils are the least vulnerable to erosion, compaction and movement unless suitable protective measures are used to prevent erosion;

3. Increases in impervious surface area, compaction of soil, changes in topography, and other modifications of land within a stream corridor shall provide on-site facilities for detention, control, and filtration if potential increases have been identified to occur;

4. The discharge point for controlled stormwater runoff shall be designed and constructed to avoid erosion; and

5. Matting or approved temporary ground cover shall be used to control erosion until natural vegetative ground cover is successfully established;

F. Development, construction, and uses shall not directly or indirectly degrade surface water and groundwater through the introduction of nutrients, fecal coliform, toxins, and other biochemical substances;

G. Prior to the approval of development, construction, or uses within a designated stream corridor, any existing source of biochemical or thermal degradation identified as originating on the project property shall be corrected;

H. Facilities which use fertilizers, pesticides or herbicides shall use landscaping, low-risk products, application schedules, and other protective methodology to minimize the surface and subsurface transfer of biochemical materials into the stream corridor;

I. Modifications to natural channel gradient, channel morphology, drainage patterns, and other stream features shall not permanently alter or obstruct the natural volume or flow of surface waters;

J. Development, construction, or uses within the stream corridor shall not alter or divert flood flows, cause channel shift, erosion, and increase or accelerate the flooding of upstream or downstream flood hazard areas;

K. Structures placed in close proximity to the outer edge of bends in stream channels shall be located to minimize the hazard from stream undercutting and stream bank erosion stemming from potential future stream migration;

L. The Department of Ecology and adjacent communities shall be notified prior to any alteration or relocation of a watercourse and evidence of such notification shall be submitted to the Federal Emergency Management Agency Insurance Administrator through appropriate notification means;

M. Maintenance shall be provided for the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished;

N. Development, construction, or uses within the fish and wildlife habitat conservation area shall be mitigated using mitigation sequencing as outlined in YMC 15.27.307;

O. Development shall not obstruct, cut off, or isolate stream corridor features;

P. Nothing in these regulations shall constitute authority of any person to trespass or in any way infringe upon the rights of private ownership;

Q. If archaeological resources are uncovered during excavation, developers and property owners shall immediately stop work and notify the city of Yakima, the Washington State Office of Archaeology and Historic Preservation and any affected Indian nation. Archaeological sites are subject to RCW Chapters 27.44 and 27.53. Development or uses that may impact such sites shall comply with WAC Chapter 25-48, Archaeological Excavation and Removal Permit;

R. Projects located within the floodway must meet the requirements of YMC 15.27.411; and

S. Any portion of the vegetative buffer temporarily damaged or disturbed as a result of construction activities (excluding approved permanent use areas) shall be repaired at the completion of construction using the reclamation found in YMC 15.27.521.

Article IV. Buffer Requirements

15.27.510 Vegetative buffers.

The establishment of a vegetative buffer system is necessary to protect the functions and values of streams, lakes, and ponds, (Table 27.5-1). Buffers associated with wetlands are listed in YMC 15.27.604.

A. Vegetative buffers shall be measured from the ordinary high water mark for streams, lakes, and ponds. The width of the buffer shall be determined according to the water type. Buffer width may be reduced through an adjustment permit process (YMC 15.27.317) using one of the following methods:

1. Where a legally established road or railway crosses a critical area buffer, the administrative official or designee may approve a modification of the minimum required buffer width to the waterward edge of the

improved road if a study submitted by the applicant and prepared by a qualified professional demonstrates that the part of the buffer on the upland side of the road sought to be reduced:

a. Does not provide additional protection of the waterbody; and

b. Provides insignificant biological, geological or hydrological buffer functions relating to the waterward portion of the buffer adjacent to the waterbody.

If the improved roadway corridor is wider than twenty feet, a study is not required.

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

a. The buffer has significant differences in characteristics that affect its habitat functions.

b. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the stream and decreased adjacent to the lower-functioning or less sensitive portion as demonstrated by a critical areas report from a qualified professional.

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

d. The buffer at its narrowest point is never less than three-quarters of the required width.

3. Buffer averaging to allow reasonable use of a parcel may be permitted when all of the following are met:

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

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

- c. The total buffer area after averaging is equal to the area required without averaging.
- d. The buffer at its narrowest point is never less than three-quarters of the required width.

B. The minimum buffer widths listed in Table 27.5-1 are the lowest possible buffer widths allowed by means of the adjustment process. Adjustments below the minimum buffer width must meet additional approval criteria as provided in YMC 15.27.317(C)(4).

D. The adequacy of these standard buffer widths presumes the existence of a relatively intact native vegetative community within the buffer zone that is deemed adequate to protect the identified critical area.

- 1. If the vegetation is degraded, then revegetation may be considered with any adjustment to the buffer width.
- 2. Where the use is being intensified, a degraded buffer may be revegetated to maintain the standard width.

Table 27.5-1	
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Water Type	Buffer Width—standard/(minimum adjustment)
Type 1 shoreline streams, lakes, and ponds	See Table 09.030-1 in YMC 17.09.030.P.
Туре 2	100'
Туре 3	50'
Type 4	25'

Water Type	Type Buffer Width—standard/(minimum adjustment)	
	No buffer standards. Type 5 streams are not regulated as streams, but may be protected under geologically hazardous area, floodplain, stormwater, construction, grading or other development regulations.	

Article V. Land Modification Development Standards

15.27.511 Roads, railroads, and parking.

The following provisions shall apply to the location and construction of roads, railroads, and parking within a designated fish and wildlife habitat conservation area:

A. Roads and railroads shall not be located within a fish and wildlife habitat conservation area except where it is necessary to cross the critical area or where existing development, topography, and other conditions preclude locations outside the critical area;

1. Construction of roadways across stream corridors shall be by the most direct route possible having the least impact to the fish and wildlife habitat conservation area;

2. Roadways that must run parallel to streams or wetlands shall be along routes having the greatest possible distance from stream or wetland and the least impact;

3. Roadways within the fish and wildlife habitat conservation area or its buffer shall not hydrologically obstruct, cut off or isolate stream corridor features, unless it is clearly unavoidable;

B. Material excavated from the roadway area to achieve the design grade shall be used as fill where necessary to maintain grade or shall be transported outside the fish and wildlife habitat conservation area;

C. Necessary fill to elevate roadways shall not impede the normal flow of floodwaters or cause displacement that would increase the elevation of flood waters such that it would cause properties not in the floodplain to be flood-prone;

D. Spoil, construction waste, and other debris shall not be used as road fill or buried within the fish and wildlife habitat conservation area;

E. Bridges and water-crossing structures shall not constrict the stream channel or impede the flow of ordinary high water, sediment, and woody debris;

F. The preservation of natural stream channels and drainage ways shall be preferred over the use of culverts. Where culverts are the preferred method, large, natural bottom culverts, multiplate pipes, and bottomless arches are preferred;

G. The alignment and slope of culverts shall parallel and match the natural flow of streams or drainage ways and shall be sized to accommodate the volume, flow and velocity of ordinary high water and shall terminate on stable, erosion-resistant materials;

H. Where fish are present, culverts shall be designed and constructed to specifications provided through the Department of Fish and Wildlife;

I. At least one end of a wood stringer bridge shall be anchored to prevent the bridge from being washed away during a high water event;

J. Roads must be designed and constructed using established flood-resistant design and construction methods when the road is possibly subject to flood water damage; and

K. Roads and bridges within floodways must meet the requirements of YMC 15.27.411(C) and (G), unless an engineer can demonstrate another appropriate method.

15.27.512 Utility transmission lines and facilities.

The following provisions shall apply to the location, construction, and installation of utility transmission lines (such as those for wastewater, water, communication, natural gas) within a designated fish and wildlife habitat conservation area:

A. Utility transmission lines shall be permitted within the stream corridor only where it is necessary to cross the corridor or where development, topography, and other conditions preclude locations outside the stream corridor.

B. Utility transmission lines across stream corridors shall be by the most direct route possible having the least impact to the stream corridor.

C. The construction of utility transmission lines within a stream corridor shall be designed and located to provide a minimum disruption to the functional properties.

D. Utility lines under streams and wetlands shall be placed in a sleeve casing to allow easy replacement or repair with minimal disturbance to the stream corridor.

E. Buried utility transmission lines crossing a stream corridor shall be buried a minimum of four feet below the maximum scour or one-third of the bankfull depth of the waterway, whichever is greater, and for a similar depth below any associated floodway and floodplain to the maximum extent of potential channel migration as determined by hydrologic analysis.

F. Wherever possible, new aboveground installations shall use existing bridges or pole facilities.

G. Aboveground electrical support towers and other similar transmission structures shall be located as far upland as is reasonably practical.

H. Transmission support structures shall be located clear of high flood velocities and located in areas of minimum flood depth, which require the least amount of floodproofing.

I. Underground utility transmission lines shall be constructed so they do not alter, intercept or dewater groundwater patterns that support streams, wetlands and hyporheic flow.

J. All new and replacement water supply systems and wastewater systems within a special flood hazard area must meet the requirements of YMC 15.27.407(D) (regarding infiltration or discharge into or out of the system).

K. Utility transmission lines within the floodway fringe shall meet the standards of YMC 15.27.409(B).

L. Utility transmission lines within the floodway shall meet the standards of YMC 15.27.411(C).

15.27.513 Bank stabilization.

The following provisions shall apply to bank stabilization projects located outside of shoreline jurisdiction:

A. Bank stabilization projects shall be allowed only where there is evidence of erosion which clearly threatens existing property, structures, or facilities, and which stabilization will not jeopardize other upstream or downstream properties;

B. Stabilization projects shall be developed under the supervision of, or in consultation with, agencies or professionals with appropriate expertise;

C. Stabilization projects shall be confined to the minimum protective measures necessary to protect the threatened property;

D. The use of fill to restore lost land may accompany stabilization work, provided the resultant bank does not extend beyond the original ordinary high water mark, finished grades are consistent with abutting properties, a restoration plan is approved for the area, and the fill material is in compliance with YMC 15.27.519;

E. Stabilization projects shall use design, material, and construction alternatives that do not require high or continuous maintenance, and which prevent or minimize the need for subsequent stabilization of the shore's other segments;

F. Alternative Preferences. Vegetation, berms, bioengineering techniques, and other nonstructural alternatives which preserve the natural character of the bank shall be preferred over riprap, concrete revetments, bulkheads, breakwaters, and other structural stabilization, while riprap, rock or other natural materials shall be preferred over concrete revetments, bulkheads, breakwaters and other structural stabilization;

G. Applications to construct or enlarge dikes or levees shall meet the requirements of YMC 15.27.411(G);

H. Revetments and bulkheads shall be no higher than necessary to protect and stabilize the bank;

I. Breakwaters shall be constructed of floating or open-pile designs rather than fill, riprap, or other solid construction methods; and

J. All new flood control projects shall define maintenance responsibilities and a funding source for operations, maintenance and repairs for the life of the project.

15.27.514 Dredging and excavation.

The following provisions shall apply to dredging and excavation within a designated aquatic fish and wildlife habitat conservation area outside of shoreline jurisdiction:

A. Dredging in surface waters shall be allowed only where necessary:

- 1. Because of existing navigation needs;
- 2. Habitat improvement;
- 3. Maintenance; and
- 4. Construction of water-dependent uses.

B. Dredging and excavation shall be confined to the minimum area necessary to accomplish the intended purpose or use.

C. Hydraulic dredging or other techniques that minimize the dispersal and broadcast of bottom materials shall be preferred over agitation forms of dredging.

D. Curtains and other appropriate mechanisms shall be used to minimize widespread dispersal of sediments and other dredge materials.

E. Access to accomplish dredging or excavation shall be confined to the minimum area necessary to gain entry and shall be confined to locations with the least potential for site disturbance and damage.

F. Dredging and excavation shall be scheduled at times having the least impact to fish during spawning, nesting, and other identified natural processes.

G. Dredge spoils are also considered fill, and shall not be deposited within the waterbody except where such deposit is in accordance with approved procedures intended to preserve or enhance wildlife habitat, natural drainage, or other naturally occurring conditions.

15.27.515 Filling.

The following provisions shall apply to filling activities within a designated fish and wildlife habitat conservation area outside of shoreline jurisdiction:

A. Fill within surface waters or wetlands shall be allowed only where necessary in conjunction with waterdependent uses or an approved mitigation or restoration plan under YMC 15.27.307, 15.27.521, or 15.27.604. B. Fill for the purpose of increasing elevation may be permitted if it can be accomplished in a manner consistent with this chapter's policies.

C. Fill shall be the minimum necessary to accomplish the use or purpose and shall be confined to areas having the least impact to the fish and wildlife habitat conservation area. Other alternatives should be preferred over fill to elevate new homes in the floodplain, such as increasing foundation height or zero-rise methods such as piers, posts, columns, or other methods.

D. Fill in floodplains shall meet the requirements of Part Four, Flood Hazard Areas.

E. Unless site characteristics dictate otherwise, fill material within surface waters or wetlands shall be sand, gravel, rock, or other clean material, with a minimum potential to degrade water quality.

F. Fill placement shall be scheduled at times having the least impact to fish during spawning, nesting, and other identified natural processes.

G. Fill and finished surface material shall require low maintenance, provide high resistance to erosion, and prevent or control the migration of sediments and other material from the fill area to surrounding waterbodies, unless the Washington Department of Fish and Wildlife indicates other options are preferred.

H. Projects that propose fill shall make every effort to acquire fill on site (compensatory storage) where appropriate.

I. Fill should not obstruct, cut off, or isolate aquatic fish and wildlife habitat conservation areas.

15.27.516 Commercial mining of gravel.

The following provisions shall apply to the commercial mining of gravel within a designated fish and wildlife habitat conservation area outside of shoreline jurisdiction:

A. Prior to the authorization of a commercial gravel mining operation, the project proponent shall provide maps to scale which illustrate the following:

1. The extent to which gravel excavation and processing will affect or modify existing fish and wildlife habitat conservation areas, including existing riparian vegetation;

2. The location, extent and size in acreage of any pond, lake, or feature that will be created as a result of mining excavation;

3. The description, location, and extent of any proposed subsequent use that would be different from existing uses.

B. Wherever feasible, the operations and any subsequent use or uses shall not cause permanent impairment or loss of critical area functions and values. Mitigation shall be provided consistent with YMC 15.27.307, 15.27.521, or 15.27.604.

C. Any surface mining allowed within the floodway shall meet the standards of YMC 15.27.411(B).

D. Except where authorized by the city of Yakima in consultation with the State Department of Fish and Wildlife and Department of Ecology, the following shall apply:

1. The excavation zone for the removal of gravels shall be located a minimum of one hundred feet upland from the ordinary high water mark (OHWM) of a waterbody.

2. Equipment shall not be operated, stored, refueled, or provided maintenance within one hundred feet of the OHWM.

3. Gravel washing, rock-crushing, screening, or stockpiling of gravels shall not occur within one hundred feet of the OHWM.

E. Mining proposals shall be consistent with the Washington Department of Natural Resources Surface Mine Reclamation Standards (WAC Chapter 332-18, RCW Chapter 78.44).

15.27.517 Restoration.

The following guidelines shall apply to the restoration of disturbed sites resulting from development activities within a fish and wildlife habitat conservation area:

A. Development, construction, or uses shall include the timely restoration of disturbed features to a natural condition or to a stabilized condition that prevents degradation;

B. Large-scale projects that extend over several months shall be phased to allow restoration of areas where work or operations have been completed;

C. Restoration shall be scheduled to address precipitation, meltwater runoff, the growing season, and other seasonal variables that influence restoration and recovery;

D. Topography shall be finished to grades, elevations, and contours consistent with natural conditions in adjacent and surrounding areas;

E. Where existing development and construction prevent return of a site to its natural condition, sites may be finished to conditions comparable to surrounding properties provided suitable protective measures are used to prevent degradation of fish and wildlife habitat conservation areas;

F. Cut-and-fill slopes shall be stabilized at, or at less than, the normal angle of repose for the materials involved; and

G. For the replacement or enhancement of vegetation within fish and wildlife habitat conservation areas and their required vegetative buffers, native plant species shall be used unless a showing of good cause acceptable to the administrative official or designee is provided. Should good cause be shown, then self-maintaining or low-maintenance plant species compatible with the native vegetation shall be used in place of non-native and high-maintenance species.

Part Six. Wetlands

15.27.600 Purpose and intent.

The purpose and intent of the provisions protecting wetland critical areas is equivalent to the purpose and intent for YMC 15.27.500.

15.27.601 Designating and mapping.

A. Wetlands shall be delineated using the procedures outlines in the approved federal wetland delineation manual and applicable regional supplements.

B. Wetlands are all areas meeting the definition of wetlands as defined in YMC 15.27.200 and are hereby designated critical areas which are subject to this chapter, except the following:

- 1. Irrigation systems that create an artificial wetland; and
- 2. Areas where changes in irrigation practices have caused wetland areas to dry up.

C. The approximate location and extent of wetlands are shown on maps maintained by the city of Yakima. These maps may include information from the National Wetlands Inventory produced by the U.S. Fish and Wildlife Service and are to be used as a guide for the city of Yakima.

15.27.602 Protection approach.

Wetlands will be protected using the protection approach for fish and wildlife habitat conservation areas found in YMC 15.27.501. Wetlands and their functions will be protected using the standards found in Part Four.

15.27.603 Wetland functions and rating.

A. Wetlands are unique landscape features that are the interface between the aquatic and terrestrial environments. Wetlands provide the following functions:

1. Biogeochemical functions, which improve water quality in the watershed (such as nutrient retention and transformation, sediment retention, metals, and toxics retention and transformation).

2. Hydrologic functions, which maintain the water regime in a watershed, such as: flood flow attenuation, decreasing erosion, and groundwater recharge.

3. Food and habitat functions, which includes habitat for invertebrates, amphibians, anadromous fish, resident fish, birds, and mammals.

B. Wetlands shall be rated based on categories that reflect the functions and values of each wetland and shall be based on the criteria provided in the *Washington State Wetland Rating System for Eastern Washington*, revised October 2014 (Ecology Publication No. 14-06-030, or as revised) which are summarized below:

1. Category I wetlands are those that 1) represent a unique or rare wetland type; or 2) are more sensitive to disturbance than most wetlands; or 3) are relatively undisturbed and contain ecological attributes that are impossible to replace in a human lifetime; or 4) provide a high level of functions. Risk of any degradation to these wetlands must be avoided because their functions and values are too difficult to replace. Generally, these wetlands are not common and make up a small percentage of the wetlands in the region.

2. Category II wetlands are difficult, but not impossible, to replace and provide high levels of some functions. These wetlands occur more commonly than Category 1 wetlands, but still need a relatively high level of protection.

3. Category III wetlands are wetlands with a moderate level of functions and can often be adequately replaced with a well-planned mitigation project. These wetlands generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

4. Category IV wetlands have the lowest levels of functions and are often heavily disturbed. These are wetlands that should be able to be replaced and, in some cases, improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions and also need to be protected.

C. Wetlands shall be rated as they exist on the day of project application submission. Information regarding the original condition of illegally modified wetlands that cannot be discerned from aerial photographs or other reliable information sources shall use the highest appropriate points value within each missing data field of the Washington State Wetland Rating System for Eastern Washington: 2014 Update rating sheet to complete the rating.

15.27.604 Wetland Buffers

A. Buffer Requirements. The following buffer widths have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified professional using the *Washington State Wetland Rating System for Eastern Washington: 2014 Update* (Ecology Publication 14-06-030, or as revised). The adjacent land use intensity is assumed to be high.

1. For wetlands that score 5 points or more for habitat function, the buffers in Table 27.6-1 can be used if both of the following criteria are met:

a. A relatively undisturbed, vegetated corridor at least 100 feet wide is protected between the wetland and any other Priority Habitats as defined by the Washington State Department of Fish and Wildlife (http://wdfw.wa.gov/hab/phshabs.htm).

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.

Presence or absence of a nearby habitat must be confirmed by a qualified biologist. If no option for providing a corridor is available, Table 27.6-1 may be used with the required measures in Table 27.6-2 alone.

b. The measures in Table 27.6-2 are implemented, where applicable, to minimize the impacts of the adjacent land uses.

2. For wetlands that score 3-4 habitat points, only the measures in Table 27.6-2 are required for the use of Table 27.6-1.

3. If an applicant chooses not to apply the mitigation measures in Table 27.6-2, or is unable to provide a protected corridor where available, then Table 27.6-3 shall be used.

4. The buffer widths in Table 27.6-1 and 27.6-3 assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided.

Table 27.6-1: Wetland Buffer Requirements if Table 27.6-2 is implemented and corridor provided

	Buffer Width (feet) based on habitat score			
Wetland Category	3-4	5	6-7	8-9
Category 1: Based on total score	75	90	120	150
Category 1: Forested	75	90	120	150
Category 1: Bogs and Wetlands of High Conservation Value	190			
Category 1: Alkali	150			
Category II: Based on total score	75	90	120	150
Category II: Vernal Pool	150			
Category II: Forested	75	90	120	150
Category III (all)	60	90	120	150
Category IV (all)	40			

Disturbance	Required Measures to Minimize Impacts
Lights	Direct lights away from wetland
Noise	• Locate activity that generates noise away from wetland
	• If warranted, enhance existing buffer with native vegetation for plantings adjacent
	to noise source
	• For activities that generate relatively continuous, potentially disruptive noise, such
	as certain heavy industry or mining, establish an additional 10-feet heavily
	vegetated buffer strip immediately adjacent to the outer wetland buffer.
Toxic Runoff	• Route all new, untreated runoff away from wetland while ensuring wetland is not
	dewatered
	• Establish covenants limiting use of pesticides within 150-feet of wetland
	Apply integrated pest management
Stormwater	• Retrofit stormwater detention and treatment for roads and existing adjacent
Runoff	development
	• Prevent channelized flow from lawns that directly enters the buffer
	Use Low Intensity Development techniques
Changes in water	• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious
regime	surfaces and new lawns.
Pets and human	• Use privacy fencing OR plan dense vegetation to delineate buffer edge and to
disturbance	discourage disturbance using vegetation appropriate for the ecoregion
	• Place wetland and its buffer in a separate tract or protect with a conservation
	easement
Dust	Use best management practices to control dust

Table 27.6-2: Required measures to minimize impacts to wetlands

Table 27.6-3: Wetland Buffer Requirements	s if Table 27.6-2 is NOT implemented and corridor NOT provide	ed

	Buffer Width (feet) based on habitat score			
Wetland Category	3-4	5	6-7	8-9
Category 1: Based on total score	100	130	180	200
Category 1: Forested	100	130	180	200
Category 1: Bogs and Wetlands of High Conservation Value	250			
Category 1: Alkali	200			
Category II: Based on total score	100	130	180	200
Category II: Vernal Pool	200			
Category II: Forested	100	130	180	200
Category III (all)	80	130	180	200
Category IV (all)	50			

5. Increased Wetland Buffer Area Width. Buffer widths shall be increased on a case-by-case basis as determined by the administrative official when a larger buffer is necessary to protect wetland functions and values. This determination shall be supported by appropriate documentation showing that it is reasonably related to protection of the functions and values of the wetland. This documentation shall include, but not be limited to, the following criteria:

a. The wetland is used by a state or federally listed plant or animal species, or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or

b. The adjacent land is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or

c. The adjacent land has minimal vegetative cover or slopes greater than 30 percent.

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

a. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a "dual-rated" wetland with a Category 1 area adjacent to a lower-rated area.

b. The buffer is increased adjacent to the higher-functioning area of habitat or more-sensitive portion of the wetland and decreased adjacent to the lower-functioning or less-sensitive portion as demonstrated by a critical areas report from a qualified wetland professional.

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

d. The buffer at its narrowest point is never less than either ³/₄ of the required width or 75-feet for Category I and II, 50-feet for Category III, and 25-feet for Category IV, whichever is greater.

7. Averaging to *allow reasonable use* of a parcel may be permitted when **all** of the following are met:

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

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

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

d. The buffer at its narrowest point is never less than either ³/₄ of the required width or 75-feet for Category I and II, 50-feet for Category III, and 25-feet for Category IV, whichever is greater.

B. To facilitate long-range planning using a landscape approach, the Administrative Official may identify and preassess wetlands using the rating system and establish appropriate wetland buffer widths for such wetlands. The Administrative Official will prepare maps of wetlands that have been pre-assessed in this manner.

C. Measurement of Wetland Buffers. All buffers shall be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland. Buffers must be fully vegetated in order to be included in buffer area calculations. Lawns, walkways, driveways, and other mowed or paved areas will not be considered buffers or included in buffer area calculations.

D. Buffers on Mitigation Sites. All wetland mitigation sites shall have buffers consistent with the buffer requirements of this Chapter. Buffers shall be based on the expected or target category of the proposed wetland mitigation site.

E. Buffer Maintenance. Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive non-native weeds is required for the duration of the mitigation bond, YMC 15.27.605(10)(b)(i)(10).

F. Impacts to Buffers. Requirements for the compensation for impacts to buffers are outlined in YMC § 15.27.605.

G. Overlapping Critical Area Buffers. If buffers for two contiguous critical areas overlap (such as buffers for a stream and a wetland), the wider buffer applies.

H. Allowed Buffer Uses. The following uses may be allowed within a wetland buffer in accordance with the review procedures of this Chapter, 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:

1. Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

2. Passive recreation. Passive recreation facilities designed and in accordance with an approved critical area report, including:

a. Walkways and trails, provided that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent (25%) of the wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five (5) feet in width for pedestrian use only. Raised boardwalks utilizing non-treated pilings may be acceptable.

b. Wildlife-viewing structures.

3. Educational and scientific research activities.

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

5. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

6. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, provided that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column of surface water down through the soil column.

7. Enhancement of a wetland buffer through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate for that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

8. Repair and maintenance of non-conforming uses or structures, where legally established within the buffer, provided they do not increase their degree of nonconformity.

I. Signs and Fencing of Wetlands and Buffers.

1. Temporary markers. The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary "clearing limits" fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Administrative Official prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. Permanent signs. As a condition of any permit or authorization issued pursuant to this chapter, the Administrative Official may require the applicant to install permanent signs along the boundary of a wetland or buffer.

a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or other non-treated material of equal durability. Signs must be posted at an interval of one (1) every 50-feet, or one (1) per lot if the lot is less than 50-feet wide, and must be maintained by the property owner in perpetuity. The signs shall be worded as follows or with alternative language approved by the Administrative Official:

Protected Wetland Area Do Not Disturb Contact the City of Yakima Regarding Uses, Restrictions, and Opportunities for Stewardship

b. The provisions of Subsection (a) may be modified as necessary to assure protection of sensitive features or wildlife.

3. Fencing.

a. The applicant shall be required to install a permanent fence around the wetland or buffer when domestic grazing animals are present or may be introduced on site.

b. Fencing installed as part of a proposed activity, or as required in this Subsection, shall be designed so as not to interfere with species mitigation, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.

15.27.605 Compensatory Mitigation

A. Mitigation Sequencing. Before impacting any wetland or its buffer, an applicant shall demonstrate that the following actions have been taken. Actions are listed in the order of preference:

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

2. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.

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

4. Reduce or eliminate the impact over time by preservation and maintenance operations.

- 5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.
- 6. Monitor the required compensation and take remedial or corrective measures when necessary.

B. Requirements for Compensatory Mitigation:

1. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans—Version 1,* (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised), and *Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington)* (Publication #10-06-07, November 2010).

2. Mitigation ratios may also be determined using the credit/debit tool describe in "*Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report* (Ecology Publication #11-06-045, August 2012), consistent with subsection 8 of this Chapter.

3. Compensating for Lost or Affected Functions. Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:

a. The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington state watershed assessment plan or protocol; or

b. Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.

C. Approaches to Compensatory Mitigation. Mitigation for lost or diminished wetland and buffer functions shall rely on the approaches listed below.

1. Wetland mitigation banks. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the mitigation bank instrument. Use of credits from a wetland mitigation bank certified under Chapter 173-700 WAC is allowed if:

a. The approval authority determines that it would provide appropriate compensation for the proposed impacts; and

b. The impact site is located in the service area of the bank.

c. The proposed use of credits is consistent with the terms and conditions of the certified mitigation bank instrument.

d. Replacement ratios for projects using bank credits is consistent with replacement ratios specified in the certified mitigation bank instrument.

2. In-Lieu Fee Mitigation: Credits from an approved in-lieu-fee program may be used when all of the following apply:

a. The approval authority determines that it would provide environmentally appropriate compensation for the proposed impacts.

b. The proposed use of credits is consistent with the terms and conditions of the approved in-lieu-fee program instrument.

c. Projects using in-lieu-fee credits shall have debits associated with the proposed impacts calculated by the applicant's qualified wetland professional using the credit assessment method specified in the approved instrument for the in-lieu-fee program.

d. The impacts are located within the service area specified in the approved in-lieu-fee instrument.

3. Permittee-responsible mitigation. In this situation, the permittee performs the mitigation after the permit is issued and is ultimately responsible for implementation and success of the mitigation. Permittee-responsible mitigation may occur at the site of the permitted impacts or at an off-site location within the same watershed. Permittee-responsible mitigation shall be used only if the applicant's qualified wetland professional demonstrates to the approval authority's satisfaction that the proposed approach is ecologically preferable to use of a bank or ILF program, consistent with the criteria in this section.

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

1. Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into:

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

b. Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.

2. Establishment (Creation): The manipulation of the physical, chemical, or biological characteristics of a site to develop a wetland on an upland or deepwater site where a wetland did not previously exist. Establishment results in a gain in wetland acres. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species. If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the approval authority may authorize creation of a wetland and buffer upon demonstration by the applicant's qualified wetland professional that:

a. The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that creation of a wetland at the site will not likely cause hydrologic problems elsewhere;

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

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

3. Enhancement. The manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement,

flood water retention, or wildlife habitat. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Activities typically consist of planting vegetation, controlling non-native or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these activities. Applicants proposing to enhance wetlands or associated buffers shall demonstrate how the proposed enhancement will increase the wetland's/buffer's functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.

4. Protection/Maintenance (Preservation). Removing a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This includes the purchase of land or easements, or repairing water control structures or fences. This term also includes activities commonly associated with the term preservation. Preservation does not result in a gain of wetland acres. Permanent protection of a Category I or II wetland and associated buffer at risk of degradation can be used only if:

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

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

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

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

ii. Rare or irreplaceable wetland type (for example, bogs, mature forested wetlands, estuarine wetlands) or aquatic habitat that is rare or a limited resource in the area;

iii. The presence of habitat for priority or locally important wildlife species; or also list has provides biological and/or hydrological connectivity;

iv. Provides biological and/or hydrological connectivity;

v. Priority sites in an adopted watershed plan.

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

e. The approval authority may approve other legal and administrative mechanisms in lieu of a conservation easement if it determines they are adequate to protect the site.

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

E. Location of Compensatory Mitigation. Compensatory mitigation actions shall generally be conducted within the same sub-drainage basin and on the site of the alteration except when the applicant can demonstrate that off-site mitigation is ecologically preferable. The following criteria will be evaluated when determining whether the proposal is ecologically preferable. When considering off-site mitigation, preference should be given to using alternative mitigation, such as a mitigation bank, an in-lieu-fee program, or advance mitigation.

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

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

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

4. Off-site locations shall be in the same sub-drainage basin unless:

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

b. Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;

c. Fees are paid to an approved in-lieu fee program to compensate for the impacts.

d. The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland.

F. Timing of Compensatory Mitigation.

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

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

Category and Type of Wetland	Creation or Re-establishment	Rehabilitation	Enhancement
Category I: Bog, Natural Heritage Site	Not considered possible	Case by Case	Case by Case
Category I: Mature Forested	6:1	12:1	24:1
Category I: Based on functions	4:1	8:1	16:1
Category II	3:1	6:1	12:1
Category III	2:1	4:1	8:1
Category IV	1.5:1	3:1	6:1

G. Wetland Mitigation Ratios:

Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or re-establishment. See Table 1b, *Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance--Version 1*, (Ecology Publication #06-06-011a, Olympia, WA, March 2006 or as revised). See also Paragraph D.4 for more information on using preservation as compensation.

H. Credit/Debit Method. To more fully protect functions and values, and as an alternative to the mitigation ratios found in the joint guidance "*Wetland Mitigation in Washington State Parts I and II*" (Ecology Publication #06-06-011a-b, Olympia, WA, March, 2006), the administrator may allow mitigation based on the "credit/debit" method developed by the Department of Ecology in "*Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report*" (Ecology Publication #11-06-015, August 2012, or as revised).

I. Compensatory Mitigation Plan. When a project involves wetland and/or buffer impacts, a compensatory mitigation plan prepared by a qualified professional shall be required, meeting the following minimum standards:

1. Wetland Critical Area Report. A critical area report for wetlands must accompany or be included in the compensatory mitigation plan and include the minimum parameters identified in YMC 15.27.314 and 15.27.315.B.

2. Compensatory Mitigation Report. The report must include a written report and plan sheets that must contain, at a minimum, the following elements. Full guidance can be found in *Wetland Mitigation in Washington State–Part 2: Developing Mitigation Plans* (Version 1) (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised).

a. The written report must contain, at a minimum:

i. The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the compensatory mitigation report; a description of the proposal; a summary of the impacts and proposed compensation concept; identification of all the local, state, and/or federal wetland-related permit(s) required for the project; and a vicinity map for the project.

ii. Description of how the project design has been modified to avoid, minimize, or reduce adverse impacts to wetlands.

iii. Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding lands uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on Wetland Ratings, YMC 15.27.603.

iv. Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are NOT undertaken (i.e., how would this site progress through natural succession?).

v. Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Include illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions

vi. A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands.

vii. A description of the proposed mitigation construction activities and timing of activities.

viii. Performance standards (measurable standards for years post-installation) for upland and wetland communities, a monitoring schedule, and a maintenance schedule and actions proposed by year.

ix. A discussion of ongoing management practices that will protect wetlands after the development project has been implemented, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands).

x. A bond estimate for the entire compensatory mitigation project, including the following elements: site preparation, plant materials, construction materials, installation oversight, maintenance twice per year for up to five (5) years, annual monitoring field work and reporting, and contingency actions for a maximum of the total required number of years for monitoring.

xi. Proof of establishment of Notice on Title for the wetlands and buffers on the project site, including the compensatory mitigation areas.

b. The scaled plan sheets for the compensatory mitigation must contain, at a minimum:

i. Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions.

ii. Existing topography, ground-proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also

existing cross-sections of on-site wetland areas that are proposed to be impacted, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation.

iii. Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes.

iv. Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this Chapter.

v. A planting plan for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species by community type, and timing of installation.

3. Buffer Mitigation Ratios. Impacts to buffers shall be mitigated at a minimum 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

4. Protection of the Mitigation Site. The area where the mitigation occurred and any associated buffer shall be located in a critical area tract or a conservation easement consistent with YMC 15.27 Part six.

5. Monitoring. Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met, but not for a period less than five years. If a scrub-shrub or forested vegetation community is proposed, monitoring may be required for ten years or more. The project mitigation plan shall include monitoring elements that ensure certainty of success for the project's natural resource values and functions. If the mitigation goals are not obtained within the initial five-year period, the applicant remains responsible for restoration of the natural resource values and functions until the mitigation goals agreed to in the mitigation plan are achieved.

6. Advance Mitigation. Mitigation for projects with pre-identified impacts to wetlands may be constructed in advance of the impacts if the mitigation is implemented according to federal rules, state policy on advance mitigation, and state water quality regulations consistent with *Interagency Regulatory Guide: Advance Permittee-Responsible Mitigation* (Ecology Publication #12-06-015, Olympia, WA, December 2012).

7. Alternative Mitigation Plans. The administrative official or designee may approve alternative wetland mitigation plans that are based on best available science, such as priority restoration plans that achieve restoration goals identified in the SMP. Alternative mitigation proposals must provide an equivalent or better level of protection of wetland functions and values than would be provided by the strict application of this chapter. The administrative official or designee shall consider the following for approval of an alternative mitigation proposal:

a. The proposal uses a watershed approach consistent with *Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington)* (Ecology Publication #10-06-07, November 2010).

b. Creation or enhancement of a larger system of natural areas and open space is preferable to the preservation of many individual habitat areas.

c. Mitigation according to YMC 15.27.605(D) is not feasible due to site constraints such as parcel size, stream type, wetland category, or geologic hazards.

d. There is clear potential for success of the proposed mitigation at the proposed mitigation site.

e. The plan shall contain clear and measurable standards for achieving compliance with the specific provisions of the plan. A monitoring plan shall, at a minimum, meet the provisions in YMC 15.27.605(I).

f. The plan shall be reviewed and approved as part of overall approval of the proposed use.

g. A wetland of a different type may be justified based on regional needs or functions and values; the replacement ratios may not be reduced or eliminated unless the reduction results in a preferred environmental alternative.

h. Mitigation guarantees shall meet the minimum requirements as outlined in YMC 15.27.605(I)(2)(a)(viii).

i. Qualified professionals in each of the critical areas addressed shall prepare the plan.

j. The City may consult with agencies with expertise and jurisdiction over the critical areas during the review to assist with analysis and identification of appropriate performance measures that adequately safeguard critical areas.

Part Seven. Geologically Hazardous Areas

15.27.700 Purpose and intent.

A. Geologically hazardous areas include those areas susceptible to erosion, sliding, earthquake, or other geological events. These areas pose a threat to the health and safety of the city of Yakima's citizens when incompatible development is sited in significantly hazardous areas. When mitigation is not feasible, development within geologically hazardous areas should be avoided.

B. The purpose of this section is to:

1. Minimize risks to public health and safety and reduce the risk of property damage by regulating development within geologically hazardous areas;

- 2. Maintain natural geological processes while protecting new and existing development; and
- 3. Establish review procedures for development proposals in geologically hazardous areas.

C. This section does not imply that land outside mapped geologically hazardous areas or uses permitted within such areas will be without risk. This section shall not create liability on the part of the city of Yakima, any officer, or employee thereof for any damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

15.27.701 Mapping and designation.

A. Geologically hazardous areas are areas that are susceptible to one or more of the following, based on WAC 365-190-080(4)(b) through (h):

- 1. Erosion hazards;
- 2. Landslide hazards, which include:
 - a. Oversteepened slopes;
 - b. Alluvial fan/flash flooding;
 - c. Avalanche; and
 - d. Channel migration zones and stream undercutting;
- 3. Seismic hazards (referred to below as earthquake hazards); and
- 4. Volcanic hazards.

B. The approximate location and extent of erosion hazard areas are shown on the city of Yakima's critical area map titled "Erosion Hazard Areas of the City of Yakima." Erosion hazard areas were identified by using the "Soil Survey of Yakima County Area, Washington" and the "Soil Survey of Yakima Indian Reservation Irrigated Area, Washington, Part of Yakima County."

C. The approximate location and extent of geologically hazardous areas are shown on the city's critical area map titled "Geologically Hazardous Areas of the City of Yakima." The following geologically hazardous areas have been mapped and classified using the criteria found in WAC 365-190-120:

1. Landslide Hazard Areas (LS). These include places where landslides, debris flows, or slumps have occurred.

a. High risk (LS3) is defined as areas that are presumed to have had a landslide, debris flow, or slump within 10,000 years or less.

b. Intermediate risk (LS2) is defined as areas where landslides, debris flows, or slumps are older than ten thousand years, but are still capable of movement.

c. Low risk areas are defined as areas unlikely to fail. These areas are unlabeled and combined with other low risk categories.

2. Oversteepened Slope Hazard Areas (OS). These include areas with slopes steep enough to create a potential problem.

a. High risk areas (OS3) are defined as having a high potential to fail, include slopes greater than forty percent, and consist of areas of rock fall, creep, and places underlain with unstable materials.

b. Intermediate risk areas (OS2) are defined as areas less likely to fail but are still potentially hazardous. This category includes slopes between fifteen and forty percent.

c. Low risk areas are defined as areas unlikely to fail. These areas are unlabeled and combined with other low risk categories.

3. Alluvial Fan/Flash Flooding Hazard Areas (AF). These areas include locations where flash floods can occur and are often associated with inundation by debris from flooding. These areas may include:

- a. Alluvial fans;
- b. Canyons;
- c. Gullies; and
- d. Small streams where catastrophic flooding can occur.

4. Avalanche Risk Hazard Areas (AR). Areas of avalanche hazards are limited to areas near Cascade Crest, which are currently located outside the city of Yakima's UGA.

5. Stream Undercutting Hazard Areas (SU). These areas are confined to banks near main streams and rivers where undercutting of soft materials may result.

a. High risk areas (SU3) include steep banks of soft material adjacent to present stream courses.

b. Intermediate risk areas (SU2) are banks along the edge of a floodplain but away from the present river course.

c. Low risk areas (SU1) are unlabeled and combined with other low risk areas on the maps.

6. Earthquake Activity Hazard Areas (EA). Recorded earthquake activity in the city of Yakima is mostly marked by low magnitude events and thus low seismic risk. The city of Yakima's low risk areas are unlabeled and combined with other low risk hazards.

7. Suspected Geologic Hazard Areas (SUS). These are areas for which detailed geologic mapping is deficient but preliminary data indicate a potential hazard may exist. No risk assessment (1-2-3) is given for these areas. Most are probably OS or LS hazards.

8. Risk Unknown Hazard Areas (UNK). This category is limited to areas where geologic mapping is lacking or is insufficient to make a determination. All of these areas are associated with other classified geologic hazards.

D. Volcanic hazard areas are not mapped but are defined as areas subject to pyroclastic (formed by volcanic explosion) flows, lava flows, and inundation by debris flows, mudflows or related flooding resulting from volcanic activity. Volcanic hazard areas in the city of Yakima are limited to pyroclastic (ash) deposits. No specific protection requirements are identified for volcanic hazard areas.

15.27.702 Geologically hazardous areas protection approach.

The geologically hazardous areas protection approach can be met by following the guidelines below and by implementing the appropriate sections of the Building Code as adopted in YMC Title 11.

A. Erosion Hazard Areas. Protection measures for erosion hazard areas will be accomplished by implementing the regulatory standards for erosion and drainage control required under YMC Title 11, building code. YMC Title 11 requirements can be met by the application of the Best Management Practices (BMPs) in the *Stormwater Management Manual for Eastern Washington* (Ecology publication number 04-10-076, or most recent version); equivalent manual adopted by the city of Yakima; or any other approved manual deemed appropriate by the administrative official.

B. Landslide Hazard Areas. Protection measures for landslide hazard areas will be accomplished through the review process of YMC 15.27.703 by implementing the development standards of YMC 15.27.704.

C. Alluvial Fan/Flash Flooding Hazard Areas. Protection measures for alluvial fan/flash flooding hazard areas will be accomplished through the review process of YMC 15.27.703.

D. Stream Undercutting Hazard Areas. Protection measures for stream undercutting hazard areas will be accomplished by critical areas review for flood hazards, and streams.

E. Avalanche Hazard Areas. This condition is outside the city of Yakima's UGA and, therefore, does not apply.

F. Oversteepened Slope Hazard Areas. Protection measures for oversteepened slope hazard areas will be accomplished through the review process of YMC 15.27.703, by implementing the development standards of YMC 15.27.704.

G. Earthquake/Seismic Hazard Area Protection Standards. Protection measures for earthquake/seismic hazard areas will be accomplished by implementing the appropriate sections of the Building Code as adopted in YMC Title 11.

H. Suspected Geologic Hazard Areas and Risk Unknown Hazard Areas. Protection measures for suspected geologic hazard areas and risk unknown hazard areas will be accomplished through the review process of YMC 15.27.703 and by implementing the development standards of YMC 15.27.704.

15.27.703 Development review procedure for geologically hazardous areas.

A. The administrative official shall make a determination of hazard to confirm whether the development or its associated facilities (building site, access roads, limits of grading/excavation/filling, retaining walls, septic drainfields, landscaping, etc.) are located:

1. Within a mapped geologically hazardous area;

2. Adjacent to or abutting a mapped geologically hazardous area and may result in or contribute to an increase in hazard, or pose a risk to life and property on or off the site;

3. Within a distance from the base of an adjacent landslide hazard area equal to the vertical relief of said hazard area; or

4. Within the potential run-out path of a mapped avalanche hazard.

B. Developments that receive an affirmative determination of hazard by the administrative official under subsection A of this section must conduct a geologic hazard report as provided in YMC 15.27.315(C), which may be part of a geotechnical report required below.

1. If the geologic hazard report determines that no hazard exists or that the project area lies outside the hazard, then no geologic hazard review is needed.

2. The administrative official is authorized to waive further geologic hazard review for oversteepened slopes on the basis that the hazards identified by the geologic hazard report will be adequately mitigated through conditions applied to a grading or construction permit.

C. Developments that receive an affirmative determination of hazard, but do not meet the provisions of subsection (B)(1) or (B)(2) of this section, must:

1. Obtain a critical areas development authorization under Part Three;

2. Submit a geotechnical report that is suitable for obtaining grading and construction permits that will be required for development:

a. The geotechnical report shall incorporate a submitted assessment which includes the design of all facilities;

b. A description and analysis of the risk associated with the measures proposed to mitigate the hazards; and

- c. Ensure the public safety, and protect property and other critical areas; and
- 3. Be consistent with YMC 15.27.704.

15.27.704 General protection requirements.

A. Grading, construction, and development and their associated facilities shall not be located in a geologically hazardous area, or any associated setback for the project recommended by the geotechnical report, unless the applicant demonstrates that the development is structurally safe from the potential hazard, and that the development will not increase the hazard risk on site or off site.

B. Development shall be directed toward portions of parcels, or parcels under contiguous ownership, that are at the least risk of hazard in preference to lands with higher risk, unless determined to be infeasible in the geotechnical report.

C. The geotechnical report shall incorporate methods to ensure that education about the hazard and any recommended buildable area for future landowners is provided.

D. The applicable requirements of grading and construction permits for developments in hazardous areas must be included in the development proposal and geotechnical report.

Part Eight. Critical Aquifer Recharge Areas (CARA)

15.27.800 Purpose and intent.

A. The Growth Management Act (RCW Chapter 36.70A) requires local jurisdictions to protect areas with a critical recharging effect on aquifers used for potable water or areas where drinking aquifers are vulnerable to contamination. These areas are referred to as critical aquifer recharge areas (CARA) in this section.

B. Potable water is an essential life-sustaining element and much of the city of Yakima's drinking water comes from groundwater supplies. Once groundwater is contaminated it can be difficult and costly to clean. In some cases, the quality of groundwater in an aquifer is inextricably linked to its recharge area.

C. The intent of this part is to:

1. Preserve, protect, and conserve the city of Yakima's CARA from contamination; and

2. Establish a protection approach that emphasizes the use of existing laws and regulations while minimizing the use of new regulations.

D. It is not the intent of this part to:

1. Regulate everyday activities (including the use of potentially hazardous substances that are used in accordance with state and federal regulations and label specifications);

2. Enforce or prevent illegal activities;

3. Regulate land uses that use or store small volumes of hazardous substances (including in-field agricultural chemical storage facilities, which do not require permits, or are already covered under existing state, federal, or county review processes and have detailed permit review);

4. Establish additional review for septic systems, which are covered under existing city of Yakima review processes;

5. Establish additional review for stormwater control, which is covered under existing review processes and has detailed permit review; or

6. Require review for uses that do not need building permits and/or zoning review.

The above items are deemed to have small risks of CARA contamination or are beyond the development review system's ability to control.

15.27.810 Maps and Reference Documents.

A. Mapping Methodology. The CARA is depicted in the map titled "Critical Aquifer Recharge Areas of the City of Yakima" located within the city of Yakima's 2017 Comprehensive Plan 2040. The CARA map was developed through a geographic information system (GIS) analysis using the methodology outlined in the "*Critical Aquifer Recharge Areas Guidance Document*" (Morgan 2005). The approximate location and extent of critical aquifer recharge areas are depicted on the above-mentioned map, and are to be used solely as a guide for the city. The CARA map estimates areas of moderate, high, and extreme susceptibility to contamination, as well as wellhead protection areas. In characterizing the hydrogeologic susceptibility of these recharge areas with regard to contamination, the following physical characteristics were utilized:

- 1. Depth to ground water;
- 2. Soil (texture, permeability, and contaminant attenuation properties);
- 3. Geologic material permeability; and
- 4. Recharge (amount of water applied to the land surface, including precipitation and irrigation).

B. Wellhead Protection Areas. The CARA map includes those wellhead protection areas for which the city of Yakima has maps. Wellhead protection areas are required for all Class A public water systems in the state of Washington. The determination of a wellhead protection area is based upon the time of travel of a water particle from its source to the well. Water purveyors collect site-specific information to determine the susceptibility of the water source to surface sources of contamination. Water sources are ranked by the Washington State Department of Health with a high, moderate, or low susceptibility to surface contamination. Wellhead protection areas are defined by the boundaries of the ten-year time of ground water travel, in accordance with WAC 246-290-135. For purposes of this chapter, all wellhead protection areas shall be considered highly susceptible.

C. Guidance Documents. The latest guidance documents shall be consulted when updating CARA maps:

- 1. U.S. Department of Agriculture Soil Survey: http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
- 2. Washington Department of Health Group A and B Maps: https://fortress.wa.gov/doh/eh/maps/SWAP/index.html

3. Soil Survey of Yakima County Area, Washington (report only): http://nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/washington/yakimaWA1985/yakimaWA1985-I.pdf

4. City of Yakima Wellhead Protection Plan: <u>http://www.yakimacounty.us/669/City-of-Yakima-Wellhead-Protection-Plan</u>

5.Hydrogeologic Framework of Sedimentary Deposits in Six Structural Basins, Yakima River Basin, Washington: http://pubs.usgs.gov/sir/2006/5116/pdf/sir20065116_plate4.pdf and Yakima Basin plate
http://pubs.usgs.gov/sir/2006/5116/pdf/sir20065116_plate4.pdf Protection approach.
A. Classification and Rating of Critical Aquifer Recharge Areas. To promote consistent application of the standards and requirements of this section, Critical Aquifer Recharge Areas within the City shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance.

1. Critical Aquifer Recharge Areas Classification. Critical aquifer recharge areas are those areas with a critical recharging effect on aquifers used for potable water. Wellhead protection involves the management of activities that have a potential to degrade the quality of groundwater produced by a supply well. The City is classified into four wellhead protection zones that are based on proximity to and travel time of groundwater to Group A and Group B water source wells within the City limits, and are designated using guidance from the Washington Department of Health Wellhead Protection Program pursuant to Chapter 246-290 WAC.

a. Wellhead Protection Zone 1 represents the land area overlying the six-month time-of-travel zone of any Group A water source well and/or land area overlying any Group B wellhead protection area.

b. Wellhead Protection Zone 2 represents the land area that overlies the one-year time-of-travel zone of any Group A water source well, excluding the land area contained within Wellhead Protection Zone 1.

c. Wellhead Protection Zone 3 represents the land area that overlies the five-year and ten-year time-oftravel zones of any Group A water source well, excluding the land area contained within Wellhead Protection Zones 1 or 2.

d. Wellhead Protection Zone 4 represents all the remaining land area in the City not included in Wellhead Protection Zones 1, 2, or 3.

2, Classification of wellhead protection zones shall be determined in accordance with the City's Wellhead Protection Plan and the Washington State Department of Health, Office of Drinking Water, Source Water Assessment Program (SWAP) Mapping Application, which designates time of travel and wellhead protection zones that correspond to Zones 1 through 4, noted in subsection 1 above.

B. Prohibited Activities in Wellhead Protection Zones.

1. Land uses or activities for new development or redevelopment that pose a significant hazard to the City's groundwater resources, resulting from storing, handling, treating, using, producing, recycling, or disposing of hazardous materials or other deleterious substances, shall be prohibited in Wellhead Protection Zones 1 and 2. These land uses and activities include, but are not limited to:

- a. Large on-site sewage systems, as defined in WAC Chapter 246-272A;
- b. Hazardous liquid pipelines as defined in RCW Chapter 81.88;

c. Solid waste landfills or transfer stations, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste;

- d. Liquid petroleum refining, reprocessing, and storage;
- e. Bulk storage facilities;
- f. Hard rock and sand and gravel mining, unless located within the mineral resource designation;

g. The storage or distribution of gasoline treated with the additive methyl tertiary butyl ether;

h. Hazardous waste treatment, storage, and disposal facilities except those defined under permit by rule for industrial wastewater treatment processes per WAC 173-303-802(5)(a);

i. Chemical manufacturing, including but not limited to, organic and inorganic chemicals, plastics and resins, pharmaceuticals, cleaning compounds, paints and lacquers, and agricultural chemicals;

j. Dry cleaning establishments using the solvent perchloroethylene or similarly toxic compounds;

k. Primary and secondary metal industries that manufacture, produce, smelt, or refine ferrous and nonferrous metals from molten materials;

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

m. Mobile fleet fueling operations;

n. Class I, Class III, Class IV, and the following types of Class V wells: 5A7, 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 as regulated under RCW Chapter 90.48 and WAC Chapters 173-200 and 173-218, as amended;

- o. Permanent dewatering of the aquifer for new projects and redevelopment;
- p. Facilities that store, process, or dispose of radioactive substances; and
- q. Irrigation with graywater or reclaimed water.

2. Other land uses and activities that the City determines would pose a significant groundwater hazard to Group A and Group B groundwater supplies within the City limits, or would significantly reduce the recharge to aquifers currently or potentially used as a potable water source.

C. Wellhead Protection Zone Performance Standards.

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

2. Any uses or activities which involve storing, handling, treating, using, producing, recycling, or disposing of hazardous materials or other deleterious substances shall comply with the following standards that apply to the wellhead protection zone in which they are located. Residential uses of hazardous materials or deleterious substances are exempt from the following standards.

3. If a property is located in more than one wellhead protection zone, the Director of Community Development shall determine which standards shall apply based on an assessment evaluation of the risk posed by the facility or activity. The assessment evaluation shall include, but not be limited to: (a) the location, type, and quantity of the hazardous materials or deleterious substances on the property; (b) the geographic and geologic characteristics of the site; and (c) the type and location of infiltration on the site.

4. Development within Wellhead Protection Zones 1 or 2, and any facility or activity existing as of adoption of this Title within which hazardous materials or other deleterious substances are present, shall implement the following relevant performance standards:

a. Secondary Containment.

i. The owner or operator of any facility or activity shall provide secondary containment for hazardous materials or other deleterious substances in aggregate quantities equal to or greater than 20 gallons

liquid or 200 pounds solid or in quantities specified in the Yakima Fire Code, YMC Chapter 10.05, whichever is smaller.

ii. Hazardous materials stored in tanks that are subject to regulation by the Washington State Department of Ecology (Ecology) under WAC Chapter 173-360, Underground Storage Tank Regulations, are exempt from the secondary containment requirements of this section, provided that documentation is provided to demonstrate compliance with those regulations.

b. Vehicle Fueling, Maintenance, and Storage Areas. Fleet and automotive service station fueling, equipment maintenance, and vehicle washing areas shall have a containment system for collecting and treating all runoff from such areas and preventing release of fuels, oils, lubricants, and other automotive fluids into soil, surface water, or groundwater. Appropriate emergency response equipment and spill kits shall be kept on-site during transfer, handling, treatment, use, production, recycling, or disposal of hazardous materials or other deleterious substances.

c. Loading and Unloading Areas. Secondary containment or equivalent Best Management Practices (BMPs), as approved by the Director of Public Works, shall be required at loading and unloading areas that store, handle, treat, use, produce, recycle, or dispose of hazardous materials or other deleterious substances in aggregate quantities equal to or greater than 20 gallons liquid or 200 pounds solid.

d. Stormwater Infiltration Systems. Design and construction of new stormwater infiltration systems must address site-specific risks of releases posed by all hazardous materials on-site. These risks may be mitigated by physical design means or equivalent BMPs in accordance with an approved Hazardous Materials Management Plan. Design and construction of said stormwater infiltration systems shall also be in accordance with YMC Chapter 7.83 and the latest edition of the Stormwater Management Manual for Eastern Washington, approved local equivalent, or another technical stormwater manual approved by Ecology, and shall be certified for compliance with the requirements of this section by a professional engineer or engineering geologist registered in the State of Washington.

e. The record and construction details of any well regulated under Chapter 173-160 WAC, Construction and Maintenance of Wells, and any well excluded per WAC 173-160-010(2) that is constructed or decommissioned in Zones 1 and 2, shall be provided to the Department of Community Development within 60 days of well completion or decommissioning.

f. Protection Standards During Construction. The following standards shall apply to construction activities occurring where construction vehicles will be refueled on-site and/or the quantity of hazardous materials that will be stored, dispensed, used, or handled on the construction site is in aggregate quantities equal to or greater than 20 gallons liquid or 200 pounds solid, exclusive of the quantity of hazardous materials contained in fuel or fluid reservoirs of construction vehicles. As part of the City's project permitting process, the City may require any or all of the following items:

- i. A development agreement;
- ii. Detailed monitoring and construction standards;

iii. Designation of a person on-site during operating hours who is responsible for supervising the use, storage, and handling of hazardous materials and who has appropriate knowledge and training to take mitigating actions necessary in the event of fire or spill;

iv. Hazardous material storage, dispensing, refueling areas, and use and handling areas shall be provided with secondary containment adequate to contain the maximum release from the largest volume container of hazardous substances stored at the construction site;

v. Practices and procedures to ensure that hazardous materials left on-site when the site is unsupervised are inaccessible to the public. Locked storage sheds, locked fencing, locked fuel tanks on construction vehicles, or other techniques may be used if they will preclude access;

vi. Practices and procedures to ensure that construction vehicles and stationary equipment that are found to be leaking fuel, hydraulic fluid, and/or other hazardous materials will be removed immediately or repaired on-site immediately. The vehicle or equipment may be repaired in place, provided the leakage is completely contained;

vii. Practices and procedures to ensure that storage and dispensing of flammable and combustible liquids from tanks, containers, and tank trucks into the fuel and fluid reservoirs of construction vehicles or stationary equipment on the construction site are in accordance with the Yakima Fire Code, YMC Chapter 10.05; and

viii. Practices and procedures, and/or on-site materials adequate to ensure the immediate containment and cleanup of any release of hazardous substances stored at the construction site. On-site cleanup materials may suffice for smaller spills whereas cleanup of larger spills may require a subcontract with a qualified cleanup contractor. Releases shall immediately be contained, cleaned up, and reported if required under state or federal law. Contaminated soil, water, and other materials shall be disposed of according to state and local requirements.

g. Fill Materials. Fill material shall comply with the standards in YMC Chapter 7.82 and the following:

i. Fill material shall not contain concentrations of contaminants that exceed cleanup standards for soil specified in WAC 173-340-740, Model Toxics Control Act, regardless of whether all or part of the contamination is due to natural background levels at the fill source site. Where the detection limit (lower limit at which a chemical can be detected by a specified laboratory procedure) for a particular soil contaminant exceeds the cleanup standard for soil specified in WAC 173-340-740, the detection limit shall be the standard for fill material quality.

ii. Fill materials in quantities greater than 10 cubic yards placed directly on or in the ground in excess of six months shall meet the following requirements:

1. A fill material source statement shall be provided to the Department of Community Development and shall be reviewed and accepted by the Department prior to stockpiling or grading imported fill materials at the site. The source statement shall be issued by a professional engineer, geologist, engineering geologist or hydrogeologist licensed in the State of Washington demonstrating the source's compliance with standards of the Model Toxics Control Act. The source statement shall be required for each different source location from which fill will be obtained.

2. Analytical results demonstrating that fill materials do not exceed cleanup standards specified in WAC 173-340-740 may be used in lieu of a fill material source statement, provided the regulated facility submits a sampling plan to, and which is approved by, the Director of Community Development. The regulated facility must then adhere to the approved sampling plan, and maintain analytical data on-site and available for inspection for a minimum of five years from the date that the fill was accepted.

iii. The Department of Community Development may accept a fill material source statement that does not include results of sampling and analysis of imported fill if it determines that adequate information is provided indicating that the source location is free of contamination. Such information may include, but is not limited to:

1. Results of field testing of earth materials to be imported to the site with instruments capable of detecting the presence of contaminants; or

2. Results of previous sampling and analysis of earth materials to be imported to the site.

iv. A fill material source statement is not required if documents confirm that imported fill will be obtained from a Washington State Department of Transportation approved source.

v. The Director of Community Development shall have the authority to require corrective measures regarding noncompliant fill materials, including independent sampling and analysis, if the property owner or operator fails to accomplish such measures in a timely manner. The property owner or operator shall be responsible for any costs incurred by the City in the conduct of such activities.

h. Cathodic Protection Wells. Cathodic protection wells shall be constructed such that the following do not occur.

i. Vertical cross-connection of aquifers normally separated by confining units;

ii. Migration of contaminated surface water along improperly sealed well borings or casings;

iii. Introduction of electrolytes or related solutions into the subsurface; and

iv. Any of the above conditions caused by improperly abandoned cathodic protection wells that are no longer in use.

i. Underground Hydraulic Elevator Cylinders. All underground hydraulic elevator pressure cylinders shall be encased in an outer plastic casing constructed of Schedule 40 or thicker-wall polyethylene or polyvinyl chloride pipe, or equivalent. The plastic casing shall be capped at the bottom, and all joints shall be solvent- or heat-welded to ensure water tightness. The neck of the plastic casing shall provide a means of inspection to monitor the annulus between the pressurized hydraulic elevator cylinder and the protective plastic casing.

j. Best Management Practices (BMPs). All development or redevelopment shall implement BMPs for water quality and quantity, as approved by the Director of Community Development, such as biofiltration swales and use of oil-water separators, BMPs appropriate to the particular use proposed, clustered development, and limited impervious surfaces.

5. Development within Wellhead Protection Zone 3 shall implement appropriate BMPs and comply with the performance standards for vehicle fueling, maintenance, and storage areas; loading and unloading areas; well construction and operation; fill materials; cathodic protection wells; and underground hydraulic elevator cylinders in applicable subsections in C.4 of this section.

6. Development within Wellhead Protection Zone 4 shall implement BMPs for water quality and quantity.

7. An incremental environmental improvement to a system protective of groundwater shall not alter, expand, or intensify an existing legal nonconformance, but may proceed without having to meet the following City codes:

a. Restrictions associated with critical areas and critical area buffers, if the footprint of the original system protective of groundwater is located within the same critical area buffer, and it can be demonstrated through BAS that there will be no significant adverse impacts to the critical area and its buffer;

b. Any requirement to bring all or any portion of the facility or the development it serves up to current building, fire, or land use codes that is triggered by the value or design of the incremental environmental improvement to a system protective of groundwater; and

c. The incremental improvement shall not qualify as a redevelopment that would otherwise be prohibited by Title 15 YMC.

APPENDIX B Designated Type 2 Stream Corridors

The following stream reaches within Yakima County are designated critical areas under the City of Yakima's Critical Areas Ordinance:

1. Bachelor Creek: From source at Ahtanum Creek (SEC13-TWP12N-RGE16 EWM) downstream to its mouth at Ahtanum Creek (SEC1-TWP12N-RGE18E).

2. Cottonwood Canyon Creek: From the south line of SEC32-TWP13N-RGE17E, downstream to mouth at Wide Hollow Creek (SEC36-TWP13N-RGE17E).

3. Hatton Creek: From its source at Ahtanum Creek (SEC18-TWP12N-RGE17) downstream to its confluence with Ahtanum Creek (SEC18-TWP12N-RGE18E).

4. Wide Hollow Creek: From the east line of the SW1/4 of the NW1/4 (SEC28-TWP13N-RGE17E) downstream to the mouth at the Yakima River.

5. Cowiche Creek: that portion which is not designated Type 1.

6. Spring Creek and associated tributaries.