City of Cle Elum 119 West First Street Cle Elum, WA 98922



Phone: (509) 674-2262 Fax: (509) 674-4097 www.cityofcleelum.com

**Date:** July 8, 2022

To: Cle Elum Planning Commission

From: Gregg Dohrn

With Copies To: Mayor McGowan, Rob Omans, Kathi Swanson, Alex Kenyon

**Subject:** Flood Hazard Prevention Regulations

Unfortunately, the Planning Commission did not have a quorum at the June 6<sup>th</sup> meeting, and as a result we were not able to conduct the scheduled public hearing on the proposed flood hazard prevention regulations to replace the City's interim regulations. Fortunately, City codes enable the City Council to conduct public hearings as needed and as a result, we were able to schedule the required public hearing for the July 25<sup>th</sup>, 2022, City Council meeting.

As we've discussed, there is very little discretion available to the City in this matter, the interim regulations must be adopted on a permanent basis if property owners are to remain eligible for federal flood insurance. The City did not receive any comments on these regulations when they were adopted on an interim basis, and no comments were received when they were recirculated for public comment in May. Please note however, that as we were preparing the draft regulations for adoption by the City Council, that we identified some further amendments that were recommended by the Department of Ecology that were not a part of the Interim Regulations. These amendments include provisions necessary to avoid potential conflicts with flood insurance requirements, as well as provisions that are beneficial to property owners.

These additional revisions have been highlighted in the attached draft that was presented at the July 11, 2022, City Council meeting and that have been posted online. We advised the City Council that the Planning Commission had not seen these most recent revisions and that we would discuss them at your July 19, 2022, meeting.

### CITY OF CLE ELUM WASHINGTON

#### **ORDINANCE NO. 1632**

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AN ORDINANCE OF THE CITY OF CLE ELUM, WASHINGTON, REPEALING INTERIM FLOOD HAZARD PREVENTION REGULATIONS; ADOPTING AN UPDATED CHAPTER 15.24 FLOOD HAZARD PREVENTION REGULATIONS; PROVIDING FOR CODE INTERPRETATIONS; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.

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WHEREAS, the City of Cle Elum ("City"), has prepared and is implementing a Comprehensive Plan and Development Regulations in accordance with the provisions of the Washington State Growth Management Act; and

WHEREAS, the Growth Management Act ("GMA") requires that the City periodically review and update its Comprehensive Plan and Development Regulations; and

WHEREAS, the City has completed a review and update of its Future Land Use and Official Zoning Maps in accordance with the provisions of its recently updated Comprehensive Plan; and

WHEREAS, the City has updated the provisions governing the administration of its Development Regulations, and of its Future Land Use and Official Zoning Maps in accordance with the provisions of its recently updated Comprehensive Plan; and

WHEREAS, the City is in the process of reviewing and updating its Development Regulations including the regulations to preserve and protect environmentally sensitive areas; and

WHEREAS, the Federal Emergency Management Agency ("FEMA") adopted a new Flood Insurance Study and Flood Insurance Rate Map for Kittitas County that went into effect on September 24, 2021; and

WHEREAS, the City adopted amendments to Cle Elum Municipal Code ("CEMC") Chapter 15.24 Flood Hazard Prevention as an interim measure, to implement the new Flood Insurance Study and Flood Insurance Rate Map for Kittitas County and to remain eligible for participation in the Federal Flood Insurance Program; and

WHEREAS, the Department of Ecology has provided the City with recommended revisions to the amended CEMC Chapter 15.24 Flood Hazard Prevention regulations adopted as an interim measure; and

WHEREAS, the City desires to repeal and replace the Interim Flood Hazard Prevention regulations with updated regulations that includes the recommended revisions from the Department of Ecology; and

WHEREAS, it is the intent of the City to implement these updated Flood Hazard Prevention Regulations on an ongoing basis and to integrate these regulations with the draft regulations currently under review to preserve and protect environmentally sensitive areas, also known as Critical Areas.

### NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CLE ELUM DO ORDAIN AS FOLLOWS:

<u>Section 1. Findings of Fact.</u> The City Council hereby adopts the recitals set forth above as its findings of fact in support of adopting the updated Flood Hazard Prevention regulations established herein on a permanent basis.

<u>Section 2. Existing Regulations, Repealed.</u> The City of Cle Elum hereby repeals the Interim Cle Elum Municipal Code Chapter 15.24 "Flood Hazard Prevention" in its entirety as is currently written.

<u>Section 3. Interim Official Controls, Adopted.</u> The City of Cle Elum hereby adopts the updated Cle Elum Municipal Code Chapter 15.24, entitled "Flood Hazard Prevention", in substantially the same form as the attached Exhibit A.

<u>Section 4. Code Interpretations</u>. In the event of a conflict between any provisions of this updated Chapter 15.24 and previously adopted ordinances, this ordinance shall prevail. The Mayor and his/her designee(s) are hereby authorized to make such administrative interpretations as may be necessary to implement this ordinance.

<u>Section 5. Severability.</u> Should any section, paragraph, sentence, clause or phrase of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

<u>Section 6 Effective Date.</u> This ordinance shall be published in the official newspaper of the City and shall take effect and be in full force five (5) days after the date of publication.

### APPROVED BY THE CLE ELUM CITY COUNCIL AT A REGULAR MEETING THEREOF ON THE \_\_\_ OF JULY 2022.

CITY OF	CLE ELUM	

ATTEST/AUTHENTICATED:	
Kathi Swanson, City Clerk	
Approved as to form:	
Alexandra L. Kenyon, City Attorney	_
Filed with the City Clerk:	
Passed by the City Council: Date of Publication:	_
Effective Date:	

#### **Sections:**

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15.24.170	Violation – Penalty.

#### 15.24.010 Statutory Authorization.

The Legislature of the State of Washington has delegated responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry.

#### 15.24.020 Findings of Fact.

A. The flood hazard areas of the city are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

B. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

#### 15.24.030 Purpose.

It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- A. To protect human life and health.
- B. To minimize expenditure of public money and costly flood control projects.
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- D. To minimize prolonged business interruptions.
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard.
- F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas.
- G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
- I. Participate in and maintain eligibility for flood insurance and disaster relief.

#### **15.24.040 Definitions.**

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application:

"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.

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

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

"Area of special flood hazard" means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Designation on Flood Insurance Rate Maps (FIRM) includes the letters A, AO, AH, A1-30, AE, A99 and AR. "Special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard."

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

"Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "one-hundred-year flood."

"Base Flood Elevation (BFE)" means the elevation to which floodwater is anticipated to rise during the base flood.

"Basement" means any area of the building having its floor sub-grade (below ground level) on all sides.

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

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

#### "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; and/or
  - b. The unusual and rapid accumulation of runoff of surface waters from any source.
  - c. 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 insurance rate map (FIRM)" means the official map on which the Federal 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" See "Flood Elevation Study."

"Floodplain or flood-prone area" means any land area susceptible to being inundated by water from any source. See "Flood or flooding."

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

"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.

"Floodway" means the channel or a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as "Regulatory Floodway."

"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.

"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:

- 1. 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
- 4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
  - a. By an approved state program as determined by the Secretary of the Interior; or
  - b. Directly by the Secretary of the Interior in states without approved programs.

"Lowest floor" 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 non-elevation design requirements of this chapter found in Section 15.24.150(A)(2).

"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than one hundred eighty consecutive days. For insurance purposes, "manufactured home" does not include park trailers, travel trailers, and other similar vehicles."

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

"Mean Sea Level" means, 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.

"New construction" means, for the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial Flood Insurance Rate 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.

"Recreational vehicle" means a vehicle which is built on a single chassis, four hundred square feet or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light duty truck and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

"Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, 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

piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"Structure" means a walled and roofed building including a gas or liquid storage tank that is principally aboveground, as well as a manufactured home.

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

"Substantial improvement" means any reconstruction, rehabilitation, addition or improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual work performed. The term does not, however, include either:

- 1. Any project for improvement of a structure to correct previously identified existing violations of state or local health, sanitary or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions, or
- 2. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

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

"Water dependent" means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

#### **15.24.050** Applicability of Provisions.

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the City of Cle Elum.

#### 15.24.060 Basis for Establishing Areas of Special Flood Hazard

The areas of special flood hazard identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study for Kittitas County, Washington and Incorporated Areas" dated September 24, 2021, and any revisions thereto, with accompanying Flood Insurance Rate Maps (FIRMs), and any revisions thereto, are adopted by reference and declared to be part of this chapter. The Flood Insurance Study and FIRM are on file at the Cle Elum City Hall 119 West First Street, Cle Elum, Washington, 98922. The best available information for flood hazard area identification as outlined in Section 15.24.130(B) shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under Section 15.24.130(B).

#### **15.24.065** Compliance.

All development within special flood hazard areas is subject to the terms of this ordinance and other applicable regulations.

#### 15.24.070 Interpretation of Provisions.

In the interpretation and application of this chapter, all provisions shall be:

- A. Considered as minimum requirements.
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

#### 15.24.080 Liability – Disclaimer.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city, any officer or employee thereof, or the Federal Insurance

Administrator, for any flood damages that result from reliance on this chapter, or any administrative decision lawfully made under this chapter.

#### **15.24.090** Abrogation of Easements.

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

#### **15.24.095** Severability.

This ordinance and the various parts thereof are hereby declared to be severable. Should any Section of this ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or any portion thereof other than the Section so declared to be unconstitutional or invalid.

#### 15.24.100 General Flood Loss Reduction Methods.

In order to accomplish its purposes, this chapter includes methods and provisions for:

- A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities.
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters.
- D. Controlling filling, grading, dredging and other development which may increase flood damage; and
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or may increase flood hazards in other areas.

#### 15.24.110 Development Permit – Required.

- A. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in CEMC Section <u>15.24.060</u>. The permit shall be for all structures including manufactured homes, as set forth in the "definitions," and for all development including fill and other activities, also as set forth in the "definitions."
- B. Application for Development Permit. Application for a development permit shall be made on forms furnished by the City and may include but not be limited to plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:
  - 1. Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures.
  - 3. Proposed elevation in relation to mean sea level to which any structure will be floodproofed.
  - 4. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in CEMC Section 15.24.150(B).
  - 4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.
  - 5. Where development is proposed in a floodway, an engineering analysis indicating no rise of the Base Flood Elevation; and
  - 6. Any other such information that may be reasonably required by the Floodplain Administrator in order to review the application.
- C. Development Permit Fee. An application fee, as set forth by resolution of the City Council, must be paid at the time of application.

#### 15.24.120 Administration – Designation of the Floodplain Administrator.

The Mayor shall appoint a Floodplain Administrator to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions. The Floodplain Administrator may delegate authority to implement these provisions.

### 15.24.130 Administration – Duties and Responsibilities of the Floodplain Administrator.

Duties of the Floodplain Administrator shall include, but not be limited to:

#### A. Permit Review.

- 1. Review all development permits to determine that the permit requirements of this chapter have been satisfied.
- 2. Review all development permits to determine that all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required.
- 3. Review all development permits to determine if the proposed development is located in the floodway, assure that the encroachment provisions of Section 15.24.160(B) are met.
- 4. Review all development permits to determine that the site is reasonably safe from flooding.
- 5. Notify FEMA when annexations occur in the Special Flood Hazard Area.
- 6. 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.
- B. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section <u>15.24.060</u>, the Floodplain Administrator 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 Sections <u>15.24.150</u> and <u>15.24.160</u>.

#### C. Information to be Obtained and Maintained.

1. Where base flood elevation data is provided through the Flood Insurance Study, Flood Insurance Rate Map, or required as in (B) of this section, 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.

- 2. For all new or substantially improved flood-proofed nonresidential structures where base flood elevation data is provided through the FIS, FIRM, or as required as in (B) of this section:
  - a. Obtain and maintain a record of the actual elevation (in relation to mean sea level) to which the structure was floodproofed.
  - b. Maintain the floodproofing certifications required in Section <u>15.24.110(B)(3)</u>.
- 3. Maintain for public inspection all records pertaining to the provisions of this chapter.
- 4. Certification required by Section 15.24.160(A)(floodway encroachments).
- 5. Records of all variance actions, including justification for their issuance.
- 6. Improvement and damage calculations.
- D. Alteration of Watercourses. Whenever a watercourse is to be altered or relocated:
  - 1. Notify adjacent communities and the state of Washington Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator through appropriate notification means; and
  - 2. Assure that the flood carrying capacity of the altered or relocated portion of said watercourse is maintained.
- E. Interpretation of FIRM Boundaries. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a 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 as provided in Section 15.24.170. Such appeals shall be granted consistent with the standards of Section 60.6 of the Rules and Regulations of the NFIP.

#### 15.24.140 General Construction and Development Standards.

In all areas of special flood hazard the following standards are required:

A. Anchoring.

- 1. All new construction and substantial improvements, including those related to manufactured homes, shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy.
- 2. All manufactured homes must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

#### 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 construction 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 conditions of flooding.

#### C. Utilities.

- 1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems.
- New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
- 2. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding; and
- 4. Water wells shall be located on high ground that is not in the floodway.
- D. Subdivision Proposals and Development.

- 1. All subdivision proposals, as well as new development, shall be consistent with the need to minimize flood damage.
- 2. All subdivision proposals, as well as new development, shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.
- 3. All subdivision proposals, as well as well as new development, shall have adequate drainage provided to reduce exposure to flood damage; and
- 4. Where subdivision proposals and other proposed developments in which base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty lots or five acres (whichever is less).
- E. Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study, Flood Insurance Rate Map, or from another authoritative source (Section 15.24.130(B)), applications for floodplain development 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. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

#### F. 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 flotation, or if readily removable from the area within the time available after flood warning.

#### 15.24.145 Critical Facility.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the base floodplain (100-year floodplain). Construction of new critical facilities shall be permissible within the base floodplain if no feasible alternative site is available. Critical facilities constructed within the base floodplain shall have the lowest floor elevated to three feet or more above the level of the base flood elevation at the site or to the height of the 500-year flood,

whichever is higher. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into flood waters. Access routes elevated to or above the level of the base floodplain shall be provided to all critical facilities to the extent possible.

### 15.24.150 Construction and Development – Residential and Nonresidential – Manufactured Homes.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 15.24.060 or 15.24.130(B), the following provisions are required.

#### A. Residential Construction.

- 1. New construction and substantial improvement of any residential structure in an AO zone shall meet the following requirements:
  - a. 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).
  - b. New construction and substantial improvements of nonresidential structures within AO zones shall either:
    - (1) 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
    - (2) 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 18.03.150(B)(2)(c).
  - c. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

- d. Recreational vehicles placed on sites within AO zones on the community's FIRM either:
  - (1) Be on the site for fewer than 180 consecutive days, or
  - (2) 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
  - (3) Meet the requirements of subsections (1) and (3) above and the anchoring requirements for manufactured homes (Section 18.03.140(A)(2)).
- 2. In AE zones or other A zoned areas where the BFE has been determined or can be reasonably obtained, new construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the BFE. Mechanical equipment utilities shall be waterproofed or elevated at least one foot above the BFE.
- 3. New construction and substantial improvement of any residential structure in an Unnumbered A zone for which a BFE is not available and cannot be reasonable 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.
- 4. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or if used solely for parking access or storage 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.
  - c. Openings may be equipped with screens, louvers, valves, 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 allow for the automatic entry and exit of floodwaters.
- 5. Interior grades below the lowest exterior grade are prohibited unless the interior grade is above the base flood elevation. Below grade crawlspaces are permitted subject to the following criteria:
  - a. The interior grade is not more than two feet below the lowest adjacent exterior grade.
  - b. The height of the below grade crawlspace, as measured from the interior grade to the top of the crawlspace foundation wall, must not exceed four feet at any point.
  - c. There must be an adequate drainage system that removes interior floodwaters.
  - d. The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace.
  - e. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
  - f. The crawlspace is an enclosed area below the BFE and, as such, must have openings that equalize hydrostatic pressures by allowing for the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than 1 foot above the lowest adjacent exterior grade.
  - g. Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE.
  - h. Any building utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters.
- B. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall meet the requirements of subsection 1 or 2 below:

- 1. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall meet all of the following requirements:
  - a. In AE zones or other A zoned areas where the BFE has been determined or can be reasonably obtained:
    - (1) New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated one foot or more above the BFE, or elevated as required by ASCE 24, whichever is greater.
    - (2) Mechanical equipment and utilities shall be waterproofed or elevated at least one foot above the BFE, or as required by ASCE 24, whichever is greater.
  - b. If located in an AO zone, the structure shall meet the requirements in Section 15.24.150(A)(1).
  - c. 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.
  - d. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or if used solely for parking, access or storage 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:
    - (1) Have a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.
    - (2) The bottom of all openings shall be no higher than one foot above grade.
    - (3) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.
    - (4) A garage attached to a structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of flood waters.

- 2. If the requirements of subsection 1 are not met, then new construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall meet all of the following requirements:
  - a. Be floodproofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water or dry floodproofed to the elevation required by ASCE 24, whichever is greater.
  - b. Have structural components capable of resisting hydrostatic and hydrostatic loads and effects of buoyancy.
  - c. 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 as set forth in Section 15.24.130(C)(2); and
  - d. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in subsection (A)(1) of this section.
- 3. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).
- C. Manufactured Homes. All manufactured homes to be placed or substantially improved on sites shall be elevated on a permanent foundation such that the lowest floor of the manufactured home elevated one foot or more above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of Section 15.24.140(A)(2).
- D. Recreational Vehicles. Recreational vehicles, where authorized by the City of Cle Elum, placed on sites are required to:
  - 1. Be on site for fewer than one hundred eighty consecutive days; and
  - 2. 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

- 3. Meet the requirements of 15.24.150(C), above.
- E. Enclosed Area Below the Lowest Floor. If buildings 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 Structures (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 floodproofed to or above the BFE.
    - e. The appurtenant structure must comply with floodway encroachment provisions.
    - f. The appurtenant structure must be designed to allow for the automatic entry and exit of flood waters.
    - g. The structure shall have low damage potential.
    - h. 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 5.2-1.

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.

#### 15.24.155 AE 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 AE zones 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.

#### 15.24.160 Wetlands Management.

To the maximum extent possible, to avoid the short term and long term adverse impacts associated with the destruction or modification of wetlands, especially those activities which limit or disrupt the ability of the wetland to alleviate flooding impacts, the following process should be implemented:

- A. Review proposals for development within base flood plains for their possible impacts on wetlands located within the flood plain.
- B. Ensure that development activities in or around wetlands do not negatively affect public safety, health, and welfare by disrupting the wetlands' ability to reduce flood and storm drainage.
- C. Request technical assistance from the Department of Ecology in identifying wetland areas. Existing wetland map information from the National Wetlands Inventory (NWI) can be used in conjunction with the community's FIRM to prepare an overlay zone indicating critical wetland areas deserving special attention.

#### 15.24.160 Floodway Location.

Located within areas of special flood hazard established in Section <u>15.24.060</u> are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- A. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- B. Construction or reconstruction of residential structures is prohibited 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 market value of the structure either:
    - a. Before the repair, reconstruction or repair 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 shall not be included in the fifty percent.

#### 3. Substantially Damaged Residences in Floodway

a. For all substantially damaged residential structures, other than farmhouses, located in a designated floodway, the Floodplain Administrator may make a written request that the Department of Ecology assess the risk of harm to life and property posed by the specific conditions of the floodway. Based on analysis of depth, velocity, flood-related erosion, channel migration, debris load potential, and flood warning capability, the Department of Ecology may exercise best professional judgment in recommending to the local permitting authority repair, replacement, or relocation of a

substantially damaged structure consistent with WAC 173-158-076. The property owner shall be responsible for submitting to the local government and the Department of Ecology any information necessary to complete the assessment. Without a favorable recommendation from the department for the repair or replacement of a substantially damaged residential structure located in the regulatory floodway, no repair or replacement is allowed per WAC 173-158-070(1).

- b. Before the repair, replacement, or reconstruction is started, all requirements of the NFIP, the state requirements adopted pursuant to 86.16 RCW, and all applicable local regulations must be satisfied. In addition, the following conditions must be met:
  - (1) There is no potential safe building location for the replacement residential structure on the same property outside the regulatory floodway.
  - (2) A replacement residential structure is a residential structure built as a substitute for a legally existing residential structure of equivalent use and size.
  - (3) Repairs, reconstruction, or replacement of a residential structure shall not increase the total square footage of floodway encroachment.
  - (4) The elevation of the lowest floor of the substantially damaged or replacement residential structure is a minimum of one foot higher than the BFE.
  - (5) New and replacement water supply systems are designed to eliminate or minimize infiltration of flood water into the system.
  - (6) New and replacement sanitary sewerage systems are designed and located to eliminate or minimize infiltration of flood water into the system and discharge from the system into the flood waters.
  - (7) All other utilities and connections to public utilities are designed, constructed, and located to eliminate or minimize flood damage.
- C. If subsection (A) of this section is satisfied or construction is allowed pursuant to subsection (B) of this section, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 15.24.150, provisions for flood hazard reduction.

#### 15.24.175 Variance and Appeals Procedures.

#### A. Appeal Board.

- 1. The City Council shall hear and decide appeals and the city planner shall consider requests for variances from the requirements of this chapter.
- 2. The City Council shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the City in the enforcement or administration of this chapter.
- 3. In passing upon such applications, the City shall consider all technical evaluations, all relevant factors standards specified in other sections of this chapter, and:
  - a. The danger that materials may be swept onto other lands to the injury of others.
  - b. The danger to life and property due to flooding or erosion damage.
  - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
  - d. The importance of the services provided by the proposed facility to the community.
  - e. The necessity to the facility of a waterfront location, where applicable.
  - f. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
  - g. The compatibility of the proposed use with existing and anticipated development.
  - h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area.
  - i. The safety of access to the property in times of flood for ordinary and emergency vehicles.
  - j. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and

- k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.
- 4. Upon consideration of the factors of subdivision 3 of this subsection and the purposes of this chapter, the City may attach such conditions to the granting of variances, as it deems necessary to further the purposes of this chapter.
- 5. The City shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

#### B. Conditions for Variances.

- 1. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items a through k of subdivision 3 of (A) of this section have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.
- 2. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in this section.
- 3. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- 4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 5. Variances shall only be issued upon:
  - a. A showing of good and sufficient cause.
  - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant.
  - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create

nuisances, cause fraud on or victimization of the public as identified in subsection (A)(3) of this section or conflict with existing local laws or ordinances.

- 6. Variances as interpreted in the National Flood Insurance Program 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 the flood elevations should be quite tare.
- 7. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except subdivision 1 of this subsection, and otherwise complies with subsections A and B of Section 15.24.140.
- 8. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

#### 15.24.165 Variances.

#### A. Requirements for Variances.

#### 1. Variances shall only be issued:

- a. Upon a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- b. 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.
- c. Upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- d. Upon a showing of good and sufficient cause.

- e. Upon a determination that failure to grant the variance would result in exceptional hardship to the applicant.
- f. 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 15.24.040 of this ordinance in the definition of "Functionally Dependent Use."
- 2. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.
- 3. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the BFE, provided all the procedures of this chapter have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.
- B. Variance Criteria. In considering variance applications, the City shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:
  - 1. The danger that materials may be swept onto other lands to the injury of others.
  - 2. The danger to life and property due to flooding or erosion damage.
  - 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
  - 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 flood waters expected at the site; and
- 11. 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.
- C. Additional Requirements for the Issuance of a Variance
  - 1) Any Applicant to whom a variance is granted shall be given written notice 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 City shall maintain a record of all variance actions, including justification for their issuance.
  - 3) The City shall condition the variance as needed to ensure that the requirements and criteria of this chapter are met.

#### **15.24.170 Violation – Penalty.**

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violation of the provisions of this chapter 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 chapter or fails to comply with any of its requirements shall upon conviction be fined not more than five thousand dollars for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing contained in this chapter shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation.

## City of Cle Elum, Washington Comprehensive Plan Amendments Recommendations 2022 Annual Amendment Process Request #1 "Firewise Amendments"

Firewise Advisory Committee Draft #4 07-10-22 With Designated City Planner Revisions 07-13-22

#### Introduction:

Western or "upper" Kittitas County, including the City of Cle Elum, is experiencing an increasing threat of catastrophic wildfires as the annual fire season becomes longer and the weather more severe. These conditions, coupled with extensive residential development in the unincorporated areas, the planned growth within the City, the projected growth within Urban Growth Areas, the high and increasing levels of recreational activities within forested areas, and proximity to I-90, make it imperative that the City adopt and actively implement policies to minimize the risk of wildfires to the greatest extent possible. Recent experiences with large fires that had the potential to devastate the entire upper county, as well as the fire scar at the entrance to the City, serve to underscore the urgency of this threat and the very real need to more actively protect our community.

Goal: Actively protect the City from the risk of wildfires.

To achieve this Goal, the City of Cle Elum adopts and shall actively implement the following policies:

**Potential New Policy 1:** The City should actively participate in and support the Kittitas County Community Wildfire Protection Plan (CWPP) that has been developed and updated through the Kittitas Fire Adapted Communities Coalition.

**Potential New Policy 2:** The City Fire Department in partnership with all other local wildfire fire suppression entities should continue to support the current mutual rapid response system to ensure that timely suppression actions are employed.

**Potential New Policy 3**: The City hereby adopts the "National Cohesive Wildland Fire Management Strategy" (<a href="https://www.forestsandrangelands.gov/strategy/thestrategy.shtml">https://www.forestsandrangelands.gov/strategy/thestrategy.shtml</a>) to guide local efforts to address the challenges associated with:

- a. The management of vegetation and fuels for wildfires.
- b. The protection of lives and property.
- c. Managing the potential for human-caused ignitions; and

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d. Effectively and efficiently responding to fires.

**New Policy 4:** The City should adopt the "2021 International Wildland-Urban Interface Code (IWUIC)" that is within the International Uniform Building Code and actively provide examples of fire resistant construction. (See <a href="https://codes.iccsafe.org/content/IWUIC2021P1/arrangement-and-format-of-the-2021-iwuic">https://codes.iccsafe.org/content/IWUIC2021P1/arrangement-and-format-of-the-2021-iwuic</a>).

**Potential New Policy 5:** The City, in partnership with the Kittitas County Fire Districts, Kittitas County, the City of Roslyn, and the Town of South Cle Elum (aka "Regional Partners"), should prepare and implement consistent development standards focused on minimizing the risk of wildfires. Areas of special emphasis should include, but is not limited to:

- a. Properties along the I-90 corridor.
- b. Large parcels under common ownership within the City limits, the Cle Elum UGA, and nearby properties.
- c. Forested properties.
- d. Properties that contain environmentally sensitive areas, parks, open space, and required buffer areas.
- e. Areas identified as high or extreme fire hazard including debris created as a part of land clearing or timber harvest.

**Potential New Policy 6** The City should apply "firesafe" vegetation management principles to City-owned properties on an ongoing basis. This shall include such measures as:

- a.
- b.
- c.

**Potential New Policy 7:** The City should engage and encourage state and federal agencies, and non-profit organizations that own or manage tracts of forested land to recognize the increasing risk of wildfires and to prepare and implement land stewardship plans that include measures to reduce the risk of wildfires.

**Potential New Policy 8:** The City, in partnership with its Regional Partners and the Washington State Department of Natural Resources, should develop protocols to ensure that all development activities in and near forested areas are conducted in accordance with Industrial Fire Precaution

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Levels as determined by the Washington State Department of Natural Resources (DNR). This shall include, but is not limited to, compliance with the DNR Handbook on Forest Fire Protection published October 2018, and as may subsequently be amended.

**Potential New Policy 9:** The City and its Regional Partners should establish uniform standards for ingress and egress, emergency vehicle access, and evacuation routes as well as shared protocols for timely evacuation notification, traffic control, responder access, and emergency shelter plans.

**Potential New Policy 10:** The City should adopt and implement the national standards for wildland fire suppression training and certification. First responders should have adequate training, personal protective equipment and appropriate wildland firefighting equipment to safely engage in any suppression action.

**Potential New Policy 11:** The City should require that the owners of forested property suitable for development prepare and implement a stewardship plan focusing on vegetation management that maintains fire resiliency to minimize wildland fire behavior. These plans should include primary and secondary egress, street standards that allow large emergency vehicle access, fire resistant vegetation, tree species and density, and greenbelt locations.

**Potential New Policy 12:** The City and its Regional Partners should continue to actively enforce fireworks bans and open burning rules and restrictions to ensure a consistent approach to manage risks associated with those activities.

**Potential New Policy 13:** Within one year of the adoption these wildfire policies, City Staff, in consultation with the Firewise Advisory Committee and the City Planning Commission, shall prepare and present for City Council approval:

- a. Defensible space standards for new developments utilizing the three vegetation management zones of 0-5 feet, 5-30 feet, and 30-100 feet or the property boundary, with management prescriptions for each zone.
- b. A requirement that building permits and land use approvals include a condition of approval that property owners shall maintain vegetation in accordance with City standards and shall schedule an inspection by the Office of the City Fire Chief at least once every five years.
- c. A plan for the Fire Department to conduct periodic wildfire risk assessments and to provide property owners with recommendations to "firewise" their property and to help make the community safer.



# STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

# **Central Region Office**

1250 West Alder St., Union Gap, WA 98903-0009 • 509-575-2490

July 1, 2022

Virgil Amick City of Cle Elum 119 W First Street Cle Elum, WA 98922

Re: SEPA Register 202202176, SEP-2022-002

Dear Virgil Amick:

Thank you for the opportunity to comment on the Determination of Non Significance for the Cle Elum Critical Areas Ordinance Updates. We have reviewed the documents and have the following comments.

# SHORELANDS/ENVIRONMENTAL ASSISTANCE

Please revise Section 14.70.050(A)(3)(h) to include language that does not exempt activities from permitting under Ch.15.24, Flood Hazard Prevention. There is a permit requirement for tracking substantial damage/substantial improvement for compliance with the NFIP.

For further clarification please reach out to **Sandra Floyd** at (509) 571-5679 or sandra.floyd@ecy.wa.gov.

Sincerely,

Terra Petropoulos
Regional Business Administrator
WA Department of Ecology
509-571-7360
CROSEPA@ECY.WA.GOV

# Chapter 18.01 CRITICAL AREAS PROTECTION\*

#### Sections:

18.01.010	Purpose.
18.01.020	Definitions.
18.01.030	Designation and mapping of critical areas.
18.01.040	Construction with other laws.
18.01.050	Permitting.
18.01.055	Determination.
18.01.060	New permits required for activities in critical areas
18.01.070	Performance standards.
18.01.080	Exemptions.
18.01.085	Notice and financial securities.
18.01.090	Reasonable use.
18.01.100	PenaltiesEnforcement.
18.01.110	Administrative appeals.
18.01.120	Nonconforming activities.
18.01.130	Severability.

# 18.01.010 Purpose.

The purpose of this chapter is to protect the functions and values of critical areas, and to protect the public health, safety, and welfare of the citizens of Cle Elum. Additionally, this chapter is intended to protect public and private property and natural ecosystems found within city limits. The City of Cle Elum shall regulate all uses, activities and developments within, adjacent to, or likely to affect, one or more critical areas, consistent with the best available science and the provisions herein. The City of Cle Elum finds that development in and/or near critical areas may pose a threat to public and private property, to natural ecosystems and to the public health, safety and welfare. This chapter aims to protect critical areas and to channel development to less ecologically sensitive areas.

(Ord. 1335 § 1, 2010)

<sup>\*</sup> Editor's note: Ord. No. 1335, § 1, adopted Nov. 9, 2010, amended Ch. 18.01 in its entirety to read as herein set out. Former ch. 18.01, §§ 18.01.010 – 18.01.520, pertained to maintenance, enhancement and preservation of critical areas, and derived from Ord. 1039, adopted 1996.

#### 18.01.020 Definitions.

[The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:]

"Anadromous fish" means fish that spawn and rear in freshwater and mature in the marine environment.

"Best available science" means current scientific information used in the process to designate, protect, or restore critical areas, that is derived from a valid scientific process as defined by WAC 365-195-900 through 925. Sources of best available science are included in "Best Available Science For the City of Cle Elum, Washington" prepared dated October 28, 2020 or amended.—

"Buffer" means an area contiguous to and protects a critical area that is required for the continued maintenance, functioning, and/or structural stability of a critical area. "Buffer" or "wetland buffer" shall mean those standard buffer widths as shown on attachedin CEMC 18.01.070 Table 18.01-12.

\_Table 18.01 1. Table Wetland Buffer Requirements

Wetland Category	Standard Buffer Width
Category I: Based on total score	<del>75 ft</del>
Category I: Forested	<del>75 ft</del>
Category I: Bogs	<del>190 ft</del>
Category I: Alkali	<del>150 ft</del>
Category I: Natural Heritage Wetlands	<del>190 ft</del>
Category II: Based on total score	<del>75 ft</del>
Category II: Vernal Pool	<del>150 ft</del>
Category II: Forested	75 ft
Category III: (all)	<del>60 ft</del>
Category IV: (all)	4 <del>0 ft</del>

"Critical areas" include the following areas and ecosystems:"

#### 1. Wetlands;

2. Areas with a critical recharging effect on aquifers used for potable water;

- 3. Fish and wildlife habitat conservation areas;
- 4. Frequently flooded areas; and
- 5. Geologically hazardous areas.

"Channel migration zone (CMZ)" means the area along a river within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings. "Fish and wildlife habitat conservation areas"

"Compensatory mitigation" means replacing project-induced critical areas losses or impacts, and includes, but is not limited to restoration, creation, enhancement, and/or preservation.

"Creation" means actions performed to intentionally establish a critical area at a site where it did not formerly exist.

"Critical aquifer recharge area (CARA)" means an area designated byunder WAC 365-190-100 that is determined to have a critical recharging effect on aquifers (i.e., maintain the quality and quantity of water) used for potable water, as defined by WAC 365-190-030(3). These areas include the following:

- 1. Wellhead Protection Areas;
- 2. Sole Source Aquifers;
- 3. Susceptible Ground Water Management Areas;
- 4. Special Protection Areas;
- 5. Moderately or Highly Vulnerable Aquifer Recharge Areas; and
- 6. Moderately or Highly Susceptible Aquifer Recharge Areas.

"Enhancement" means actions performed within an existing degraded shoreline, critical area, and/or buffer to intentionally increase or augment one or more ecological functions or values of the existing area. Enhancement actions include, but are not limited to, increasing plant diversity and cover; increasing wildlife habitat and structural complexity (snags, woody debris); installing environmentally compatible erosion controls; or removing non-indigenous plant or animal species.

"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,

**Commented [JDL(1]:** There are no SSAs anywhere near Cle Elum. At the City's option, this could be left out. Some jurisdictions list them anyway.

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.

- "Habitats of local importance" designated as fish and wildlife habitat conservation areas include those areas found to be locally important by counties and cities.
- 2. "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company. include:
- 1. Areas with which endangered, threatened, and sensitive species have primary association;
- 2. Habitats and species of local importance;
- Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish andwildlife habitat;
- 4. Waters of the state;
- 5. State natural area preserves and natural resource conservation areas.
- "Frequently flooded areas" means lands in the floodplain subject to a one percent (1%) or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater and those lands that provide important flood storage, conveyance, and attenuation functions. These areas include, but are not limited to, streams, rivers, lakes, wetlands, and areas where high groundwater forms ponds on the ground surface include those flooded areas in the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program, and Crystal Creek and ephemeral drainages identified by DNR and the Washington Department of Fish and Wildlife (WDFW) and other frequently flooded areas.

"Floodway" are all areas designated as regulatory floodways, potholes and shaded X zones that are three feet or greater in depth, and active stream channels.

"Floodplain" are all areas subject to inundation by the base flood, but outside the limits of the floodway. Those portions of the A, AE, AH, and shaded X zones not defined as floodway, and that portion of a pothole and FEMA shaded X zone area that is between zero feet (base flood elevation) and three feet in depth.

"Geologically hazardous area" means an area that is not suited to commercial, residential, or industrial development because of its susceptibility to erosion, sliding, earthquakes, or other geological events hazardous to public health or safety.

"In-kind compensation" means to replace critical areas with substitute areas whose characteristics and functions closely approximate those destroyed or degraded by a regulated activity. The determination of in-

kind versus out-of-kind compensation for wetlands is dependent upon equivalency in wetland functions, not wetland categories.

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

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

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

"Moderately or highly susceptible aquifer recharge areas" means aquifer recharge areas moderately or highly susceptible to degradation or depletion because of hydrogeologic characteristics are those areas meeting the criteria established by the Washington State Department of Ecology (Ecology).

"Moderately or highly vulnerable aquifer recharge areas" means aquifer recharge areas that are moderately or highly vulnerable to degradation or depletion because of hydrogeologic characteristics are those areas delineated by a hydrogeologic study prepared in accordance with Ecology guidelines.

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

"Ordinary high watermark (OHWM)" on all lakes, rivers, and streams means that mark that will 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 all ordinary years, as to mark upon the soil a character distinct from that of the

**Commented [JDL(2]:** What's the distinction between "susceptible" & "vulnerable"? (noting the difference in definition)

abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the Washington State Department of Ecology; provided that in any area where the OHWM cannot be found, the OHWM salt water shall be the line of mean higher high tide and the OHWM adjoining freshwater shall be the line of mean high water.

"Priority habitat" means a habitat type with a unique or significant value to one (1) or more species. An area classified and mapped as priority habitat must have one (1) or more of the following attributes: comparatively high fish or wildlife densities; comparatively high fish or wildlife species diversity; fish spawning habitat; important wildlife habitat; important fish or wildlife seasonal range; important fish or wildlife movement corridors; rearing and foraging habitat; refuge; limited availability; high vulnerability to habitat alteration; unique or dependent species; or shellfish beds. A priority habitat may be described by its unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife (such as oak woodlands or eelgrass meadows). A priority habitat may also be described by a successional stage (such as old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or non-priority fish and wildlife (WAC 173-26-020(28)).

"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 in WAC 173-26-020(29).

"Rehabilitation" means a type of restoration action intended to repair natural or historic functions and processes. Activities could involve breaching a dike to reconnect wetlands to a floodplain or other activities that restore the natural water regime.

"Restore," "restoration" or "ecological restoration" means the re-establishment or upgrading of impaired ecological shoreline processes or functions. This may be accomplished through measures including, but not limited to, re-vegetation, removal of intrusive shoreline structures and removal or treatment of toxic materials. Restoration does not imply a requirement for returning the shoreline area to aboriginal or pre-European settlement conditions.

"Sole source aquifers" means areas that have been designated by the U.S. Environmental Protection Agency pursuant to the Federal Safe Water Drinking Act.

"Special protection areas" means those areas designated underfined by WAC 173-200-090.

"Susceptible ground water management areas" means areas that have been designated as moderately or highly vulnerable or susceptible in an adopted ground-water management program developed pursuant to Chapter WAC 173-100 WAC.

"Type F waters" means segments of natural waters other than Type S Waters, which are within the bankfull widths of defined channels and periodically inundated areas of their associated wetlands, or within lakes,

Commented [JDL(3]: Relates to comment above

ponds, or impoundments having a surface area of 0.5 acre or greater at seasonal low water and which in any case contain fish habitat or are described by one of the following categories<sup>22</sup>

- 1. Waters, which are diverted for domestic use by more than 10 residential or camping units or by a public accommodation facility licensed to serve more than 10 persons, where such diversion is determined by the department to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type F Water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by 50 percent, whichever is less;
- 2. Waters, which are diverted for use by federal, state, tribal or private fish hatcheries. Such waters shall be considered Type F Water upstream from the point of diversion for 1,500 feet, including tributaries if highly significant for protection of downstream water quality. The department may allow additional harvest beyond the requirements of Type F Water designation provided the department determines after a landowner-requested on-site assessment by the department of fish and wildlife, Ecology, the affected tribes and interested parties that:
  - a. The management practices proposed by the landowner will adequately protect water quality for the fish hatchery; and
  - Such additional harvest meets the requirements of the water type designation that would apply in the absence of the hatchery;
- 3. Waters, which are within a federal, state, local, or private campground having more than 10 camping units: Provided, That the water shall not be considered to enter a campground until it reaches the boundary of the park lands available for public use and comes within 100 feet of a camping unit, trail or other park improvement;
- 4. Riverine ponds, wall-based channels, and other channel features that are used by fish for off-channel habitat. These areas are critical to the maintenance of optimum survival of fish. This habitat shall be identified based on the following criteria:
  - a. The site must be connected to a fish habitat stream and accessible during some period of the year;
     and
  - b. The off-channel water must be accessible to fish.

Crystal Creek is a Type F stream throughout its length in the City of Cle Elum.

"Type Np Water" mean all segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial steams are flowing waters that do not go dry any time of a year of normal rainfall and include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.

"Type Ns Water" means all segments of natural waters within the bankfull width of the defined channels that are not Type S, F, or Np Waters. These are seasonal, nonfish habitat streams in whish surface flow is not present for a least some portion of a year of normal rainfall and are not located downstream from and stream reach that is a Type Np Water. Ns Waters must be physically connected by an above-ground channel system to Type S, F, or Np Waters.

"Type S Waters" means all waters, within their bankfull width, as inventoried as "shorelines of the state" under chapter 90.58 RCW and the rules promulgated pursuant to chapter 90.58 RCW including periodically inundated areas of their associated wetlands. As of August 2020, the only known Type S waters in Cle Elum are the Yakima and Cle Elum rivers.

"Qualified professional" means a person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4). A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology, or related field, and have at least five years related work experience.

- a1. A qualified professional for wetlands must be a professional wetland scientist with at least two years of full time work experience as a wetlands professional, including delineating wetlands using the state or federal manuals, preparing wetlands reports, conducting function assessments, and developing and implementing mitigation plans.
- b2. A qualified professional for habitat must have a degree in biology or a related degree and professional experience related to the subject species.
- e3. A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the State of Washington.
- <u>44</u>. A qualified professional for critical aquifer recharge areas means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.

"Qualified scientific expert" has the expertise appropriate to the relevant critical areas and is determined by the person's professional credentials and/or certification, any advanced degrees earned in the pertinent scientific-discipline from a recognized university, the number of years experience in the pertinent scientific discipline, formal training in the specific area of expertise, and field and/or laboratory experience with evidence of the ability to produce peer-reviewed publications or other professional literature. No one factor is determinative indeciding whether a person is a qualified scientific expert.

"Waters of the state" include lakes, rivers, ponds, streams, inland waters, underground waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in RCW 90.48.020.

"Wellhead protection areas" are areas defined by the boundaries of the ten (10) year time of ground water travel, or boundaries established using alternate criteria approved by the state Department of Health in those

Commented [JDL(4]: We suggest that, as applied to CARAs, a qualified professional be someone who is a currently licensed Washington State geologist holding a current specialty license in hydrogeology. A general practice geologist or PE, or one whose specialty lies in another area, may or may not have appropriate background to perform this work. (See Ch. 18.220 RCW & Ch. 308-15 WAC, generally, & specifically WAC 308-15-053 & -055.) We recognize that in some areas there's a dearth of licensed hydrogeos so if that specific expertise is lacking in Kittitas Co., then the current language is fine.

settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.

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

(Ord. 1335 § 1, 2010)

## 18.01.030 Designation and Mapping of critical areas.

- A. All areas within the city meeting the definition of one or more critical areas defined above are hereby designated critical areas and are subject to the provisions of this chapter except for critical areas within the City of Cle Elum shorelines. The City of Cle Elum Shoreline Master Program supersedes this chapter for only those critical areas within shoreline designations.
- AB. The City of Cle Elum shall regulate all uses, activities and developments within, adjacent to, or likely to affect, one or more critical areas, consistent with the best available science and the provisions herein.
  - B. Critical areas regulated by this chapter include:

#### <u>C</u><sup>1</sup>. <u>Wetlands Designation:</u>

Wetlands are those areas, designated in accordance with the procedures outlined in WAC 173-22-035. All areas within the city meeting the wetland designation criteria as outlined in WAC 173-22-035 are hereby designated critical areas and are subject to the provisions of this chapter. Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system found in the Washington State Wetland Rating System documents (Eastern Washington, Ecology Publication #04-06-15030) or as revised by Ecology. Wetland delineations are valid for five years; after such date the City shall determine whether a revision or additional assessment is necessary.

1. The approximate location and extent of known wetlands are shown on the adopted critical area map, or the latest revision of this map, as derived from the National Wetlands Inventory. The City's critical

area mapping., National Wetland Inventory Map, Soil Surveys, and any Washington Department of Natural Resource wetland is map is mapping are to be used as a guide for the City, project applicants, and/or property owners to identify potential wetland areas, but do not provide a conclusive or definitive indication of wetland presence or extent. Other wetlands may exist that do not appear on the maps and some wetlands that appear on these maps may not meet all of the wetland designation criteria., and may be continuously updated as new critical areas are identified. It is a reference and does not provide a final critical area designation.

- The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional
- D2. Critical aquifer recharge areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC Error! Hyperlink reference not valid. CARAs have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. Aquifer recharge areas shall be rated as having high, moderate, or low susceptibility based on soil permeability, geologic matrix, infiltration, and depth to water as determined by the criteria established by the state Department of Ecology. These areas include the following:
  - 1. a. Wellhead Protection Areas. Wellhead protection areas may beare defined by the boundaries of the ten year time of ground water travel or boundaries established using alternate criteria approved by the Washington State Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC Error! Hyperlink reference not valid.
  - 2. Sole Source Aquifers. Sole source aquifers are areas that have been designated by the U.S. Environmental Protection Agency pursuant to the Federal Safe Water Drinking Act.
  - 3. Susceptible Ground Water Management Areas. Susceptible ground water management areas are areas that have been designated as moderately or highly vulnerable or susceptible in an adopted ground water-management program developed pursuant to WAC Error! Hyperlink reference not valid.
  - 4. Special Protection Areas. Special protection areas are those areas defined by WAC-Error! Hyperlink reference not valid.
  - 5. Moderately or Highly Vulnerable Aquifer Recharge Areas. Aquifer recharge areas that are moderately or highly vulnerable to degradation or depletion because of hydrogeologic characteristics are those areas delineated by a hydrogeologic study prepared in accordance with the state Department of Ecology guidelines.

Moderately or Highly Susceptible Aquifer Recharge Areas. Aquifer recharge areas moderately or highly susceptible to degradation or depletion because of hydrogeologic characteristics are those areas meeting the criteria established by the state Department of Ecology. The city lies over alluvial soil deposits. There are unconsolidated materials composed of silt, sand and gravel, which in places are several hundred feet in depth. This deposit material is important as a water conveying unit and supplies the groundwater of stream flow (recharge). In general, areas of permeable soils in combination with geological transfer structure may be aquifer recharge areas. Based on the information and maps contained in hydrology of the Upper Yakima River Basin and landscape planning, environmental applications, the entire city is in an aquifer recharge area. This is a preliminary determination until further studies of geology and hydrology are

Commented [JDL(5]: Duplicates definition

conducted on an overall or individual property specific basis to either include or exclude them as an aquifer recharge area

- E3. Frequently flooded areas are those areas <u>subject to at least a one percent or greater chance of flooding in</u> any given year, or within areas subject to flooding due to high ground water. These areas include: that have a one percent or greater chance of flooding in any given year. These areas may include, but are not limited to.
  - 1. Water-ways- Including (streams, rivers, lakes, coastal areas, wetlands, and areas where high ground water forms ponds on the ground surface). streams (including intermittent ones), draws/ravines, rivers, wetlands, draws and the like. This includes Crystal Creek. Crystal Creek and ephemeral drainages identified by DNR and the Washington Department of Fish and Wildlife (WDFW).
  - 2. b. Floodways Floodways and Floodplains Lidentified in the most recent the May 5, 1981 FEMA Flood Insurance Rate Map, and as subsequently revised and amended. c. Crystal Creek. Crystal Creek and ephemeral drainages identified by DNR and the Washington State Department of Fish and Wildlife (DFW).
- E4. Geologically hazardous areas are areas susceptible to erosion, sliding, earthquake, or other geological events, that are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns. Geological hazardous areas as designated by WAC 365-190-080 include those with the following-areaseharacteristies:
  - a. Erosion Hazard Areas. Erosion hazard areas are at least those areas identified by the U.S.
     Department of Agriculture's Natural Resources Conservation Service as having a "moderate to severe," "severe," or "very severe" rill and inter-rill erosion hazard. Erosion hazard areas are also those areas impacted by shore land and/or stream bank erosion and those areas within a river's channel migration zone.
  - 2. b. Landslide Hazard Areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors, and include, at a minimum, the following (per WAC 365-190-120(6)):
    - a. Areas of historic failures, such as:
      - Those areas delineated by the United States Department of Agriculture Natural Resources
         Conservation Service as having a significant limitation for building site development;
      - ii. Those coastal areas mapped as class u (unstable), uos (unstable old slides), and urs (unstable recent slides) in the Ecology coastal atlas; or

- iii. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the United States Geological Survey or Washington department of natural resources.
- b. Areas with all three of the following characteristics:
  - i. Slopes steeper than fifteen percent;
  - Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
  - iii. Springs or groundwater seepage.
- c. Areas that have shown movement during the holocene epoch (from ten thousand years ago to the present) or which are underlain or covered by mass wastage debris of this epoch;
- d. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials:
- e. Slopes having gradients steeper than eighty percent subject to rockfall during seismic shaking;
- f. Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones;
- g. Areas that show evidence of, or are at risk from snow avalanches;
- h. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and
- i. Any area with a slope of forty percent or steeper and with a vertical relief of ten or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.
- j. Any area with a slope of forty percent or steeper and with a vertical relief of ten or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.
- k. Known landslide areas documented by the Washington State Department of Natural Resources (DNR)(2020) and those areas with slopes greater than 35%.
- Known mass wasting areas identified in the 2005 Landslide Hazard Zonation Project Mass Wasting Assessment prepared by Powell, L.
- 3. e. Seismic Hazard Areas. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, lateral spreading, or surface faulting. Settlement and soil liquefaction conditions occur in areas underlain by

cohesionless soils of low density, typically in association with a shallow groundwater table. One indicator of potential for future earthquake damage is a record of earthquake damage in the past.

Ground shaking is the primary cause of earthquake damage in Washington, and ground settlement may occur with shaking. As specified in WAC 365-190-120(7), The strength of ground shaking is primarily affected by:

- a. The magnitude of an earthquake;
- b. The distance from the source of an earthquake;
- c. The type of thickness of geologic materials at the surface; and
- d. The type of subsurface geologic structure.

The Washington Department of Natural Resources Seismic scenario catalog, liquification susceptibility, and U.S. Department of Agriculture Natural Resource Conservation Service soil surveys should be consulted. These maps are a reference and do not provide a conclusive or final critical area designation. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting. Settlement and soil liquefaction conditions occur in areas underlain by cohesionless, loose, or soft-saturated soils of low density, typically in association with a shallow ground water table.

- 4. d.—Mine Hazard Areas Mine hazard areas are those areas underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or air shafts. Factors which should be considered include: Proximity to development, depth from ground surface to the mine working, and geologic material. —Mine hazard areas are those areas underlain by or affected by mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sink holes, gas releases, or subsidence due to mine workings. Coal mining activities during the early part of this century left some areas in the Upper Kittitas County honeycombed with abandoned mine workings. Many of these abandoned workings pose a danger to collapse or sinking, especially during a seismic event. Factors that should be considered include: proximity to development, depth from ground surface to the mine working, and geologic material.
- 5. e. Volcanic Hazard Areas. Volcanic hazard areas are areas subject to pyroclastic flows, lava flows, debris avalanche, and inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.
- f. Steep Slopes: Known landslide areas documented by the Washington State Department of Natural Resources (DNR)(2020) and are those areas with steep slopes greater than 35%.
- 7. fg. Other Hazard Areas. Geologically hazardous areas shall also include areas determined by the {director} to be susceptible to other geological events including mass wasting, debris flows, rock falls, and differential settlement.

- **G5**. Fish and wildlife habitat conservation areas include those with the following characteristics:
  - 1. a. Federally Designated Endangered, Threatened and Sensitive Species. Areas with which federally designated endangered, threatened and sensitive species have a primary association. Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current listing status.
  - 2. b. State Designated Endangered, Threatened and Sensitive Species. Areas with which state designated endangered, threatened and sensitive species have a primary association. State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the state of Washington identified by the Washington Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species) and WAC 232-12-011 (state threatened and sensitive species). The state Department of Fish and Wildlife maintains the most current listing and should be consulted for current listing status.
  - 3. e. State Priority Habitats and Areas Associated With State Priority Species. Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the state Department of Fish and Wildlife.
  - 4. d. Habitats and Species of Local Importance. Habitats and species of local importance are those identified by the [city/county]City of Cle Elum, including but not limited to those habitats and species that, due to their population status or sensitivity to habitat manipulation, warrant protection. Habitats may include a seasonal range or habitat element with which a species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.
  - 5. Waters of the State.
  - 6. Streams. All streams that meet the criteria for Type S, F or N (Np and Ns) waters as set forth in WAC 222-16-030 and provided in definitions in CEMC 18.01.020. Official Water Type Reference Maps maintained by the Department of Natural Resources should be consulted. These maps are a reference and do not provide a conclusive or final critical area designation.

7. Naturally occurring and man-made ponds under twenty (20) acres in size.

<u>GC.</u> All areas within the city meeting the definition of one or more critical areas defined above are herebydesignated critical areas and are subject to the provisions of this chapter.

(Ord. 1335 § 1, 2010)

#### 18.01.040 Construction with other laws.

A. Abrogation and Greater Restrictions. It is not intended that this chapter repeals, abrogates, or impairs any existing regulations, easements, covenants, or deed restrictions. However, when this chapter imposes greater restrictions, the provisions of this chapter shall prevail.

BA. Interpretation. The provisions of this chapter shall be liberally construed to serve the purposes of this chapter.

(Ord. 1335 § 1, 2010)

# 18.01.050 Permitting.

All applications for permits to conduct activities having a possible significant impact on critical areas that are located on or near a project site must identify the areas affected and make an estimate of the probable impact. The Ceity of Cle Elum shall deny all requests for permits which would result in activities degrading a wetland or fish and/or wildlife habitat conservation area, which would put people or property in a position of unacceptable risk with respect to floods or geologic hazards, which would tend to aggravate geologic hazards, or which would harm critical recharging areas for aquifers not otherwise in accordance with this Chapter. The Ceity of Cle Elum may, however, grant permits which include mitigation measures if the mitigation measures adequately protect the critical area and people involved. In granting a permit that includes mitigation measures, best available science, which shall be determined utilizing the criteria set out in Chapter 365-195 WAC-Error! Hyperlink reference not valid. through Error! Hyperlink reference not valid., shall be used to develop and approve the mitigation measures. Applicable permit fees, as set forth by resolution of the city council, are due at the time of application. The applicant shall be responsible for the initiation, preparation, submission, and expense of all required reports, assessment(s), studies, plans, reconnaissance(s), peer review(s) by qualified consultants, and other work prepared in support of or necessary to review the application.

(Ord. 1543 § 1, 2019; Ord. 1335 § 1, 2010)

#### 18.01.055 Determination.

- A. Each development permit shall be reviewed to determine if the proposal is within a critical area or critical area buffer. City staff shall use maps and data maintained by the city and a site inspection if appropriate.
- B. If it is determined that a critical area(s) is present additional assessments prepared by a qualified professional best suited for the type of identified critical area(s) may be required.
- B. Wetlands. A wetland assessment prepared by a qualified wetlands specialist is required for projects situated within 200 feet of a known or suspected wetland and shall include the following:of a critical area, and or its buffers. The wetland assessment should provide results of a preliminary environmental agency data resources review applicable to the site, field investigation data forms and site photographs, and a map of the delineated critical area and associated buffer areas as it relates to the property's extent and the proposed project footprint.
  - 1. The category and precise location of the boundary of the wetland(s); and
  - 2. Delineated wetlands and required buffers within 200 feet of the project area shall be depicted on the site plan. Best available information includes, but is not be limited to, aerial photos, soils maps, and/or topographic maps; and
  - 3. An analysis of the onsite wetland(s) including the following site- and proposal-related information:
    - a. Documentation of any fieldwork performed on the site, including but not limited to field
       delineation data sheets for delineations, the wetland rating forms, and baseline hydrologic data;
    - A description of the methodologies used to conduct the wetland delineations; and <del>Tthe vegetative, faunal, and hydrologic characteristics of the wetland.</del>
- C. Critical Aquifer Recharge Area.
  - 1. As stated in CEMC 18.01.030.DC, the entire city limits is presumed to be located within in critical aquifer recharge area unless a hydrogeologic study demonstrates otherwise. This is a preliminary determination until further studies of geology and hydrology are conducted on an overall or individual property specific basis to either include or exclude them as an aquifer recharge area.
  - 2. All critical aquifer recharge areas shall be classified as having either a high, medium, or low aquifer recharge potential. At a minimum, classification shall be based on soil permeability and recharge potential as described within the Soil Survey of Kittitas County. Where adequate information is available, aquifer recharge potential shall be further classified based on the recharge potential of surficial geologic materials, presence or absence of restrictive layers, surface and groundwater monitoring data, wellhead protection areas, depth to groundwater, topography (i.e., slopes), and

locally adopted groundwater protection plans and studies. Land classified as having a high, medium, or low aquifer recharge potential shall also be classified as having a high, medium, or low susceptibility to contamination of an underlying aquifer, respectively. Based on these criteria, the potential for recharging aquifers or transmitting contaminants to the underlying aquifer is greatest where the aquifer is close to the ground surface, where ground surface slopes are minimal, and where the recharge potential of the soils and/or surficial geologic material is greatest. All wellhead protection areas shall be designated as highly susceptible critical aquifer recharge areas. This can be provided in the hydrogeologic study or separate memo prepared by a qualified professional.

#### D. Fish Habitat Conservation Area.

- 1. A critical areas report prepared by a qualified biologist is required if a proposed use or development is located within two hundred (200) feet of a designated fish habitat conservation area and shall include the following:
  - a. Identify the water type as classified according to WAC 222-16-030 and Waters of the State.
     https://www.codepublishing.com/cgi-bin/wac.pl?cite=222-16-030
  - b. The location of the ordinary high watermark;
  - All fish habitat conservation areas and required buffers within two hundred (200) feet of the project area shall be depicted on the site plan;
  - d. The vegetative, faunal, topographic, and hydrologic characteristics of the fish habitat conservation area; and
  - e. A detailed discussion of the direct and indirect potential impacts on fish habitat conservation area
    by the project. Such discussion shall include a discussion of the ongoing management practices
    that will protect habitat after the project site has been developed.
- 2. A habitat management plan prepared by a qualified biologist is required for projects situated within 200 feet of a known or suspected fish and wildlife habitat conservation areas. The habitat management plan shall include a discussion of the potential direct and indirect impacts, as well as a discussion of the ongoing management practices that will protect habitat after the project site has been developed. The habitat management plan will include any relevant information and recommendations from the Washington Department of Fish and Wildlife habitat guidelines for the affected species and/or habitat. Based on the characteristics of the site, the City may require that all or a portion of the following be included in a habitat management plan:
  - a. A map drawn to scale or survey showing the location of the fish and wildlife habitat conservation area on the subject property, as well as the approximate location of any potential fish and wildlife habitat conservation area within two hundred (200) feet of the subject property;

- b. A description of the methodologies used to classify the water type and the associated fish
- c. Detailed description of vegetation and habitat characteristics within and adjacent to the site;
- d. Identification of any endangered, threatened, sensitive, or candidate species that have a primary
   association with habitat on the project area, and assessment of potential project impacts to use of
   the buffer and critical area on the site by the species;
- e. Methods and measures to avoid, minimize and/or compensate for adverse impacts associated with the proposed development, including but not limited to:
  - i. Prohibition or limitation of development activities within the fish and wildlife habitat conservation area;
  - ii. Establishment of a buffer around the fish and wildlife habitat conservation area;
  - iii. Retention of vegetation and/or revegetation of areas / habitats critically important to species;
  - iv. Special construction techniques;
  - v. Implementation of erosion and sediment control measures;
  - vi. Habitat enhancement (i.e., fish passage barrier removal);
  - vii. Seasonal restrictions on construction activities on the subject property;
  - viii. Clustering of development on the subject property; and
  - ix. Any other requirements and/or recommendations from WDFW's habitat management guidelines.
- E. Frequently Flooded Areas. A Federal Emergency Management Agency (FEMA) elevation certificate shall be required for new construction, any addition affixed to the side of a structure, and substantial improvements located within flood hazard areas. The most current version of the FEMA elevation certificate must be completed and certified by a professional land surveyor, currently licensed in the state of Washington, kept on file by the city for public inspection, recording the actual (as-built) elevation (in relation to mean sea level) of:
  - 1. The lowest floor, including basement, of all new or substantially improved structures, whether or not the structure contains a basement;
  - For floodproofed nonresidential structures, where the structure was floodproofed (including floodproofing certifications).

- F. Geological Hazard Areas Risk Assessment. If it is determined that a landslide, erosion, mine, volcanic and seismic hazard area hazard may be present on or adjacent to a proposed development site, the applicant shall submit a geologic hazard area risk assessment prepared by a professional engineer, engineering geologist, or geologist. The geologic hazard area risk assessment shall include a description of the geology of the site and the proposed development; an assessment of the potential impact the project may have on the geologic hazard; an assessment of what potential impact the geologic hazard may have on the project; appropriate mitigation measures, if any; and a conclusion as to whether further analysis is necessary. The assessment shall be signed by and bear the seal of the engineer or geologist that prepared it. No further analysis shall be required if the geologic hazard area risk assessment concludes that there is no geologic hazard present on the site, nor will the project affect or be affected by any potential geologic hazards that may be nearby. If the professional preparing the geologic hazard area risk assessment concludes that further analysis is necessary, the applicant shall submit a geotechnical report.
- G. Geological Hazard Areas Geotechnical Report. If the geological hazard areas risk assessment requires further analysis, a geotechnical report is required. The geotechnical report shall include a certification from the professional preparing the report, including the professional's stamp and signature. The geotechnical report shall include the following:
  - 1. A detailed description of the geology and soil conditions of the site;
  - 2. Evaluation of the geologic conditions giving rise to the geologic hazard;
  - 3. An evaluation of the safety of the proposed project;
  - Conclusions and recommendations regarding the effect of geologic conditions on the proposed development;
  - 5. Conclusions and recommendations on the suitability of the site to be developed;
  - 6. A statement regarding the risk of damage from the project, both on- and off-site; and whether or not the project will materially increase the risk of occurrence of the hazard;
  - The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.
  - 8. Recommendations concerning drainage practices, vegetation retention and other mitigation and monitoring measures which may be needed to ensure slope stability;
  - 9. Recommended erosion and sediment control measures;
  - 10. A bibliography of scientific citations; and
  - 11. Any other specific measures which must be incorporated into the design and operational plan of the project to eliminate or reduce the risk of damage due to the hazard. This shall include a

recommendation on the required buffer or setback distance that must be maintained between the proposed development and the hazard to ensure the safety of the development. In cases related to geohazards, the assessment shall include a description of the geology of the site and the proposed development; and assessment of the potential impact the project may have on the geologic hazard; an assessment of what potential impact the geologic hazard may have on the project; appropriate mitigation measures, if any; a conclusion as to whether further analysis is necessary; and be signed by and bear the seal of the engineer or geologist that prepared it.DE. When a geotechnical report is required it shall include a certification from the engineer preparing the report, including the engineer's professional stamp and signature, stating all of the following:1. The risk of damage from the project, both on—and off—site;2. The project will not materially increase the risk of occurrence of the hazard; and3. The specific measures incorporated into the design and operational plan of the project to eliminate or reduce the risk of damage due to the hazar

EH. All mitigation measures, construction techniques, recommendations and technical specifications provided in the geotechnical report shall be applied during the implementation of the proposal. The engineer of record shall submit sealed verification at the conclusion of construction that development occurred in conformance with the approved plans.

FG. A proposed development cannot be approved if it is determined by the geotechnical report that either the proposed development or adjacent properties will be at risk of damage from the geologic hazard, or that the project will increase the risk of occurrence of the hazard, and there are no adequate mitigation measures to alleviate the risks.(Ord. 1335 § 1, 2010)

# 18.01.060 New permits required for activities in critical areas.

The following activities shall require a critical areas permit if they are not already reviewed through a more general permit in which the applicant has reported a possible impact on a critical area:

- A. In Wetlands: The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter or material of any kind; dumping, discharging, or filling with any material; the draining, flooding, or disturbing of the water level or water table; the driving of piling; the placing of obstructions; the construction, reconstruction, or demolition or expansion of any structure; the destruction or alteration of wetlands vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland, or activities that result in a significant change of water temperature, a physical or chemical characteristics or of the wetland water sources, including quantity, or the introduction of pollutants.
- B. In Critical Aquifer Recharge Areas: Any land use, agricultural activity, or other activity having significant potential to contaminate the water.

- C. In Fish and Wildlife Habitat Conservation Areas: Any land use or other activity having the potential to significantly degrade the habitat or harm wildlife.
- D. In Frequently Flooded Areas: Any land use or other activity likely to contribute to a significant increase in flood hazards or to place a significant number of people in danger.
- E. In Geologically Hazardous Areas: Any land use or other activity likely to contribute to a significant increase in geological hazards or to place people in danger.
- F. Designated critical areas and any associated buffers shall be designated and disclosed on the final plats, maps, documents, etc., as critical area tracts, non-buildable lots and buffer areas or common areas.

(Ord. 1335 § 1, 2010)

#### 18.01.070 Performance standards.

The following general performance standards shall apply to activities permitted with-in critical areas or critical area buffers. Additional standards may be necessary based on site specific considerations or proposed development impacts.

### A. General Performance Standards.

- 1. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan based off of Wetland Mitigation in Washington-State, Part 1: Agency Policies and Guidance (Version 1, Publication #06-06-011a, March 2006, or as amended) and Wetland Mitigation in Washington State, Part 2: Developing Mitigation Plans (Version 1, Publication #06-06-011b, March 2006, or as amended).
- 2. Mitigation plans shall include a discussion of mitigation alternatives (sequencing) as they relate to:
  - a. Avoiding the impact altogether by not taking a certain action or parts of an action;
  - b. Minimizing impacts by limiting the degree or magnitude of the actions and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
  - c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;

- e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
- f. Monitoring the impact and taking appropriate corrective measures.
- 3. All boundaries of critical areas or any associated buffers shall be delineated prior to development activity on site.
- 4. Mitigation Ratios shall mean those wetland mitigation ratios as shown on attached Table 18.01-2.

Table 18.01-21. Table Wetland Mitigation Ratios

Category and Type of Wetland	Creation or Re- establishment	Rehabilitation	Enhancement	Preservation
Category I: Bog, Natural Heritage Site	Not considered possible	6:1	Case by case	10:1
Category I: Mature Forested	6:1	12:1	<del>24:1</del>	<del>24:1</del>
Category I: Based on functions	4:1	8:1	<del>16:1</del>	<del>20:1</del>
Category II	3:1	<del>6:1</del>	<del>12:1</del>	<del>20:1</del>
Category III	2:1	4 <del>:1</del>	<del>8:1</del>	<del>15:1</del>
Category IV	1.5:1	<del>3:1</del>	<del>6:1</del>	<del>10:1</del>

## AB. Wetland Area Performance Standardss.

- 1. General measures to minimize impacts to wetlands:
  - a. Lights shall be directed away from the wetland.
  - Activities that generate noise shall be located away from the wetland, or noise impacts shall be minimized through design or insulation techniques.
  - c. Toxic runoff from new impervious surface area shall be directed away from wetlands.
  - d. Treated storm water runoff may be allowed into vegetated wetland buffers in accordance with provisions of the Eastern Washington Stormwater Manual. Channelized flow shall be prohibited.
  - e. Use of pesticides, insecticides and fertilizers within 150 feet of wetland boundary shall be limited and follow Best Management Practices (BMPs) in Table18.02-2.

- 6. The outer edge of the wetland buffer shall be marked, identified, planted with dense native vegetation and/or fenced with wildlife permeable fencing for the purposes of identifying the wetland buffer area and to discourage human disturbance.
- 2. 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 wetland professional using the Washington State Wetland Rating System for Eastern Washington: 2014 Update (Ecology Publication #14-06-030, or as revised and approved by Ecology). The adjacent land use intensity is assumed to be high. Buffer widths are 1 established to protect the integrity, functions and values of all regulated wetlands and are measured horizontally in all directions from the regulated wetland edge as marked in the field. The prescribed buffer widths are based on the wetland category and the expected level of impact of the proposed adjacent land use.
  - a. For wetlands that score 6 points or more for habitat function, the buffers in Table 18.01-1 can be used. if both of the following criteria are met: High impact land use: Commercial, urban, industrial, institutional, retail sales, residential (more than 1 unit/acre), hobby farms, and high intensity recreation (golf course, ball fields, etc.) and conversion to high intensity agricultural (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc).
  - b. Moderate For wetlands that score 3-5 habitat points, only the measures in Table 18.01-2 are required for the use of Table 18.01-1.impact land use: Residential development (1 unit/acre or less), parks with biking, jogging, etc., paved trails, building of logging roads, conversion or agriculture related to orchards, hay fields, etc., and utility corridor or right-of-way shared by several utilities.
  - bc. Low If an applicant chooses not to apply the mitigation measures in Table 18.01-2, or is chooses not to provide a protected corridor where available, then Table 18.01-3 must be used. impact land use includes forestry (cutting of trees only), open space (hiking, bird-watching, preservation of natural resources, etc.), unpaved trails, and utility corridors without a maintenance road and little or no vegetation management.
  - d. The buffer widths in Table 18.01-1 and 18.01-3 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 18.01-1 Standard Wetland Buffer Requirements if Table 18.01-2 is Implemented

	Buffer Width (in feet) Based on Habitat Score		
Wetland Category	<u>3-5</u>	<u>6-7</u>	<u>8-9</u>
Category I: Based on total score	<u>75</u>	110	<u>150</u>
Category I: Forested	<u>75</u>	110	<u>150</u>
Category I:  Bogs and Wetlands of High Conservation Value	190 (buffer width not based on habitat score)		
Category I: Alkali	150 (buffer width not based on habitat scores)		
Category II: Based on total score	<u>75</u>	<u>110</u>	<u>150</u>
Category II: Vernal Pool	150 (buffer width not based on habitat scores)		
Category II: Forested	<u>75</u>	<u>110</u>	<u>150</u>
Category III (all) Category IV (all)	<u>60</u> <u>110</u> <u>150</u> <u>40</u>		

Table 18.01-2. Required Measures to Minimum Impacts to Wetlands

<b>Disturbance</b>	Required Measures to minimize Impacts
<u>Lights</u>	Direct lights away from wetland
Noise	Locate activity that generates noise away
	<u>from wetland</u>
	<ul> <li>If warranted, enhance existing buffer with</li> </ul>
	native vegetation plantings adjacent to noise
	source
	<ul> <li>For activities that generate relatively</li> </ul>
	continuous, potentially disruptive noise, such
	as certain heavy industry or mining, establish
	an additional 10' heavily vegetated buffer

	strip immediately adjacent to the outer
	wetland buffer
Toxic Runoff	Route all new, untreated runoff away from
	wetland while ensuring wetland is not
	dewatered
	Establish covenants limiting use of pesticides
	within 150 ft of wetland
	Apply integrated pest management
Stormwater Runoff	Retrofit stormwater detention and treatment
	for roads and existing adjacent development
	Prevent channelized flow from lawns that
	directly enters the buffer
	Use Low Intensity Development techniques
	(for more information refer to the drainage
	ordinance and manual)
Changes in water regime	Infiltrate or treat, detain, and disperse into
	buffer new runoff from impervious surfaces
	and new lawns
Pets and human disturbance	Use privacy fencing OR plant dense
	vegetation to delineate buffer edge and to
	discourage disturbance
	<ul> <li>Using vegetation appropriate for the</li> </ul>
	ecoregion;
	Place wetland and its buffer in a separate
	tract or protect with a conservation easement
Dust	Use best management practices to control
	<u>dust</u>

<u>Table 18.01-3. Standard Wetland Buffer Requirements if Table 18.01-2 is NOT Implemented</u>

	Buffer width (in feet) based on habitat score		
Wetland Category	<u>3-5</u>	<u>6-7</u>	<u>8-9</u>
Category I:	100	150	200
Based on total score	<u>100</u>	<u>130</u>	<u>200</u>
Category 1:	100	150	200
Forested	<u>100</u>	<u>150</u>	<u>200</u>
Category I:		250	
Bogs and Wetlands of	(buffer width not based on habitat scores)		
High Conservation Value			

Category I:	<u>200</u>		
<u>Alkali</u>	(buffer width not based on habitat scores)		
Category II:	100	150	200
Based on total score	100	150	200
Category II:	<u>200</u>		
Vernal Pool	(buffer width not based on habitat scores)		
Category II:	100	150	200
Forested	150 150 200		
Category III (all)	<u>80</u> <u>150</u> <u>200</u>		
Category IV (all)		<u>50</u>	

- 3. All wetland 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.
- 4. Interrupted buffer: When a wetland buffer contains an existing legally established public road or private access road, the City may allow development on the landward side of the road provided that the development will not have a detrimental impact to the wetland. The applicant may be required to provide a wetland critical area report to describe the potential impacts. In determining whether a critical areas report is necessary, the City shall consider the hydrologic, geologic, and/or biological habitat connection potential and the extent and permanence of the buffer interruption.
- 5. Increased wetland buffers: The City shall increase wetland buffer zone widths for a development project on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values. Such determination shall be based on site-specific and project-related conditions which include, but are not limited to, the following circumstances:
  - a. Wetland sites with known locations of state priority or federally listed endangered, threatened, or sensitive species for which a habitat management plan indicates a larger buffer is necessary to protect habitat values for such species; or
  - b. The adjacent land is susceptible to severe erosion, and erosion control best management practices
     will not effectively prevent adverse wetland impacts
  - c. Wetland sites in geologically hazardous areas or where adjacent land has slopes greater than 30%.
- 6. Wetland buffer condition: Wetland buffer areas shall be retained in a natural condition or may be improved to enhance buffer functions and values. Where buffer disturbance is allowed pursuant to this section, revegetation with native vegetation shall be required. Alterations of the buffer that are not associated with a development or listed as an exemption under CEMC 18.01.080 shall be prohibited.

- 7. Building setback: A 15-foot building setback is required from the landward edge of any wetland buffer. Minor intrusions into the area of the building setback may be allowed if the City determines that such intrusions will not negatively impact the wetland. The setbacks shall be shown on all site plans submitted with the application.
- 8. Buffer Averaging: The City may allow, at its sole discretion, modification of standard wetland buffer width in accordance with the report and the best available science on a case-by-case basis by averaging buffer widths. Where the City allows modification of standard wetland buffer width this modification may only be allowed where a qualified wetlands professional demonstrates that:
  - a. It will not reduce wetland functions or values;
  - b. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
  - c. The total area contained in the buffer area after averaging is equal to the area required without averaging; and
  - d. The minimum width of the buffer at any given point is at least seventy-five percent (75%) of the standards width unless the applicant demonstrates an acceptable reasonable use as described in CEMC 18.01.090. Total buffer area after averaging must equal the area required without averaging.
- 9. Before impacting any wetland or its buffer, an applicant shall demonstrate that the following actions have been taken. Mitigation plans shall include a discussion of mitigation alternatives (sequencing) as they relate to:
  - a. Avoid the impact altogether by not taking a certain action or parts of an action.
  - 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.
  - c. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
  - d. Reduce or eliminate the impact over time by preservation and maintenance operations.
  - Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.
  - f. Monitor the required compensation and take remedial or corrective measures when necessary.
- 10. Wetland Compensatory Mitigation: Compensatory mitigation is required for all alterations to wetlands or their buffers, except for City approved buffer averaging.

- 11. Requirements for Compensatory Mitigation:
  - a. 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.
  - b. 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 or as revised).
  - c. Mitigation ratios shall be consistent with Table 18.01-2.
  - d. Preference of mitigation actions: Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:
    - Restoring and/or rehabilitating filled or altered wetlands to their pre-development or near predevelopment condition.
    - ii. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conductive for the wetland community that is being designed.
    - iii. Enhancing significantly degraded wetlands in combination with restoration or creation.
  - Mitigation for lost or affected functions: Compensatory mitigation actions shall replace functions
    affected by the alteration and shall provide equal or greater functions compared to the impacted
    wetland.
  - f. Mitigation timing: Mitigation projects shall be completed prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
  - g. Delay in mitigation: The City may authorize a one-time temporary delay, up to one hundred twenty (120) days, in completing minor construction and landscaping when environmental conditions could produce a high probability of failure or significant construction difficulties. 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, and general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints which preclude implementation of the mitigation plan. The justification must be verified and approved by the City and include a financial guarantee.

h. Mitigation ratios for wetland impacts: Mitigation ratios shall be used when impacts to wetlands cannot be avoided, as specified in Table 4.2-2. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered. Compensatory mitigation shall restore, create, rehabilitate or enhance equivalent or greater wetland functions. The ratios shall apply to mitigation that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. If available, these ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a certified wetland mitigation bank or in-lieu fee program. When credits from a certified bank or in-lieu fee program are used, replacement ratios should be consistent with the requirements of the bank's/program's certification.

<u>Table 18.01-4.</u> Wetland Mitigation Ratios for Unavoidable Wetland Impacts:

Category and Type of Wetland	Creation or Re- establishment <sup>1,2</sup>	Rehabilitation <sup>1,2</sup>	Enhancement <sup>1,3</sup>
Category I: Bog, Natural Heritage Site	Not considered possible	Case-by-case	<u>Case-by-case</u>
Category I: Mature Forested	<u>6:1</u>	<u>12:1</u>	<u>24:1</u>
Category I: Based on functions	<u>4:1</u>	<u>8:1</u>	<u>16:1</u>
Category II	<u>3:1</u>	<u>6:1</u>	<u>12:1</u>
Category III	<u>2:1</u>	<u>4:1</u>	<u>8:1</u>
Category IV	1.5:1	<u>3:1</u>	<u>6:1</u>

#### Table Footnotes:

- <sup>1</sup>Natural heritage sites, alkali wetlands, and bogs are considered irreplaceable wetlands because they perform special functions that cannot be replaced through compensatory mitigation. Impact to such wetlands would therefore result in a net loss of some functions no matter what kind of mitigation is provided.
- <sup>2</sup>Provides gains in a whole suite of functions both at the site and landscape scale. Rehabilitation actions often focus on restoring environmental processes that have been disturbed or altered by previous ongoing human activity.
- <sup>3</sup>Actions which provide gains in only a few functions. Enhancement actions often focus on structural or superficial improvements to a site and generally do not address larger scale environmental processes.
- 4 Compensatory mitigation for vernal pool impacts must be seasonally ponded wetland area(s).

- i. Increased replacement ratios: The City shall increase the wetland mitigation ratios under the following circumstances:
  - i. Uncertainty exists as to the probable success of the proposed restoration or creation;
  - ii. A significant period of time will elapse between impact and replication of wetland functions;
  - iii. Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacts; or
  - iv. The impact was an unauthorized impact.
- j. Alternative mitigation ratios: The City may approve different mitigation ratios when the applicant proposes a combination of wetland creation, restoration, rehabilitation, and/or enhancement, provided that federal and state resource agencies approve the mitigation plan.
- k. Mitigation ratios for wetland buffer impacts: To mitigate impacts to functions and values of buffers, a minimum buffer ratio of 1:1 (alteration area: mitigation area) is required. This ratio assumes that creation/restoration of wetland buffer with appropriate native vegetation is sufficient to compensate for the wetland buffer functions and values affected by alteration of existing wetland buffer. If enhancement of an existing wetland buffer is proposed as mitigation, a higher mitigation ratio may be required. For any proposed wetland buffer activities, the applicant must show that the functions and values of the altered wetland buffer will be fully replaced by the proposed mitigation. The City may increase the buffer mitigation ratios under the following circumstances:
  - i. The replacement ratio needed to recover the lost functions and values of buffer area is greater than 1:1 based upon the existing type of vegetative cover of either the impact site or the proposed mitigation site;
  - ii. Uncertainty exists as to the probable success of the proposed restoration or creation;
  - iii. A significant period of time will elapse between impact and replication of wetland functions;
  - iv. The impact was an unauthorized impact.
- Mitigation banking and in-lieu fee (ILF) mitigation: The City may establish a mitigation bank and ILF program as a form of compensatory mitigation for wetland and habitat conservation area impacts. If established, the bank and ILF program shall be certified in accordance with applicable federal and state mitigation rules.
- m. 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. This period may

be longer for more fragile mitigation proposals such as those containing woody vegetation. 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.

#### C. Critical Aquifer Recharge Areas (CARA).

- 1. The city lies over alluvial soil deposits. There are unconsolidated materials composed of silt, sand and gravel, which in places are several hundred feet in depth. This deposit material is important as a water-conveying unit and supplies the groundwater of stream flow (recharge). In general, areas of permeable soils in combination with geological transfer structure may be aquifer recharge areas. Based on the information and maps contained in hydrology of the Upper Yakima River Basin and landscape-planning, environmental applications, the city is as an aquifer recharge area. This is a preliminary-determination until further studies of geology and hydrology are conducted on an overall or individual property specific basis to either include or exclude them as an aquifer recharge area
- 2. All structures shall be placed to provide a maximum buffer to known specific CARA.
- 3. Impervious coverage of the lot shall be minimized.
- 4. Best Management Practices shall be used during construction.
- 1. New development in a critical aquifer recharge area shall meet the following standards:
  - a. The proposed development will not cause contaminants to enter the aquifer and will not significantly adversely affect the recharging of the aquifer.
  - b. The proposed development must comply with applicable water source protection requirements and recommendations of the Federal Environmental Protection Agency, Washington State Department of Health, and the Kittitas County health department.
  - c. The proposed development must be designed and constructed in accordance with applicable stormwater management standards.
  - d. Impervious coverage of the lot shall be minimized.
- 2. When located within an area of medium or high aquifer susceptibility, aboveground/underground storage tanks or vaults for the storage of hazardous substances, animals wastes, sewage sludge, fertilizers, or other chemical or biological hazards or dangerous wastes as defined in Chapter 173-303 WAC, or any other substances, solids, or liquids in quantities identified by Kittitas County Public Health, consistent with WAC 173-303, as a risk to groundwater quality, shall be designated and constructed so as to:

Commented [JDL(6]: Suggest removing this. Source water protection requirements in the federal Safe Drinking Water Act & in the WACs implemented by DOH impose a duty on water systems themselves, not land uses within a wellhead protection area. Wellhead protection programs are a required component of the purveyor's water system plan. Local health jurisdictions are typically not involved in this process.

- a) Prevent the release of such substances to the ground, groundwaters, or surface waters;
- b) Be contained or enclosed by an impervious containment area with a volume greater than the volume of the storage tank or vault to avoid an overflow of the containment area;
- c) Provide for release detection;
- d) Provide written spill response and spill notification procedures to the local fire district;
- e) Use material in the construction or lining of the storage containment area which is compatible
  with the substance to be storage to protect against corrosion or leakage, or otherwise designed in a
  manner to prevent the release or threatened release of any storage substance; and
- f) Comply with Chapters 173-303 and 173-360 WAC.
- g) The tanks must comply with Ecology regulations contained in Chapters 173-360 and 173-303
  WAC as well as International Building Code requirements.
- 3. The City may grant a waiver from one or more of the above requirements (in 3 a through g) upon a finding that the aboveground storage activity would not create a significant risk to groundwater quality. Aboveground or underground storage facilities designed and maintained according to an approved plan from the Natural Resources Conservation Service or Kittitas County Conservation District are exempt from these requirements but remain under the jurisdiction of the City to ensure compliance with the protective features of this Section and for enforcement purposes.
- 4. The use of fertilizers, herbicides, pesticides, or other chemical for vegetation management within critical aquifer recharge areas shall adhere to the best management practices to prevent impacts to water quality and water supply. Where the application of such chemicals covers five (5) or more acres, a mitigation plan shall be required pursuant the regulations listed below.
- 5. The following development activities, when proposed in medium or high susceptibility critical aquifer recharge areas, have the potential to adversely affect groundwater quality and/or quantity and may only be allowed subject to the City's review and approval of a special hydrogeological assessment prepared by a qualified professional:
  - a) Vehicle repair, servicing and salvaging facilities; provided that the facility must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur. Dry wells shall not be allowed on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by Ecology prior to commencement of the proposed activity.

Commented [JDL(7]: I wasn't sure what "regulations listed below" is referring to. Generally, I discourage the use of "mitigation" in relation to CARAs. Often a jurisdiction will seek to apply general mitigation requirements to all critical areas, while the compensatory mitigation provisions of <u>WAC 365-196-830</u> are carried through to only two specific critical areas types – geohazard (<u>WAC 365-190-120</u>) & wetlands (<u>WAC 365-190-090</u>). I don't think that's what's being done here but if possible, it would be good to use a different term to avoid implying that some degree of degradation to an aquifer is acceptable, while allowing even a limited degree of harm to an aquifer could result in lost potability.

- b) Use of reclaimed wastewater must be in accordance with adopted water or sewer comprehensive plans that have been approved by Ecology.
- c) Any other development activity that the City determines is likely to have a significant adverse impact on groundwater quality or quantity, or on the recharge of the aquifer. The determination must be made based on credible scientific information.
- d) New landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste of more than two thousand (2,000) cubic yards, and inert and demolition waste landfills.
- e) Underground injection wells. Class I, III, and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells.
- f) Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade).
- g) Facilities that store, process, use or dispose of chemicals containing perchloroethylene (PCE) or methyl tertiary butyl ether (MTBE).

6. State and Federal Regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

<u>Activity</u>	Statute - Regulation - Guidance
Above Ground Storage Tanks	Chapter 173-303 -640 WAC
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (Ecology WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
<u>Chemical Treatment Storage and Disposal</u> <u>Facilities</u>	<u>Chapter 173-303-182 282 WAC</u>
Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic	Chapter 173-303-170 WAC

Commented [JDL(8]: Please review. The numbering scheme has been changed for types of Class V wells, & I believe they now all have names rather than numbers but don't know the "crosswalk" between old & new. See https://www.epa.gov/uic/class-v-underground-injection-control-study

**Commented [JDL(9]:** Suggest adding TCE too, if specific chemicals are a concern.

<u>Activity</u>	Statute - Regulation - Guidance
Processing, Printing and Publishing	
Shops, etc.)	
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Spills and Discharges into the Environment	Chapter Section 173-303-145 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (Washington State Department of Ecology WDOE 94-146)
Oil and Gas Drilling	Chapter Section 332-12-450 WAC, WAC, Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (Washington State Department of Ecology WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	Chapter Section 332-18-015 WAC
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Washington State Department of Ecology Land Application Guidelines, Best Management Practices for Irrigated Agriculture

- 5. Activities involving fertilizers, herbicides, and pesticides will require a hydrogeological study prepared by a qualified professional for critical aquifer recharge areas and in accordance with the state Department of Ecology guidelines.
- D. Fish and Wildlife Habitat Conservation Areas Performance Standards.
  - 1. Flora (plant life) and Fauna (animal life) identified as protected, shall be sheltered from construction activities using Best Management Practices.
  - 2. Replacement of any flora shall be maintained by the applicant for three years to establish viable plant life.
  - 13. Fish and Wildlife Habitat Conservation Areas Regulations:
    - a. Stream buffer widths are established to protect the integrity, functions and values of all streams that meet the criteria for Type S, F or N (Np and Ns) waters. Buffer widths have been determined in accordance with the best available science and are measured horizontally from the ordinary high-water mark.

Table 18.01-5. Stream Buffer Requirements

Stream Type Standard Buffer Width		
Type S	<u>200 ft</u>	
Type F	<u>50 ft</u>	
Type Np	<u>25 ft</u>	
Type Ns	<u>25 ft</u>	

- b. Wildlife buffer widths are established to protect the integrity, functions, and values of all listed and/-or priority wildlife species. Buffer widths have been determined in accordance with the best available science. The city shall require a 100-foot buffer from the documented present listed and or priority wildlife species.
- c. Multiple buffers: In the event that buffers for any fish habitat conservation areas or other critical areas are contiguous or overlapping, the landward-most edge of all such buffers shall apply.
- d. Stream buffers shall not be altered except as authorized by this section.
- e. No clearing of vegetation or land disturbances shall be allowed within the wildlife habitat conservation area or associated terrestrial buffer area without an approved mitigation plan and written authorization from the City.

- f. Increased buffers: If there is credible evidence of historic or current fish use within a non-Type S stream, the City shall increase the non-Type S water buffer up to a maximum of two hundred (200) feet to protect fish habitat forming processes.
- g. Buffer condition: Fish and wildlife habitat conservation area buffers shall be maintained in a predominantly well-vegetated and undisturbed condition. No alterations shall occur without written authorization from the City-
- h. Interrupted buffer: When an fish and wildlife habitat conservation area buffer contains an existing legally established public road or private access road, the City may allow a use and/or development on the landward side of the road provided that the use and/or development will not have a detrimental impact to the habitat area. The applicant may be required to provide a critical area report to describe the impacts. In determining whether a critical areas report is necessary, the City shall consider the hydrologic, geologic, and/or biological habitat connection potential and the extent and permanence of the buffer interruption.
- i. Buffer averaging: The City may allow modification of standard fish and wildlife habitat

  conservation area buffer in accordance with an approved critical area report on a case-by-case
  basis. With buffer averaging, the buffer width may be reduced in one location and increased in
  another location to maintain the same overall buffer area provided there is no net loss in the
  function or value of the buffer. Proposals for buffer averaging shall not require compensatory
  mitigation if the following conditions are met:
  - i. The development is not a residential subdivision of more than four (4) lots;
  - ii. The buffer has not been averaged or reduced by any prior actions administered by the City;
  - iii. No feasible site design could be accomplished without buffer averaging;
  - iv. The buffer averaging will not reduce stream or habitat functions or adversely affect salmon or trout habitat;
  - v. The minimum width of the buffer at any given point is at least seventy-five percent (75%) of
    the standards width, or twenty-five (25) feet, whichever is greater unless the applicant
    demonstrates an acceptable reasonable use as described in CEMC 18.01.090; and
  - vi. The area that is added to the buffer to offset the reduction is well-vegetated. The City may require vegetation enhancement if needed to ensure this criterion is met.
- j) Prior to approving a request for buffer averaging, the City shall ensure the development is designed to separate and screen the stream from impacts such as noise, glare, and vegetation trampling. The site design shall consider the varying degrees of impacts of different land uses. For example, parking lots, store entrances, and roads generally have higher noise and glare impacts than the rear of the store. Site screening should take advantage of natural topography or existing

- vegetation, wherever possible. Where natural screening is not available, berms, landscaping, and structural screens should be implemented (e.g., orient buildings to screen parking lots and store entrances from critical areas).
- k) Building setback: A building setback line equal to the side yard setback requirement of the applicable zoning district is required from the landward edge of any stream buffer. Minor intrusions into the area of the building setback may be allowed if the City determines that such intrusions will not negatively impact the stream. The setbacks shall be shown on all site plans submitted with the application.
- 1) Anadromous Fish Habitat Standards.
  - All activities, uses, and alterations proposed to be located in water bodies used by
     anadromous fish or in areas that affect such water bodies shall adhere to the following
     standards:
    - (a) Activities shall be timed to occur only during the allowable work window as designated by the Department of Fish and Wildlife for the applicable species;
    - (b) An alternative alignment or location for the activity is not feasible;
    - (c) The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas; and
    - (d) Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved critical area report.
  - ii. Structures that prevent the migration of salmonids shall not be allowed in the portion of water
     bodies currently or historically used by anadromous fish. Fish bypass facilities shall be
     provided that allow the upstream migration of adult fish and shall prevent fry and juveniles
     migrating downstream from being trapped or harmed.
  - iii. Fills shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts, and shall only be allowed for a water-dependent use.
- m. Fish and wildlife habitat compensatory mitigation is required for all alterations to fish and wildlife habitat or their buffers, except for buffer averaging.
- n. Applicants shall demonstrate that all reasonable efforts have been examined within the intent to avoid and minimize impacts to critical areas through mitigation sequencing.
- o. Fish and wildlife habitat management and mitigation plan: For unavoidable impacts to wildlife habitat conservation areas, a wildlife habitat management and mitigation plan shall be prepared by a wildlife biologist who is knowledgeable of fish and wildlife habitat within Kittitas County. The wildlife habitat management and mitigation plan shall:

- Demonstrate, when implemented, that there shall be no net loss of ecological function of habitat.
- ii. Identify how impacts from the proposed project shall be mitigated, as well as the necessary
  monitoring and contingency actions for the continued maintenance of the wildlife habitat
  conservation area and its associated buffer.
- p. In addition to the general mitigation plan requirements described above, the fish and wildlife habitat management and mitigation plan shall contain a report containing, but not limited to, the following information:
  - i. A map or maps indicating the Ordinary High Water Mark; the boundary of the habitat
     conservation areas; associated stream and wildlife habitat buffers; the width and length of all
     existing and reposed structures, utilities, roads, easements; wastewater and stormwater
     facilities; adjacent land uses, zoning districts and comprehensive plan designations;
  - ii. A description of the proposed project including the nature, density and intensity of the proposed development and the associated grading, structures, roads, easements, wastewater facilities, stormwater facilities, utilities, etc., in sufficient detail to allow analysis of such land use change upon the habitat conservation area;
  - iii. A description of the vegetation in the habitat conservation area, on the overall project site and adjacent to the site;
  - iv. A detailed description of the proposed project's effect on the habitat conservation area, and a
     discussion of any federal, state or local management recommendations which have been
     developed for the species or habitats in the area;
  - v. An explanation of how any adverse impacts created by the proposed development will be mitigated, including the following techniques:
    - (a) Establishment of buffer zones;
    - (b) Preservation of critically important plants and trees;
    - (c) Special construction techniques;
    - (d) Implementation of erosion and sediment control measures;
    - (e) Limitation of access to the habitat conservation area;
    - (f) Seasonal restriction of construction activities;
    - (g) Habitat enhancement (i.e., fish passage barrier removal);

- (h) Any other requirements and/or recommendations from WDFW's habitat management guidelines
- (i) Establishment of a timetable for periodic review of the plan. This includes a program for monitoring construction of the compensation project, and for assessing a completed project. The project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five years; and
- (j) Contingency plan if monitoring and evaluation indicates project performance standards are not being met.
- E. Frequently Flooded Areas Performance Standards.
  - 1. General Standards. The following standards apply to all frequently flood areas:
    - a. All structures and other improvements shall be located on the buildable portion of the site out of the area of flood hazard. Where necessary residential buildings may be elevated.
    - <u>b.</u> <u>2.</u> Utilities shall either be located three or more feet above the base flood elevation (BFE), or be engineered to the City of Cle Elum Engineers requirements appropriate for the conditions.
    - c. 3.—All new construction and substantial improvements shall be constructed using flood resistant materials and using methods and practices that minimize flood damage.
    - <u>d.</u> <u>4.</u> All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
    - e. 5.—No rise in the BFE shall be allowed. Post and piling techniques are preferred and are presumed to produce no increase in the BFE.
    - f. 6. Modification of stream channels shall be avoided.
    - f. In areas within base flood elevations (but a regulatory floodway has not been designated), no new construction, substantial improvements, or other development (including fill) shall be permitted 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 (1) foot at any point within the community.
  - 2. Floodways. Any development, encroachment, clearing and grading, new construction, or substantial improvements, including structures that do not require a building permit, shall be prohibited within the floodway, except as allowed in CEMC 18.01.080 Exceptions and the following:

- Agricultural activities that do not require the installation of structures and that do not have any associated fill.
- Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications, which are solely necessary to assure safe living conditions.
- c. Prior to the repair or replacement of a substantially damaged residential structure located within a floodway, a recommendation shall be obtained from the Washington Department of Ecology in accordance with WAC 173-158-076.
- All developments shall be subject to provisions of Chapter 15.24, Flood Hazard Prevention CEMC. If
   Chapter 15.24, Flood Hazard Prevention CEMC standards conflicts with the Frequently Flood Area

   Performance Standards provided above, the later shall supersede.
  - 4. When compensatory mitigation is required, the flooded areas mitigation plans shall be prepared by a civil engineer licensed in the State of Washington and familiar with hydrology, hydraulics, and fluvial geomorphology.

## F. Geologically Hazardous Areas Performance Standards.

- The following general standards apply to proposed development activities within or near geologically hazardous areas:
- Will not increase the threat of the geological hazard to adjacent properties beyond predevelopment conditions;
- b. Will not adversely impact other critical areas;
- c. Are designed so that the hazard to the project is eliminated or mitigated;
- d. Structures and improvements should be located to preserve the most critical portion of the site and
  its natural landforms and vegetation;
- Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography; and
- f. Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer.
- g. A proposed development cannot be approved if it is determined by the City, following review of the geotechnical report, that either the proposed development or adjacent properties will be at risk of damage from the geologic hazard, or that the project will increase the risk of occurrence of the hazard, and there are no adequate mitigation measures to alleviate the risks.

- 2. A buffer shall be established from all edges of erosion and landslide hazard areas. The size of the buffer shall be determined by the Planning Director to eliminate or minimize the risk of property damage, death, or injury resulting from landslides caused in whole or part by the development, based upon review of, and concurrence with, a geotechnical report prepared by a qualified professional;
  - a. The minimum buffer shall be equal to the height of the slope or 50 feet, whichever is greater;
  - b. The buffer may be reduced to a minimum of 10 feet based on a finding by the City following review of the geotechnical report recommendations that the reduction will adequately protect the proposed development, adjacent developments and uses, and the subject critical area;
  - c. The buffer may be increased where based on a finding by the City following review of the
    geotechnical report determines a larger buffer is necessary to prevent risk of damage to proposed
    and existing development;
- 3. A building setback of 20-feet shall be provided from all edges of the geological hazard area buffers.

  The building setback may be reduced based on a finding by the City following review of the geotechnical report recommendations that the reduction will adequately protect the proposed development, adjacent developments and uses, and the subject critical area
- 4. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a hazards analysis is submitted and based on findings by the City following review of the geotechnical report that:
  - a. The development will not increase surface water discharge or sedimentation to adjacent properties beyond pre-development conditions;
  - b. The development will not decrease slope stability on adjacent properties; and
  - c. Such alterations will not adversely impact other critical areas and, are certified as safe as designed and under anticipated conditions by a qualified professional, licensed in the state of Washington.
- 5. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited.
- 6. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.
- Critical facilities, such as hospitals and emergency response centers, shall not be sited within geologically hazardous areas unless there is no other practical alternative.
- Seasonal Restriction. Clearing shall be allowed only from May 1st to October 1st of each year; provided, that the city may extend or shorten the dry season on a case by case basis depending on actual weather conditions, except that timber harvest, not including brush clearing or stump removal.

may be allowed pursuant to an approved forest practice permit issued by the city or the Department of Natural Resources;

- 8. When compensatory mitigation is required, the geologically hazardous areas mitigation plan shall be prepared by a qualified professional who is either a geologist or a geotechnical engineer, or a civil engineer licensed in the State of Washington, who is knowledgeable of regional geologic conditions and who has professional experience in landslide and erosion hazard evaluation, mitigation plan design, implementation, and monitoring. 1. Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography.
- Structures and improvements shall be located to preserve the most critical portion of the site and itsnatural landforms and vegetation.
- The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties.
- Development shall be designed to minimize impervious surfaces within the critical area and critical
  area buffer.
- G. Additional Considerations.
- 1. Site specific considerations may warrant additional performance standards, to be determined during the permit process, to ensure the protection of critical areas.
- 2. Development specific considerations may warrant additional performance standards based on level of impact to critical areas.

(Ord. 1335 § 1, 2010; Ord. 1039 (part), 1996)

## 18.01.080 Exemptions.

The following developments, activities and associated uses <u>may be determined by the City to shall</u> be exempt from the provisions of this chapter, provided that they are otherwise consistent with the provisions of other local, state, and federal laws and requirements:

A. Emergencies. Those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this chapter. Emergency actions that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. Once the

immediate threat has been addressed, any adverse impacts on critical areas as subject to the provisions of this chapter, including but not limited to, minimizing and mitigating any impacts to critical areas.

- B. Operation, Maintenance, or Repair. Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems, that do not require construction permits, if the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, maintenance, or repair. Operation and maintenance includes vegetation management performed in accordance with best management practices that is part of ongoing maintenance of structures, infrastructure, or utilities, including those vegetation removal activities as necessary for fire reduction, provided that such management actions are part of regular and ongoing maintenance, do not expand further into the critical area, are not the result of an expansion of the structure or utility, and do not directly impact an endangered or threatened species; and
- C. Passive Outdoor Activities. Recreation, education and scientific research activities that do not degrade the critical area, including fishing, hiking, and bird watching.
- D. Forest Practices Regulated by the State. Forest practices regulated and conducted in accordance with provisions of Chapter 76.09 RCW and forest practices regulations, title 222 WAC, are exempt, except for conversions to forestry uses.

(Ord. 1335 § 1, 2010)

# 18.01.085 Notice and Financial securities.

- A. Notice. The owner of any property containing critical areas or buffers on which a development project is submitted shall record with Kittitas County notice of said critical areas or buffers in a format approved by the City. Such notice shall provide notice in the public record of identify or provide notice of the presence of any critical areas or buffers on the property. The owner shall submit proof to the Ceity that the notice has been filed for record within 30 days after the approval of a development permit. The notice shall run with the land, and failure to provide such notice to any purchase prior to transferring any interest in the property shall be a violation of this chapter. Development proposals which are defined as normal repair and maintenance of existing structures or development, including but not limited to roof repair, interior remodeling, wood stove permits, and on-site sewage disposal systems repairs, are exempt from this requirement
- B. When mitigation is required pursuant to a development proposal is not completed prior to the Ceity's final permit approval, such as final plat approval or final building inspection, the Ceity shall require of the

applicant an assignment of funds or post a performance bond or other security in a form and amount deemed acceptable by the Ceity. If the development proposal is subject to mitigation, the applicant shall post mitigation security in a form and amount deemed acceptable by the Ceity to ensure mitigation is fully functional.

- C. The performance security shall be in the amount of one hundred and twenty-five percent (125 %) of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater, and the cost of maintenance and monitoring for a five-year period.
- D. The security shall be in the form of assignment of funds, a surety bond, performance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the city attorney.
- E. The security authorized by this section shall remain in effect until the city determines, in writing, that the standards bonded for have been met. Security shall be held by the Ceity for a minimum of five years to ensure that the required mitigation has been fully implemented and demonstrated to function and may be held for longer periods when necessary.
- F. Depletion, failure, or collection of security funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.
- G. Public development proposals shall be relieved from having to comply with the security requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.
- H. Any failure to satisfy critical areas requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the Ceity may demand payment of any financial guarantees or require other action authorized by the Municipaleity Ceode or any other law.
- I. Any funds recovered pursuant to this section shall be used to complete the required mitigation.

## 18.01.090 Reasonable use.

- A. Where the provisions of this chapter would prevent all reasonable use of those properties completely encumbered by critical areas, the property owner may apply for a reasonable use exception if it is demonstrated that all of the following five conditions exist:
  - 1. No reasonable use of the property is possible without some impact to the critical area.
  - No feasible and reasonable onsite alternative to the proposed activities is possible, including possible changes in site layout, reductions in density, and similar factors that would allow a reasonable economic use with fewer adverse impacts.
  - 3. The proposed activities, as conditioned, will result in the minimum possible impacts to affected critical areas, considering their functions and values and/or the risks associated with proposed development. The inability to derive reasonable economic use is not the result of the applicant's actions or that of a previous property owner, such as by segregating or dividing the property and creating an undevelopable condition.
  - Any alteration of a critical area approved under this section shall be subject to appropriate conditions and will require mitigation under an approved mitigation plan.
- B. The responsibility of proving the presence of the above criteria shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.
- C. A request for a reasonable use exception shall be made to the City of Cle Elum and shall be processed as a Type III application according to the provisions in CEMC 17.100 "quasi-judicial review of applications." The request shall include a critical areas report, including a mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy. the city planner shall prepare a recommendation to the city's planning commission based on review of the submitted information, a site inspection, and the proposal's ability to comply with reasonable use exception criteria identified above.
- D. The Planning Commission shall review and decide upon the request for reasonable use, and shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with the reasonable use exception criteria identified above.

(Ord. 1335 § 1, 2010)

## 18.01.100 Penalties Enforcement.

- A. Applicability: The City Enforcement action by the department or local government may be taken enforcement action whenever a person has violated this chapter. The choice of enforcement action and the severity of any penalty should be based on the nature of the violation, the damage or risk to the public or to public resources, and/or the existence or degree of bad faith of the persons subject to the enforcement action.
- B. Site Inspections. The City is authorized to make site inspections and take such actions as necessary to enforce this chapter. The City shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

#### C. Unauthorized Alterations.

- 1. The Ceity shall have the authority to issue a stop work order to cease all ongoing development work—and order restoration, rehabilitation or replacement measures at the responsible party's expense to compensate for violation of provisions of this chapter. At a minimum, the structural and functional values of the critical area shall be restored and any hazard shall be reduced to a level equal to, or less than, the predevelopment conditions.
- All development work shall remain stopped until a restoration plan has been approved by the Ceity.
   Such a plan shall be prepared by a qualified professional. The Ceity may, at the violator's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

## D. Order to cease and desist.

- Authority. The City shall have the authority to serve upon a person a cease and desist order if an
  activity being undertaken in critical areas, upon a reasonable belief, in violation of RCW 90.58 or this
  master programcritical areas ordinance.
- 2. Contents. The order shall set forth:
  - a. A description of the specific nature, extent, and time of violation and the damage or potential damage;
  - b. A notice that the violation or the potential violation cease and desist or, in appropriate cases, the specific corrective action to be taken within a given time;
  - c. The amount of the civil penalty;
  - d. A statement that the person to whom the order is directed may request an administrative appeal hearing to review the violation and/or imposed penalty. Such request must be in writing.

accompanied by applicable fees, and received by the City within 10 working days after the Order has been served.

- 3. Effective date. The cease and desist order shall become effective immediately upon receipt by the person to whom the order is directed.
- 4. Compliance. Failure to comply with the terms of a cease and desist order can result in enforcement actions including, but not limited to, the issuance of a civil penalty.
- E. Penalties. Any person, party, firm, corporation, or other legal entity convicted of violating any of the provisions of this chapter shall be guilty of a misdemeanor. Each day or portion of a day during which a violation of this chapter is committed or continued shall constitute a separate offense. Any development carried out contrary to the provisions of this chapter shall constitute a public nuisance and may be enjoined as provided by the statutes of the state of Washington. The city may levy civil penalties against any person, party, firm, corporation, or other legal entity for violation of any of the provisions of this chapter. The civil penalty shall be assessed at a maximum rate of \$1,000 per day per violation. Daily fines shall not be levied until after a violator has received a notice of violation and shall not be levied while the violator is making a good faith and diligent effort to correct the violation in cooperation with City enforcement personnel nor while a notice of violation is under appeal through the applicable appeal process. The city shall process violations of this chapter in accordance with the procedures identified in Chapter Error!

  Hyperlink reference not valid. Code Enforcement, of the Cle Elum Municipal Code.

(Ord. 1335 § 1, 2010)

## 18.01.110 Administrative appeals.

Any aggrieved person dissatisfied with a permitting decision may appeal the decision in accordance with the procedures identified in Chapter 17.100.130 Appeals, of the Cle Elum Municipal Code.

(Ord. 1335 § 1, 2010)

# 18.01.120 Nonconforming activities.

A regulated activity that was approved prior to the passage of this chapter and to which significant economic resources have been committed pursuant to such approval but which does not conform to this chapter may be continued subject to the following:

- A. No such activity shall be expanded, changed, enlarged, or altered in any way that increases the extent of its nonconformity without a permit issued pursuant to the provisions of this chapter.
- B. Except for cases of discontinuance as part of a normal agricultural activity, if a nonconforming activity is discontinued for twelve consecutive months, any resumption of the activity shall conform to this chapter.
- C. If a nonconforming use or activity is destroyed by human activities or an act of God, it shall not be resumed except in conformity with the provisions of this chapter.
- D. Activities or adjuncts thereof that are or become nuisances shall not be entitled to continue as nonconforming activities.

(Ord. 1335 § 1, 2010)

# 18.01.130 Severability.

If any clause, sentence, paragraph, section or part of this chapter or the application thereof to any person or circumstances shall be adjudged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered and shall not affect or invalidate the remainder of any part thereof to any other person or circumstances and to this end the provisions of each clause, sentence, paragraph, section or part of this law are hereby declared to be severable.

(Ord. 1335 § 1, 2010)

## The Cle Elum Municipal Code is current through Ordinance 1588, passed June 8, 2020.

Disclaimer: The city clerk's office has the official version of the Cle Elum Municipal Code. Users should contact the city clerk's office for ordinances passed subsequent to the ordinance cited here.

**Note:** This site does not support Internet Explorer. To view this site, Code Publishing Company recommends using one of the following browsers: Google Chrome, Firefox, or Safari.

City Website: cityofcleelum.com City Telephone: (509) 674-2262 Code Publishing Company

# ORDINANCE REPEALING CHAPTER 18.01 OF THE CLE ELUM MUNICIPAL CODE AND ADOPTING CHAPTER 14.70: CRITICAL AREAS ORDINANCE

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## Chapter 14.70 - CRITICAL AREAS CODE

#### 14.70.010 Purpose and Intent

The purpose of this Title is to establish regulations pertaining to development which protect designated critical areas, as defined and required by Chapterthe Washington State Growth Management Act (GMA) (RCW 36.70A RCW). The GMA requires the use of "best available science," also as defined in that law, to establish local regulations which protect critical areas. GMA-designated Ceritical areas, all of which are present in CCity of Cle Elum, include: Ccritical aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands. The regulations of this Title are intended to:

- 1. Prevent degradation of critical areas;
- 2. Conserve, protect, and; where feasible, restore critical areas and their functions and values:
- Protect unique, fragile and/or valuable elements of the environment, including ground and surface waters, anadromous fish species, and other fish and wildlife and their habitats;
- Protect the public health, safety, and general welfare from hazards associated with critical areas;
- 5. Further the goals and objectives of the City of Cle Elum Comprehensive Plan and all of its elements:
- Implement the goals and requirements of the Washington Growth Management Act (RCW-Chapter 36.70A RCW);
- 7. Allow for reasonable use of all properties in City of Cle Elum.

# 14.70.020 Authority

- As provided herein, the City Administrator, Mayor, and/or his/her designee is given the authority to interpret and apply, and the responsibility to enforce this Title to accomplish the stated purpose and is herein referenced as the Designated Official.
- 2. The City may withhold, condition, or deny permits and/or approvals for development and alterations to ensure that the proposed development is consistent with this Title.

## 14.70.030 Applicability

- Except as provided in subsection 3 and 4 below, the provisions of this Title shall apply to
  any alteration or development within the unincorporated portion of Ccity of Cle Elum's
  corporate limits, and outside of Shoreline jurisdiction, as determined by the Shoreline
  Master Program (CEMC Chapter 18.02). No development shall be constructed, located,
  extended, modified, converted, or altered, or land subdivided without full compliance
  with this Title.
- 2. Compliance with these regulations does not remove an applicant's obligation to comply with applicable provisions of any other Federal, State, or local law or regulation.

Commented [JDL(1]: We all call it GMA but that title isn't actually established in statute.

Commented [JDL(2]: The statute doesn't designate critical areas; the local jurisdiction does that in its plans & regulations. Ref RCW 36.70A.170

Any activities, alterations or development located within any Shoreline of the State
within the <u>unincorporated portion of cCity</u> of Cle Elum's <u>corporate limits</u> are subject to
the provisions of the Shoreline Master Program (<u>CEMC-Chapter 18.02 CEMC</u>) and not
this Title.

## 14.70.040 Regulated Development and Alterations

The following development and alterations are regulated within critical areas and their riparian management zones and/or buffers, unless exempt by CEMC 14.70.050:

- Removing, excavating, disturbing, or dredging soil, sand, gravel, minerals, organic matter, or materials of any kind;
- 2. Dumping, discharging, or filling;
- 3. Draining, flooding, or disturbing the water level or water table;
- 4. Driving piling or placing obstructions, including placement of utilities;
- 5. Constructing, reconstructing, demolishing, or altering the size of any structure or infrastructure;
- Altering the character and/or functions and values of a regulated area by destroying or altering vegetation through clearing, harvesting, cutting, intentional burning, shading, or planting;
- 7. The division of land pursuant to CEMC Title 16 CEMC; and
- 8. The creation of impervious surfaces.

## 14.70.050 Exemptions and Exceptions

# A. Exemptions

1. Exemption Request and Review Process. The proponent of the alteration or development may submit a written request for Determination of exemption eligibility to the Designated Official that describes the alteration or development and states the exemption listed in this section that applies. The purpose of a Determination of exemption eligibility is to provide, at the applicant's request, a written record documenting that a proposed alteration or development is, in fact, an exempt activity under the provisions of this Chapter.

The Designated Official shall review the exemption request to verify that it complies with this chapter and approve, approve with conditions, or deny the exemption. If the exemption is approved, it shall be placed on file with CEMCDS. If the exemption is denied, the proponent may continue in the review process and shall be subject to the requirements of this chapter.

2. Exempt Alterations and Development and Impacts to Critical Areas. All exempted alterations or development shall use reasonable methods to avoid potential impacts to critical areas and their buffers. To be exempt from this Title does not give permission to degrade a critical area or its buffer or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area or its buffer that is not a

Commented [JDL(3]: Meaning?

- necessary outcome of the exempted alteration or development shall be restored, rehabilitated, or replaced at the responsible party's expense.
- 3. **Exempt Alterations and Development**. The following alterations and developments and uses shall be exempt from the provisions of this Title:
  - **Emergencies.** Those alterations or developments necessary to prevent an immediate threat to public
  - a. health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventive action in a timeframe too short to allow for compliance with the requirements of the critical areas regulations, provided that:
    - The emergency action shall have the least possible impacts to the critical area and its buffer as is reasonably judged in real time while still adequately addressing the emergency situation;
    - ii. The person or authorized representative of the agency undertaking such action shall notify the City within one (1) working day following commencement of the emergency alteration or development. Within thirty (30) days, the Designated Official shall determine if the action taken was within the scope of the emergency actions allowed in this Subsection. If the Designated Official determines that the action taken, or any part of the action, was beyond the scope of an allowed emergency action, then the enforcement provisions of Chapter 8.60 CEMC shall apply; and
    - iii. After the emergency, the person or authorized representative of the agency undertaking the action shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical areas report and mitigation plan, as described in <a href="CEMC">CEMC</a> 14.70.080. The person or authorized representative of the agency undertaking the action shall apply for review, and the alteration, critical areas report, and mitigation plan shall be reviewed by the City in accordance with the review procedures contained herein. Restoration and/or mitigation activities must be initiated within one (1) year of the date of the emergency alteration or development and completed in a timely manner.
    - b. Operation, Maintenance, or Repair. Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems, that do not require construction permits, if the alteration or development does not further change or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, maintenance, or repair. Operation and maintenance includes vegetation

management performed in accordance with best management practices that is part of ongoing maintenance of structures, infrastructure, or utilities, provided that such management actions are part of ongoing maintenance, do not expand further into the critical area or buffer, are not the result of an expansion of the structure or utility, and do not directly impact an endangered or threatened species.

- c. Passive Outdoor Activities. Recreation, education, and scientific research activities that do not alter or degrade the critical area or buffer, including fishing, hiking, and bird watching.
- d. Forest Practices. Forest practices conducted in accordance with the requirements of the Forest Practice Act (Chapter 76.09 RCW) and its rules, except for the conversion of forest land to a use other than commercial forestry (Class IV conversions).
- e. Removal or Control of Terrestrial Noxious Weeds. Removal of terrestrial weeds that are included on the State noxious weed lists in Chapter(WAC 16-750 WAC) or other invasive plant species as identified by city of Cle Elum. Control may be conducted by clipping, pulling, over-shading with native tree and shrub species, or non-mechanized removal including herbicide or other methods applicable to weed control.
- f. Removal or Control of Aquatic Noxious Weeds. Removal or control of aquatic noxious weeds, as defined in RCW 17.26.020, using an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Washington State Department of Agriculture or the Washington State Department of Ecology jointly with other state agencies under RCW-Chapter 43.21C RCW.
- g. Enhancement Actions. Habitat enhancement actions that do not involve clearing, grading, in-water work or construction activities, such as revegetation with native plants and installation of nest boxes.
- h. Maintenance of Existing Structures. Normal maintenance or repair of existing structures or developments, including damage by accident, fire, or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "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, except where repair causes substantial adverse effects to critical areas or their buffers. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including, but not limited to, its size, shape, configuration,

Commented [JDL(4]: There are several

**Commented [JDL(5]:** Solely mechanical removal should be utilized within sanitary control areas associated with public drinking water systems; herbicides should not be allowed.

**Commented [JDL(6]:** Please check with Ecology on this. They hav a general permit for aquatic weed control now so this may(?) be outdated language.

**Commented [JDL(7]:** Should this be moved to definitions?

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location, and external appearance and the replacement does not cause substantial adverse effects to critical areas or their buffers.

- Site Exploration and Investigation Activities. Site exploration and investigation activities that are prerequisite to preparation of an application for development, when all the following conditions are met:
  - The activity will have no significant adverse impact on the environment including, but not limited to, fish; wildlife; fish or wildlife habitat; water quality; and aesthetic values; and
  - ii. The activity does not involve the installation of any structure, and upon completion of the activity, the vegetation and land configuration of the site are restored to conditions existing before the activity.

#### i. Tree Removal.

- Hazard Tree Removal in Fish and Wildlife Habitat Conservation Areas, Wetlands, Frequently Flooded Areas and Geologically Hazardous Areas.
  - (a) The removal of a hazard tree may be allowed when trimming or topping is not sufficient to address the hazard. If a tree in close proximity to a stream or river qualifies as a hazard tree in accordance to this Title it should be felled in a manner that creates instream habitat, when it is possible to do so while also addressing the original hazardous situation. The removal of nonhazardous trees is not an exempt action in the critical areas listed under, except when regulated under the provisions of the Forest Practice Act (Chapter 76.09 RCW).
- ii. Tree Removal in Critical Aquifer Recharge Areas.
  - (a) The removal of any tree is an exempt action when the tree is solely within a Critical Aquifer Recharge Area and not also within a different overlapping critical area, riparian management zone, or buffer. This action does not require an exemption request or review by the Designated Official.
- k. Utility Line Work. Public and private utility line work (new construction, maintenance, and repair) within improved surfaces (e.g., driveways, parking lots, concrete or asphalt surfaces, gravel roads and road shoulders, and hard surface-earthen rights-of-way or easements).
- Harvesting of Wild Crops. The harvesting of wild crops in a manner that is
  not injurious to natural reproduction of such crops and provided the
  harvesting does not require tilling of soil, planting of crops, chemical
  applications, or alteration of the critical area or its buffer by changing existing
  topography, water conditions, or water sources.

#### **B.** Exceptions

- Public Agency and Utility. If the application of this Title would prohibit a proposed development by a public agency or public utility, the agency or utility may apply for an exception pursuant to the following:
  - a. Exception Request and Review Process. An application for a public agency and utility exception shall be made to the City and shall include a critical areas report, as described in CEMC 14.70.080, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW and Chapter 197-11 WAC). The application shall follow the administrative project permit review process outlined in CEMC Chapter 15A.03 CEMC.
  - Designated Official Review. The designated official shall approve, approve
    with conditions, or deny the request based on the proposal's ability to
    comply with all the reasonable use exception criteria in Subsection 2(c).
  - c. **Public Agency and Utility Review Criteria.** The criteria for review and approval of public agency and utility exceptions are as follows:
    - There is no other practical alternative to the proposed development with less impact on the critical area and its buffer;
    - ii. The application of this Title would unreasonably restrict the ability to provide utility and/or agency services to the public;
    - The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
    - The proposal attempts to protect and mitigate impacts to the critical area functions and values consistent with the best available science;
       and
    - v. The proposal is consistent with other applicable regulations and standards.
  - d. Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision must be made on the application.
- 2. **Reasonable Use.** If the application of this Title would deny all reasonable economic use of the subject property, the City shall determine if the property owner may apply for an exception pursuant to the following:
  - a. Exception Request and Review Process. An application for a reasonable use exception shall be made to the City and shall include a critical areas report, as described in CEMC 14.70.080, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW and rules thereunder in Chapter 197-11 WAC). The application shall follow the

**Commented [JDL(8]:** Unlike some regulations, many of the functional requirements of SEPA are in the WAC rather than RCW.

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administrative project permit review process outlined in <a href="CEMC">ChapterCEMC</a>
17.100 <a href="CEMC">CEMC</a>. In determining what is considered reasonable use of an undeveloped parcel, the Designated Official may consider additional information such as zoning, and comparable structure sizes and land uses of the surrounding area.

- b. **Designated Official Review.** The Designated Official shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with all the reasonable use exception criteria in Subsection 2(c).
- c. Reasonable Use Review Criteria. Criteria for review and approval of reasonable use exceptions include:
  - The application of this Title would deny all reasonable economic use of the property;
  - ii. No other reasonable economic use of the property has less impact on the critical area and its buffer:
  - iii. The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;
  - The inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of this Title;
  - v. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
  - vi. The proposal will result in no net loss of critical area functions and values consistent with the best available science;
  - vii. The proposal is consistent with other application regulations and standards.
- d. Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision must be made on the application.

## 14.70.070 Non-Conforming Lots, Structures, and Uses

The following provisions apply to lots, structures and uses lawfully established prior to the effective date of this Title, or amendments thereto, which do not conform to the current regulations or standards of this Title. The following provisions do not apply to lots, structures or uses that were unlawfully established.

- 1. Non-conforming lots:
  - a. An undeveloped lot, tract, parcel, site, or division of land located landward of the ordinary high water mark which was established in accordance with local and state subdivision requirements prior to the effective date of this Title but which does not conform to the present lot size standards may be developed as permitted by the land use regulations of the local government so long as such development conforms to all other requirements of this Title and the Act.

Commented [JDL(10]: What act is this referring to?

## 2. Non-conforming structures:

- a. Nonconforming structures may be maintained, repaired, renovated, and remodeled, provided such activity does not enlarge or expand the structure beyond the allowances in this section.
- b. Nonconforming structures may be enlarged or expanded one time, provided:
  - The enlargement does not extend closer to the critical area than the existing primary structure or farther into the minimum side yard setback;
  - ii. The enlargement does not expand the footprint of the existing structure by more than 200 square feet in a lateral direction;
  - iii. The enlargement does not cause new direct wetland or stream impact;
  - iv. Mitigation of impacts to disturbed critical areas or buffers is provided in accordance with this title. The City may consult with agencies of expertise to ensure plan adequacy.
- c. Nonconforming single-family residences may increase their height within the existing structural footprint up to maximum of thirty-five (35) feet.
- d. A nonconforming structure which is moved any distance must be brought into conformance with this Title and the Act.
- e. Damaged nonconforming structures outside frequently flooded areas may be reconstructed to those configurations existing immediately prior to the time the development was damaged. Reconstruction of nonconforming development located in frequently flooded areas shall comply with reconstruction regulations contained within the City of Cle Elum Flood Prevention Ordinance (CEMC Chapter 15.24 CEMC).

## 3. Nonconforming uses:

- Nonconforming uses may be continued consistent with their lawfully established scale and range of uses.
- A structure which is being or has been used for a nonconforming use may be used for a different nonconforming use only upon written approval by the Designated Official and may be approved only upon a finding that:
  - No reasonable alternative conforming use is practical because of the configuration of the structure and/or the property;
  - The proposed use will be at least as consistent with the policies and provisions of the Act and this Title and as compatible with the uses in the area as the pre-existing use;
  - The use or development is enlarged, intensified, increased or altered only to the minimum amount necessary to achieve the intended functional purpose;
  - iv. The structure(s) associated with the nonconforming use shall not be expanded in a manner that increases the extent of the non-conformity, including encroachment into areas such as setbacks, and any critical

Commented [JDL(11]: Same question

Commented [JDL(12]: Same question

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- areas and/or associated buffers where new structures, use, or development would not be allowed;
- v. The buffer standards of this Title are met;
- vi. The change in use, remodel, or expansion will not create adverse impacts to critical areas or their associated buffers and riparian management zones;
- vii. Uses which are specifically prohibited or which would thwart the intent of the Act or this Title shall not be authorized; and
- viii. Conditions necessary to assure that the use will not become a nuisance or a hazard have been attached to the development permit and preliminary site analysis.

Redevelopment of nonconforming rights-of-way and associated transportation structures, such as railroad trestles, may be permitted for purposes of facilitating the development of public trails; provided, that such redevelopment shall be otherwise consistent with the provisions of this Title.

#### 14.70.080 Critical Areas Reports

- When Required. An applicant shall submit a critical areas report when required by <u>CEMC</u> 14.70.110.2 and the reporting section of the applicable critical area chapter of this Title. Critical areas reports are valid for five years from the date of completion, or date of the corresponding delineation documentation, if applicable.
- 2. **Preparation by Qualified Professional**. The critical areas report shall be prepared by a qualified professional as defined in CEMC 14.70.080.
- 3. Incorporation of Best Available Science. The critical areas report shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance to evaluate the proposed development and all probable impacts to critical areas in accordance with the provisions of this Title. The report shall reference the source(s) of science used.
- 4. Minimum Report Contents. At a minimum, the report shall contain the following:
  - a. The name and contact information of the applicant and a description of the proposal:
  - The site plan for the proposed development, including a map drawn to scale depicting critical areas, buffers and/or setbacks, the proposed development, and any areas to be cleared or altered;
  - c. The names and qualifications of the persons preparing the report;
  - d. Documentation of any fieldwork performed on the site;
  - e. Documentation that consultation, when deemed appropriate, was initiated with agencies of expertise;
  - f. Field identification and characterization of all critical areas and buffers on and adjacent to the proposed development;

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- g. A statement specifying the accuracy of the report, and all assumptions made and relied upon;
- h. A discussion of the performance standards applicable to the critical area and proposed development;
- A mitigation plan in accordance with CEMC 14.70.100(2) if mitigation is required;
   and
- Any additional report information required for the critical area as specified in CEMC 14.70.090 through CEMC 14.70.130.

## 14.70.090 General Protective Measures

- 1. Land Divisions. All the following shall apply to the creation of new lots or parcels:
  - a. All critical areas and their buffers and/or riparian management zones and any associated setbacks shall be mapped prior to the approval of a land division.
  - b. All new lots or parcels shall contain sufficient area outside of the wetland and/or wetland buffer, fish and wildlife habitat conservation area and/or fish and wildlife habitat conservation area riparian management zones or buffers, floodway, channel migration zone, or landslide hazard area and/or landslide hazard area buffer to accommodate the use or development.
  - c. Open space or conservation area lots may be established without a site that is suitable for development provided there is a note on the face of the plat or other recorded document which indicates the purpose of the lot.

## 2. Native Growth Protection Areas

- Native growth protection areas shall be used in development proposals for land division to delineate and protect those contiguous critical areas and buffers listed below:
  - i. All landslide hazard areas and buffers;
  - ii. All wetlands and buffers;
  - iii. All floodways;
  - iv. All fish and wildlife habitat conservation areas and associated riparian management zones and buffers; and
  - v. All other lands to be protected from alterations as conditioned by project approval.
- b. Native growth protection areas shall be recorded on all documents of title of record for all affected lots.
- c. Native growth protection areas shall be designated on the face of the plat or recorded drawing in a format approved by the City assessor. The designation shall include the following restrictions:
  - An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and

- ii. The right of the City to enforce the terms of the restriction.
- 3. Temporary or Permanent Field Identification. Prior to a regulated alteration or development taking place within or adjacent to a critical area, the City may require temporary or permanent field markers delineating the critical area boundary and associated buffer. The type of field markers to be used will be agreed to by the applicant and the Designated Official depending on site conditions and inspection requirements. Field markers shall be spaced at a minimum of every fifty (50) feet, unless alternative placement or spacing is authorized by the Designated Official. The location of field markers must be shown on all site plans and final plats associated with the proposed development. Field markers shall remain in place until any required final inspections are completed and approved. Field markers may be waived by the Designated Official if an alternative to field marking achieves the same objective, or if the development and construction activity(ies) is located at a sufficient distance so that impacts to the critical area and its buffer are unlikely to occur. The Designated Official may require permanent, wildlife-passable fencing and/or signage if necessary to protect a critical area and its buffer from adjacent land uses.
- 4. **Building Setbacks**. Unless otherwise provided, buildings and other structures shall be set back a distance of fifteen (15) feet from the edges of all critical area buffers, RMZs, or from the edges of all critical areas, except CARAs, if no buffers are required. The following are allowed in the building setback area:
  - a. Landscaping;
  - b. Uncovered decks;
  - Building overhangs, if such overhangs do not extend more than eighteen (18) inches into the setback area; and
  - d. Impervious ground surfaces, such as driveways and patios.
- 5. **Notice on Title**. Any property on which a development proposal requiring a critical areas report is submitted shall have filed with the <a href="City of Cle ElumKittitas County">Cle ElumKittitas County</a> Auditor:
  - a. A notice on title of the presence and location of the critical area and/or buffer;
  - b. A statement as to the applicability of this Title to the property; and
  - c. A statement describing possible limitations on action in or affecting critical areas or buffer as approved by the Designated Official. The Applicant shall record such documents and will provide a copy of the recorded notice to the City. Development proposals which are defined as normal repair and maintenance of existing structures or developments, including, but not limited to, roof repair, interior remodeling, wood stove permits, and on-site sewage disposal systems repairs, are exempt from this requirement.

## 14.70.100 Critical Areas Mitigation

 Mitigation Sequence. Adverse impacts caused by new alterations and developments shall be mitigated using the following actions in order of priority:

- a. Avoiding the impact altogether by not taking a certain action or parts of an action:
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations;
- e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and
- f. Monitoring the impact and the compensation project and taking appropriate corrective measures.
- 2. **Mitigation Plans.** When mitigation is required, the applicant shall submit a mitigation plan. The mitigation plan shall include all the following:
  - Mitigation Sequencing. A description of reasonable efforts made to apply mitigation sequencing pursuant to CEMC 14.70.100(2)(a) to avoid, minimize, and mitigate impacts to critical areas and buffers;
  - b. Mitigation Details.
    - Documentation of consultation/coordination with appropriate agencies of expertise, as applicable;
    - ii. A description of the anticipated impacts to the critical area and buffer, including impacts to critical area functions and values;
    - iii. The mitigating actions proposed, including: type of mitigation proposed (e.g., on-site or off-site); site selection criteria; identification of compensation goals; and identification of critical area functions.
    - iv. The environmental goals and objectives of the mitigation, together with specific measurable criteria and performance standards for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained;
    - v. An analysis of the likelihood of success of the mitigation project based on best available science.
  - c. Construction Details. The mitigation plan shall include written specifications, descriptions, and drawings of the mitigation proposed, including:
    - Construction sequence, timing, and duration;
    - ii. Grading and excavation details;
    - iii. Erosion and sediment control features; and
    - iv. Planting plan specifying plant species, quantities, locations, size, spacing, density, and measures to protect and maintain plants until established. All plant species must be native to the region.
  - d. Monitoring Details.

Commented [JDL(14]: It is not appropriate to apply the general mitigation requirements to all critical areas. The compensatory mitigation provisions of WAC 365-196-830 are carried through to only two specific critical areas types – geohazard (WAC 365-190-120) & wetlands (WAC 365-190-090) – but do not extend to CARAs (not included in WAC 365-190-100) or other critical area classes. When placed in general standards, these provisions imply that some degree of degradation to an aquifer is acceptable, while allowing even a limited degree of harm to an aquifer could result in lost potability.

- i. A program for monitoring construction and assessing the outcome of the mitigation project, including the schedule for site monitoring (for example, describe how monitoring may occur in years 1, 2, 3, 5, 7 and 10 after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met. Monitoring reports shall be submitted to the City to document milestones, successes, problems, and contingency actions of the compensation project. The mitigation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than ten (10) years. Mitigation monitoring shall be the responsibility of the applicant, and monitoring reports will be reviewed by City staff to ensure that performance standards are being met.
- ii. A contingency plan with courses of action and corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met, including a possible extension of the monitoring period until it can be shown that performance standards are being met.
- iii. The mitigation plan shall include financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures in accordance with CEMC 14.70.100(3)
- iv. The mitigation plan shall address any additional mitigation requirements relevant to the specific critical area as specified in the following chapters.

## 3. Financial Guarantees.

- a. When mitigation is required for a proposed development but is not completed prior to the City's final permit approval, such as final plat approval or final building inspection, the applicant shall post a financial guarantee to ensure work will be completed and meet the stated environmental objectives. Where financial guarantees are required by other state or federal agencies for specific mitigation features, additional financial guarantees for those features are not required under this provision.
- b. The financial guarantee shall be, at a minimum, in the amount of one hundred and twenty-five percent (125%) of the estimated cost of the uncompleted actions and/or the estimated cost of restoring the functions and values of the critical area(s) that is at risk. The guarantee amount shall be based on an itemized cost estimate of the mitigation activity including clearing and grading, plant materials, plant installation, irrigation, weed management, monitoring, and other costs, and shall be determined at the City's discretion in consideration of market trends, inflation, and other decision making criterion that may increase costs between the establishment of the financial guarantee and the release of the guarantee.

- c. The financial guarantee may be in the form of a surety bond, performance bond, assignment of savings account, an irrevocable letter of credit guaranteed by an acceptable financial institution, or other form acceptable to the Designated Official, with terms and conditions acceptable to the City of Cle Elum attorney.
- d. The financial guarantee shall remain in effect until the Designated Official determines, in writing, that the standards bonded for have been met. Financial guarantees for wetland or stream compensatory mitigation shall be held for a minimum of five (5) years after completion of the work to ensure that the required mitigation has been fully implemented and demonstrated to function and may be held for longer periods when necessary.
- e. Public development proposals shall be relieved from having to comply with the bonding requirements of this Section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.
- f. Any failure to satisfy critical area requirements established by law or condition, including but not limited to the failure to provide a monitoring report within thirty (30) days after it is due or comply with other provisions of an approved mitigation plan, shall constitute a default, and the Designated Official may demand payment of any financial guarantees or require other action authorized by City of Cle Elum code or any other law.
- g. Any funds recovered pursuant to this Section shall be used to complete the required mitigation. Such funds shall not be deposited in the City General Fund, but rather provided with a separate account. The City will use such funds to arrange for completion of the project or mitigation, and follow-up corrective actions.
- h. 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.
- 4. Mitigation Banking and In-Lieu Fee Mitigation. The City may approve mitigation banking and/or in-lieu fee mitigation as a form of compensatory mitigation for wetland and fish and wildlife habitat conservation area impacts when the provisions of this Title require mitigation and when the use of a mitigation bank/in-lieu fee program will provide equivalent or greater replacement of critical area functions and values when compared to conventional permittee-responsible mitigation. Mitigation banks and inlieu fee program shall only be used when it can be demonstrated that they provide significant ecological benefits including long-term conservation of critical areas, important species, habitats and/or habitat linkages, and when they are documented to provide a viable alternative to the piecemeal mitigation for individual project impacts to achieve ecosystem-based conservation goals. Mitigation banks and in-lieu fee programs shall not be used unless they are certified in accordance with applicable federal and state mitigation rules and expressly authorized through City legislative action.

#### 14.70.110 Review Process

Administrative Procedures and Rules. The administrative procedures followed during
the critical area review process shall conform to the standards and requirements of all
development and alterations. This shall include, but not be limited to, timing, appeals,
and fees associated with applications covered by this Title.

#### 2. General Requirements

- a. Submittal. Prior to the City's consideration of any proposed alteration or development not found to be exempt under CEMC 14.70.050, the applicant shall submit to the City complete information regarding the critical area on the application for the underlying development, on forms provided by the City.
- b. Checklist. As part of the application packaged described within CEMC X14.70X.2(a). project proponents are required to submit a completed critical areas checklist. The purpose of this checklist is to provide critical areas information to City staff to determine potential impacts of a project or action regulated within the City's Critical Areas Ordinance as described hereinunder this Title. City staff will review this checklist along with critical areas information available to the City through this Title and make a determination of impacts. This checklist should be utilized for all development activities as defined within this Title
- c. As part of critical areas review, the City shall:
  - i. Verify the information submitted by the applicant;
  - ii. Evaluate the project area and vicinity for critical areas and buffers;
  - Determine whether the applicant is required to seek additional critical area consultation with qualified professionals and/or agencies, which may include a joint site visit with City staff, agency staff, and/or qualified professionals;
    - (1) This additional consultation may be required for, but is not limited to, areas which contain unmapped critical areas and/or difficult mitigation circumstances.
  - iv. Determine whether the proposed development is likely to impact the functions or values of critical areas; and
  - v. Determine if the proposed development avoids impacts or adequately addresses the impacts to the critical area and buffer associated with the alteration or development.
- d. Make a review determination:
  - i. No Critical Areas Present. If after a site visit, the Designated Official's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed alteration or development is unlikely to degrade the functions or values of a critical area, then the Designated Official shall rule that the critical area review is complete and note on the underlying application the reasons that no further review is

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- required. A summary of this information shall be included in any staff report or decision on the underlying permit.
- ii. Critical Areas Present, but No Impact Waiver. If the Designated Official determines there are critical areas within or adjacent to the project area, but that the best available science shows that the proposed alteration or development is unlikely to degrade the functions or values of the critical area(s) or buffer(s), the Designated Official may waive the requirement for a critical areas report. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:
  - (1) There will be no alteration of the critical area or associated riparian management zone or buffer;
  - (2) The development proposal will not negatively impact a critical area or buffer.
- iii. Critical areas may be affected by proposal. If the Designated Official determines that a critical area or areas or buffer(s) may be affected by the proposal, then the Designated Official shall notify the applicant that a critical areas report must be submitted prior to further review of the project, as described in CEMC 14.70.080. The Designated Official may use the following indicators to assist in determining the need for a critical areas report:
  - Indication of a critical area on the City critical areas maps that may be impacted by the proposed alteration or development;
  - Information and scientific opinions from appropriate agencies, including but not limited to the Washington State Departments of Fish and Wildlife and Ecology;
  - (3) Documentation, from a scientific or other reasonable source, of the possible presence of a critical area; or
  - (4) A finding by a qualified professional, or a reasonable belief by the Designated Official, that a critical area may exist on or adjacent to the site of the proposed alteration or development.
- e. Effect of Designated Official's Determination. A determination regarding the apparent absence of one or more critical areas by the Designated Official is not an expert certification regarding the presence of critical areas and the determination is subject to possible reconsideration and reopening if new information is received. If the applicant wants greater assurance of the accuracy of the critical area review determination, the applicant may choose to hire a qualified professional to provide such assurances.
- Request for Technical Assistance. The Designated Official may engage technical
  consultants or agencies with expertise to provide third party review and interpret
  critical area data and findings submitted by or on behalf of the applicant in instances

- where City staff lack the resources or expertise to review these materials. Costs incurred by the City to enable third party review and technical assistance is to be borne by the applicant. The applicant will be billed post-consultation.
- 4. Pre-Qualification of Consultants. The Designated Official may prepare and maintain a list of qualified technical consultants and firms that meet the qualified professional standards detailed in CEMC 14.70.080. Any proposed consultant whose name is not on the list may submit a statement of qualifications including information on experience in the preparation of critical area studies, years of experience, and sample work. Upon approval of the submitted qualifications, the Designated Official shall add the name to the list of qualified consultants. The Designated Official may reject data and findings from non-pre-qualified consultants or require a third-party review per CEMC 14.70.110(3).

#### 14.70.120 Relationships to Other Regulations

- 1. This Title shall apply as an overlay and in addition to zoning and other regulations adopted by the City.
- Any individual critical area adjoined by another type of critical area shall have the buffer and meet the requirements that provide the most protection to the critical areas involved. When any existing regulations, easement, covenant, or deed restriction conflicts with this Title that which provides more protection to the critical area shall apply.
- 3. These critical areas regulations shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA), as locally adopted.
- 4. Compliance with the provisions of this Title does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Hydraulic Project Approval [HPA] permits, Section 106 of the National Historic Preservation Act, U.S. Army Corps of Engineers Section 404 permits, National Pollution Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this Title.

## 14.70.130 Best Available Science

Critical areas reports and decisions to alter critical areas shall be based on the most current best available science to protect the functions and values of critical areas in City of Cle Elum.

# 14.70.140 Critical Areas Report Review and Determination

- The Designated Official shall make a determination as to whether the proposed alteration or development and associated mitigation, if any, is consistent with the provisions of this Title. The Designated Official's determination shall be based on the following criteria:
  - a. The proposal minimizes the impact on critical areas in accordance with CEMC 14.70.100, Critical Areas Mitigation;

**Commented [JDL(16]:** Same comment as above in relation to mitigation provisions in this section

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- b. The proposal is consistent with the general purposes of this Title;
- Any alterations permitted to the critical area(s) are mitigated in accordance with this Title's mitigation requirement sections depending on the type of critical area(s) impacted;
- d. The proposal protects the critical area functions and values consistent with the best available science and results in no net loss of critical area functions and values: and
- e. The proposal is consistent with other applicable regulations and standards.
- 2. The City may condition the proposed alteration or development as necessary to mitigate impacts to critical areas and to conform to the standards required by this Title.

#### 3 Determination

The Designated Official will determine if the proposed alteration or development meets the criteria in CEMC 14.70.150(1) and complies with the applicable provisions of this Title. The Designated Official shall prepare a written notice of determination and identify any required conditions of approval.

- a. If a proposed alteration or development is approved under this Title a notice of determination and conditions of approval shall be included in the project file, be considered in the next phase of the City's review of the proposed alteration or development in accordance with any other applicable codes and regulations, and shall be attached to the underlying permit or approval.
  - Any subsequent changes to the conditions of approval shall void the previous determination pending re-review of the proposal and conditions of approval by the Designated Official.
  - ii. A favorable determination should not be construed as endorsement or approval of any underlying permit or approval.
- b. If a proposed alteration or development is rejected due to not adequately mitigating its impacts on the critical area(s) and/or does not comply with the criteria in CEMC 14.70.150(1), and the provisions of this Title, the Designated Official shall prepare a written notice of the determination that includes findings of noncompliance.
  - i. No proposed alteration, development, or permit shall be approved or issued if it is determined that the proposed activity does not adequately mitigate its impacts on the critical area(s) and/or does not comply with the provisions of this Title.
  - Upon receiving a notice of determination that includes findings of noncompliance, the applicant may request consideration of a revised critical areas report.
  - iii. If the revision is found to be substantial and relevant to the critical area review, the Designated Official may reopen the critical area review and make a new determination based on the revised report.

4. The City's determination regarding critical areas pursuant to this Title shall be concurrent with the final decision to approve, condition, or deny the development proposal or other alteration involved.

#### 14.70.150 Enforcement

- Generally. When a critical area or its buffer has been altered in violation of this Title, all
  ongoing development work shall stop, and the critical area and buffer shall be restored.
  The City shall have the authority to issue a stop work order to cease all ongoing
  development work, and order restoration, rehabilitation, or replacement measures at
  the owner's or other responsible party's expense to compensate for violation of
  provisions of this Title.
- 2. Requirement for Restoration Plan. All development work shall remain stopped until a restoration plan is prepared and approved by the City. Such a plan shall be prepared by a qualified professional using best available science and shall describe how the actions proposed meet the minimum requirements described below. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal. The City may consult with agencies of expertise to ensure plan adequacy.

#### 3. Minimum Performance Standards for Restoration

- a. For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and fish and wildlife habitat conservation areas, the following minimum performance standards shall be met for the restoration of a critical area, provided that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:
  - The pre-violation structural and functional values shall be restored, including water quality, hydrology and habitat functions;
  - The historic soil types and configuration of the altered area shall be replicated;
  - iii. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species type and densities. The historic functions and values should be replicated at the location of the alteration; and
  - iv. Information demonstrating compliance with the requirements in CEMC 14.70.100 shall be submitted to the Designated Official.
- b. For alterations to frequently flooded areas and geologically hazardous areas, the following minimum performance standards shall be met for the restoration of a critical area, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:
  - The hazard shall be reduced to a level equal to, or less than, the predevelopment hazard;
  - Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

- iii. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.
- 4. **Site Investigations.** The Designated Official is authorized to make site inspections and take such actions as are necessary to enforce this Title.
- Penalties. Penalties for violating the provisions of this Title are specified in CEMC Chapter 14.70 CEMC.

#### 14.70.160 Definitions

Certain terms and words used in this title are defined in the following sections. Words used in the present tense include the future; words in the singular number include the plural number; and words in the plural number include the singular number. The word "shall" is mandatory.

"Adjacent" to a critical area means the project area is located:

- 1. anywhere within the standard critical area buffer and/or standard building setback;
- 2. anywhere within three hundred (300) feet from a fish and wildlife habitat conservation area or wetland; or
- 3. anywhere within two hundred (200) feet from a critical aquifer recharge area.

"Agricultural activities" means agricultural uses and practices including, but not limited to: Producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie dormant; allowing land used for agricultural activities to lie dormant; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline and/or critical area than the original facility; and maintaining agricultural lands under production or cultivation.

"Agricultural activities, high intensity" are defined as: dairies, animal feed lots, nurseries, greenhouses, and like uses which are commercially operated.

"Agricultural land" means land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by \*RCW 84.33.100 through 84.33.140, finfish in upland hatcheries, or livestock, and that has long-term commercial significance for agricultural production.

"Alluvial fan" or "Alluvial fan hazard area" means a low, outspread, relatively flat-to- gentle sloping landscape surface composed of eroded alluvial materials deposited by a stream at the transitional area between valley floodplains and steep mountain slopes. Channel pattern in the

Commented [JDL(17]: The early draft had some added definitions that aren't here, in case you want to reconcile the two drafts.

alluvial fan is highly variable, often dependent on substrate size and age of the landform. Channels may change course frequently, resulting in a multi-branched stream network. Channels can also be deeply incised within highly erodible alluvial material.

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

"Anadromous Fish" means fish that spawn and rear in fresh water and migrate to the ocean to mature in the marine environment until returning to freshwater to spawn. In City of Cle Elum, these include Pacific salmon, steelhead, bull trout, and Pacific lamprey.

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

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

"Arborist" is defined as a person with a minimum 2-year degree in arboriculture or equivalent discipline such as forestry, horticulture, or biology. Membership and certifications from International Society of Arboriculture as well as documented work experience may be substituted for formal degrees at the discretion of the Designated Official.

"Area of Special Flood Hazard" is defined as the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letter A. Also referred to as "100-year floodplain" and "special flood hazard area."

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

"Avulsion" means a sudden cutting off or separation of land by a flood breaking through a meander or by a sudden change in current whereby the stream deserts its old channel for a new one, such as occurs in Channel Migration Zones.

"Bank" means any land surface landward of the ordinary high water line next to a body of water and constrains the water except during floods. The term "bank" also includes all land surfaces of islands within a body of water that are below the flood elevation of the surrounding body of water.

"Best Available Science" means scientific information applicable to the critical area prepared by local, state, or federal natural resource agencies, a qualified scientific professional, or team of qualified scientific professionals that is consistent with criteria established in WAC 365-195-900 through WAC 365-195-925.

"Buffer" means an area that is contiguous to and protects a critical area, and which is required for the continued maintenance, function, and/or structural stability of a critical area. 14.70.150

"Channel migration zone" (CMZ) means the area along a watercourse, but not always within the flood zone, within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings.

"Clearing" means significant vegetation removal including the removal or alteration of trees, shrubs, and/or ground cover by grading, cutting, burning, chemical means, or other activity that causes significant ecological impacts to functions provided by such vegetation. The removal of invasive or noxious weeds does not constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

"Critical aquifer recharge areas" are areas with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge.

"Critical areas" include the following areas and ecosystems: (a) wetlands; (b)critical aquifer recharge areas; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas.

"Cumulative Impacts" or "cumulative effects" means the combined, incremental effects of human activity on ecological or critical areas functions and values. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis and changes to policies and permitting decisions.

"Dam" means a barrier or controlling and appurtenant works across a stream or river that does or can confine, impound or regulate flow, or raise water levels for purposes such as flood or irrigation water storage, erosion control, power generation, or collection of sediment or debris.

Commented [JDL(18]: In the early draft you also had this included following the citation: "Sources of best available science are included in "Best Available Science For the City of Cle Elum, Washington" prepared dated October 28, 2020 or amended."

Commented [JDL(19]: Artifact?

"Development" means any action that would require land\_use review or other approval from the city or other local, state or federal jurisdiction. Development includes, but is not limited to: land division, construction, reconstruction, structural alternation, relocation, or enlargement of any structure; clearing or grading; and changes to surface or groundwaters.

"Development area" means the area of land disturbing activity on a site.

"Designated Official" means the Designated Official of the City of Cle Elum Community Development Services or designee.

"Dry well" means a hole in the ground filled with gravel or rubble intended to receive treated or otherwise unpolluted drainage water and allow it to percolate into the ground. A dry well is typically engineered and designed to infiltrate individual home roof runoff in a subdivision.]

"Ecological functions" means the work performed or role played by the physical, chemical, and biological processes that contribute to the maintenance of aquatic and terrestrial environments that constitute the natural ecosystem.

"Emergency activities" means activities necessary to prevent an immediate threat to public health, safety, or welfare – or an immediate risk of damage to private property – that require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this Title.

"Enhancement" means actions performed within an existing degraded critical area and/or buffer to intentionally increase or augment one or more ecological functions or values of the existing area. Enhancement actions include, but are not limited to, increasing plant diversity and cover; increasing wildlife habitat and structural complexity (snags, woody debris); installing environmentally compatible erosion controls; removing non-indigenous plant or animal species; or removing human-made structures or fill that are degrading ecological functions or values.

"Erosion" means the process whereby wind, rain, water, and other natural agents mobilize and transport particles of soil or rock.

"Erosion hazard areas" are areas containing soils that may experience significant erosion, including any or all of the following:

- Soil areas identified by the Natural Resources Conservation Service as having "severe" or "very severe" erosion hazard; or
- 2. Slopes forty percent (40%) or steeper with a vertical relief of ten (10) or more feet, except areas composed of consolidated rock; or
- 3. Concave slope forms equal to or greater than fifteen percent (15%) with a vertical relief of ten (10) or more feet, except areas composed of consolidated rock; or

4. Channel migration zones.

"Feasible" means, for the purpose of this Title, that an action, such as a development activity, mitigation, or preservation requirement, meets all of the following conditions:

- The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results:
- 2. The action provides a reasonable likelihood of achieving its intended purpose;
- The action does not physically preclude achieving the activity's primary intended legal use; and
- 4. In cases where these guidelines require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant. In determining an action's infeasibility, the reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

"Feedlot" means the use of structures or pens for the concentrated feeding or holding of animals or poultry including, but not limited to, horses, cattle, sheep or swine. This definition includes dairy confinement areas, slaughterhouses, shipping terminal holding pens, poultry and/or egg production facilities and fur farms, but does not include animal husbandry and normal farming practices.

"Fill" means any solid or semi-solid material that when placed, changes the grade or elevation of the receiving site, including the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the ordinary high water mark (OHWM), in wetlands, or on shorelands in a manner that raises the ground surface elevation or creates dry land.

"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; areas with high relative population density or species richness; and also, locally important habitats and species designated by the City, and state priority habitats and species as identified by the WA Department of Fish and Wildlife. "Fish and wildlife habitat conservation areas" do not include artificial features or constructs created in what were originally upland areas, such 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.

"Forester" is defined as a person with a minimum 2-year degree in forestry or equivalent discipline such as arboriculture, horticulture, or biology. Membership and certifications from International Society of American Foresters as well as documented work experience may be substituted for formal degrees at the discretion of the Designated Official.

"Forest land" means all land which is capable of supporting a merchantable stand of timber and is not being actively used for a use which is incompatible with timber growing. Forest land does not include agricultural land that is or was enrolled in the conservation reserve enhancement program by contract if such agricultural land was historically used for agricultural purposes and the landowner intends to continue to use the land for agricultural purposes in the future.

"Frequently flooded areas" means lands in the floodplain subject to a one percent (1%) or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater and those lands that provide important flood storage, conveyance, and attenuation functions. These areas include, but are not limited to, streams, rivers, lakes, wetlands, and areas where high groundwater forms ponds on the ground surface. As designated and classified determined by a local government in accordance with WAC 365-190-110. Classifications of frequently flooded areas include, at a minimum, the one hundred-(100)-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

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

"Geotechnical analysis" or "geotechnical report" means a scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers or geologists who have professional expertise about the regional and local shoreline geology and processes.

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

Commented [JDL(20]: In the early draft you also had this at the end of this sentence;
"and Crystal Creek and enhancing drainages identified by

"and Crystal Creek and ephemeral drainages identified by DNR and the Washington Department of Fish and Wildlife (WDFW)"

"Groundwater" means all the water that exists beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body of surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves.

"Habitats of local importance" designated as fish and wildlife habitat conservation areas include those areas found and/or designated to be locally important by the City.

"Hazard Tree" means a tree with a structural defect, combination of defects or disease resulting in a structural defect that, under the normal range of environmental conditions at the site, will result in the loss of a major structural component of the tree in a manner that will:

- Damage a residential structure or accessory structure, or a place of employment or public assembly;
- 2. Damage an approved road, utility, or public facility;
- 3. Prevent emergency access in the case of medical hardship; or
- 4. Endanger pedestrians or users of a recreational area

"Hazard Tree Determination Report" means a written document prepared by an arborist or forester containing the following elements:

- 1. Parcel, address, and name of landowner of site where tree(s) are located,
- 2. Description of size, health, and species of tree(s) evaluated,
- 3. Description of factors related to potential impacts to human health or structures posed by evaluated tree(s),
- 4. Alternative methods (pruning, cabling, etc.) considered,
- Location of nearby critical areas (wetlands, streams, steep slopes, landslides, floodplains, shorelines, etc.),
- 6. Proposed methods for removal,
- 7. Size and species of replacement trees, if any,
- 8. Site map showing parcel lines, structures, evaluated trees, critical areas, utilities, and other pertinent information described in the report,
- 9. Date of field evaluation and signature of arborist or forester,
- 10. Qualifications of arborist or forester authoring the report.

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

"Hydric soil" means a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

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

"Impervious <u>S</u>urface" means a hard surface area which either prevents or retards the entry of water into the soil surface and subsoils, such as would occur under natural conditions prior to development, or which causes water to run off the surface in greater quantities or at an increased rate of flow relative to natural conditions prior to development. Common impervious surfaces include, but are not limited to: rooftops, walkways, patios, driveways, parking lots, storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled macadam, or other surfaces which similarly impede the natural infiltration of stormwater.

"In-stream structure" is a human-made structure placed within a stream or river waterward of the ordinary high water mark that either causes or has the potential to cause water impoundment, or the diversion, obstruction, or modification of water flow. In-stream structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, or other purpose.

"Landslide hazard areas" are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten (10) feet of vertical relief. Potential landslide hazard areas include but are not limited to the following areas:

- Areas designated as quaternary slumps, earth-flows, mudflows, or landslides on maps published by the U.S. Geological Survey or Washington State Department of Natural Resources.
- 2. Areas with all three (3) of the following characteristics:
  - a. Slopes steeper than fifteen percent (15%);
  - b. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
  - c. Springs or groundwater seepage.
- Areas that have shown movement and/or are underlain or covered by mass wastage debris;
- Slopes that are parallel or sub-parallel to planes of weakness (which may include but not be limited to bedding planes, soft clay layers, joint systems, and fault planes) in subsurface materials;
- 5. Slopes having gradients steeper than eighty percent (80%) subject to rock fall during seismic shaking;
- 6. Areas that show evidence of, or are at risk from snow avalanches; and

- 7. Any area with a slope of forty percent (40%) or steeper and with a vertical relief of ten (10) or more feet except areas composed of competent bedrock.
- 8. Potentially unstable slopes resulting from river erosion or undercutting.
- 9. Areas that show past sloughing or calving of sediment or rocks resulting in a steep slope that is poorly vegetated.
- 10. Deep-seated landslide areas characterized by one or more of the following features, which may be evident in aerial images, topographic maps, LiDAR imagery or on the ground:
  - a. scalloped ridge crests at the top of the slope,
  - b. crescent shaped depressions,
  - c. head scarps,
  - d. side scarps,
  - e. ponds or sag areas on mid slopes,
  - f. benches and scarps on mid slope areas,
  - g. hummocky ground,
  - h. linear fractures in the ground.
- 11. Areas below unstable slopes or that have been identified as landslide hazard areas that could be impacted by landslide run out.
- 12. Areas above or adjacent to unstable slopes that could be impacted if the landslide area expands.

"Mine hazard areas" are areas underlain by abandoned mine shafts, secondary passages between shaft tunnels, or air vents. Mine hazards include subsidence, which is the uneven downward movement of the ground surface caused by underground workings caving in; contamination to ground and surface water from tailings and underground workings; concentrations of lethal or noxious gases; and underground fires.

"Mining" means the removal of sand, gravel, soil, minerals, and other earth materials for commercial and other uses. Mining does not include mineral prospecting conducted according to the most current WAC for mineral prospecting under the hydraulic code.

"Mitigation Sequencing" means a process used to guide mitigation decisions and determine the type and level of mitigation required. It follows a three (3) step process, described in <a href="CEMC">CEMC</a> 14.70.100:

- 1. Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing 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. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- 4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;

- 5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
- 6. Monitoring the impact and taking appropriate corrective measures.

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

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

"Native Vegetation" means plant species that are indigenous to the area in question.

"Naturally occurring ponds" means those ponds and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created in upland areas for mitigation purposes. Naturally occurring ponds do not include ponds deliberately designed and created in upland sites for purposes other than mitigation, such as irrigation canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities.

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

"Ordinary high water mark (OHWM)" on all lakes, streams, and tidal water means that mark that will 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 all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the Washington State Department of Ecology; provided that in any area where the OHWM cannot be found, the OHWM adjoining salt water shall be the line of mean higher high tide and the OHWM adjoining freshwater shall be the line of mean high water.

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

"Priority habitat" means a habitat type or elements with unique or significant value to one or more species as classified by the state Department of Fish and Wildlife. 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 (e.g., oak woodlands, juniper savanna). A priority habitat may also be described by a successional stage (e.g., old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat feature (e.g., talus slopes, caves, snags) of key value to 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 include State Endangered, Threatened, Sensitive, and Candidate species; animal aggregations (e.g., heron colonies, bat colonies) considered vulnerable; and species of recreational, commercial, or tribal importance that are vulnerable. A species identified and mapped as priority species fit one or more of the following criteria:

## 1. Criterion 1. State-Listed and Candidate Species:

State-listed species are 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 Candidate species are fish and wildlife species that will be reviewed by the department (POL-M-6001) for possible listing as Endangered, Threatened, or Sensitive according to the process and criteria defined in WAC-232-12-297.

# 2. <u>Criterion 2</u>. Vulnerable Aggregations:

Vulnerable aggregations include species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to aggregate. Examples include heron rookeries, seabird concentrations, marine mammal haulouts, shellfish beds, and fish spawning and rearing areas.

# 3. <u>Criterion 3</u>. Species of Recreational, Commercial, and/or Tribal Importance:

Native and non-native fish and wildlife species of recreational or commercial importance, and recognized species used for tribal ceremonial and subsistence purposes, whose biological or ecological characteristics make them vulnerable to decline in Washington or that are dependent on habitats that are highly vulnerable or are in limited availability.

"Public facilities" include streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools.

"Qualified professional" means a person with experience and training in the applicable field or critical area. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, soil science, botany, engineering, environmental studies, fisheries, geology or related field, and a minimum of 2 years of related work experience. Other equivalently qualified professionals may be approved by the Designated Official on a case by case basis.

- A qualified professional for wetlands and fish and wildlife habitat conservation areas
  must have a degree in biology, soil science, botany or related fields and relevant
  professional experience or professional certification (Professional Wetland Scientist
  Certification) that documents capability in functional assessment and mitigation
  techniques. For wetlands, Professional Wetland Scientist Certification, or other
  documentation of expertise, is required.
- 2. A qualified professional for preparing Geologically Hazardous Area Assessments must be a professional geologist or engineering geologist licensed in the State of Washington.
- 3. Engineered structures for mitigation of geologic hazards must be designed by a qualified professional engineer or engineering geologist, licensed in the State of Washington.
- 4. A qualified professional for critical aquifer recharge areas must be a professional hydrogeologist licensed in the State of Washington, who is trained and qualified to analyze geologic, hydrologic, and groundwater flow systems.

"Rehabilitation" means a type of restoration action intended to repair natural or historic functions and processes. Rehabilitation activities could involve breaching a dike to reconnect wetlands to a floodplain or other activities that restore the natural water regime.

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

"Restore," "restoration" or "ecological restoration" means repairing environmental damage to a condition equivalent to the pre-impact condition, or upgrading of impaired critical area processes or functions. This may be accomplished through measures including, but not limited to, re-vegetation, removal of intrusive stream bank structures, or removal or treatment of toxic materials. Restoration does not imply a requirement for returning the critical area to aboriginal or pre-European settlement conditions.

"Riparian" areas are transitional between terrestrial and aquatic ecosystems and are distinguished by gradients in biophysical conditions, ecological processes, and biota. They are areas through which surface and subsurface hydrology connect waterbodies with their adjacent

uplands. They include those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (i.e., a zone of influence).

"Riparian management zone(s)" or "RMZ(s)" is a scientifically based description of the area adjacent to rivers and streams (see "riparian") based on the site potential tree height conceptual framework. It is the area that has the potential to provide full ecological function for bank stability, shade, pollution removal, contributions of detrital nutrients, and recruitment of large woody debris.

"Seismic hazard areas" are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting.

"Setback" means the distance a building or structure is placed from a specified limit such as a lot line or a critical area buffer.

"Shorelines" means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of statewide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second (20 cfs) or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty (20) acres in size and wetlands associated with such small lakes.

"Shorelines of statewide significance" means the shorelines identified in RCW 90.58.030 which because of their elevated status require the optimum implementation of the Shoreline Management Act's policies. This includes all rivers with a mean annual flow of greater than two hundred cubic feet per second (200 cfs) and lakes with surface areas of one thousand (1,000) acres or more.

"Shrub-Steppe" is a nonforested vegetation type consisting of one or more layers of perennial bunchgrasses and a conspicuous but discontinuous layer of shrubs (see Eastside Steppe for sites with little or no shrub cover). Although Big Sagebrush (Artemisia tridentata) is the most widespread shrub-steppe shrub, other dominant (or co-dominant) shrubs include Antelope Bitterbrush (Purshia tridentata), Threetip Sagebrush (A. tripartita), Scabland Sagebrush (A. rigida), and Dwarf Sagebrush (A. arbuscula). Dominant bunchgrasses include (but are not limited to) Idaho fescue (Festuca idahoensis), Bluebunch Wheatgrass (Pseudoroegneria spicata), Sandberg Bluegrass (Poa secunda), Thurber's Needlegrass (Achnatherum thurberianum), and Needle-and-Thread (Hesperostipa comata). In areas with greater precipitation or on soils with higher moisture-holding capacity, shrub-steppe can also support a dense layer of forbs (i.e., broadleaf herbaceous flora). Shrub-steppe contains various habitat features, including diverse topography, riparian areas, and canyons. Another important

component is habitat quality (i.e., degree to which a tract resembles a site potential natural community), which may be influenced by soil condition and erosion; and the distribution, coverage, and vigor of native shrubs, forbs, and grasses. Sites with less disturbed soils often have a layer of algae, mosses, or lichens. At some more disturbed sites, non-natives such as Cheatgrass (Bromus tectorum) or Crested Wheatgrass (Agropyron cristatum) may be codominant species. Fire disturbance is an ecological component of shrub-steppe. Shrub-steppe disturbed by fire may lack the aforementioned habitat components during periods of post-fire recovery

"Site Potential Tree Height" or "SPTH" is the average maximum height of the tallest dominant trees (200 years or more in age) for a given area.

"Soft armoring" means stream bank erosion control practices using predominantly natural materials in a design that minimizes impacts to natural processes. This term is frequently used in reference to bioengineering.

"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.

"Streams" see definition for "Watercourse"

"Stream or Water Types" are fully defined in WAC 222-16-030. An abbreviated definition is provided below, but the full WAC definition is adopted and applies:

- 1. "Type S Water" means all designated "shorelines of the state".
- 2. "Type F Water" means streams other than Type S Waters that contain fish habitat or are diverted for certain kinds of domestic use or for use by fish hatcheries.
- 3. "Type Np Water" means streams that are perennial nonfish habitat streams.
- 4. "Type Ns Water" means streams that are seasonal, nonfish habitat streams, which are physically connected by an above-ground channel system to Type S, F, or Np Waters.

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

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

"Volcanic hazard areas" are subject to pyroclastic flows, lava flows, debris avalanche, inundation by debris flows, mudflows, or related flooding resulting from volcanic activity. There are no active or dormant volcanoes located within City of Cle Elum; however, Mount Rainer and

Mount St. Helens are relatively near. Hazards to City of Cle Elum residents from these volcanoes are limited to ash deposition.

"Watercourse," "river" or "stream" means any portion of a stream or river channel, bed, bank, or bottom waterward of the ordinary high water line of waters of the state. Watercourse also means areas in which fish may spawn, reside, or pass, and tributary waters with defined bed or banks that influence the quality of habitat downstream. Watercourse also means waters that flow intermittently or that fluctuate in level during the year, and the term applies to the entire bed of such waters whether or not the water is at peak level. A watercourse includes all surface-water-connected wetlands that provide or maintain habitat that supports fish life. This definition does not include irrigation ditches, canals, stormwater treatment and conveyance systems, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans..

"Water quality" means the physical characteristics of water, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics.

"Water system" means any system providing water intended for, or used for, human consumption, domestic uses, or commercial businesses. It includes, but is not limited to, the source, purification, storage, transmission, pumping, irrigation, and distribution facilities.

"Waters of the state" means lakes, rivers, ponds, streams, inland waters, underground waters, and all other surface watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-030.

"Wellhead protection area" means the portion of a well's, wellfield's, or spring's zone of contribution within the ten-year time of travel boundary, or boundaries established using alternate criteria approved by the state Department of Health in those settings where groundwater time of travel is not a reasonable delineation criteria.

"Wetland" or "wetlands" means areas that are inundated or saturated by surface water or groundwater 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.

**Commented [JDL(21]:** This isn't used within this code except for a reference in a different definition.

## 14.70.170 Critical Aquifer Protection Areas (CARAs)

#### A. Purpose and Intent

The purpose of this chapter is to protect critical aquifer recharge areas from degradation resulting from alterations and development. It is the intent of this chapter to safeguard groundwater resources against contaminants from alterations and development.

### B. Designation, and Mapping.

- 1. Classification and Designation. Critical aquifer recharge areas are areas of unconsolidated deposits within the Roslyn and Kittitas Basins, and all Group A well head protection areas, as shown on the Source Water Assessment Program (SWAP) mapping tool through the Department of Health. The City of Cle Elum finds that all groundwater sources should be protected equally, and requires that all projects proposing uses listed in <a href="CEMC">CEMC</a> 14.70.030 that are City Limits of the City of Cle Elum shall be reviewed for potential hazards to groundwater.
- Mapping. Group A well-head protection areas are depicted upon official mapping
  from the Washington State Department of Health on the Source Water Assessment
  Tools; however, it should be noted that all areas within the existing and future
  incorporated limits of the Ccity of Cle Elum's corporate limits are hereby designated
  as Critical Aquifer Recharge Areas.

# C. Applicability.

This chapter regulates the following uses when located in a critical aquifer recharge area:

- 1. Storage tanks;
- 2. Commercial vehicle repair, servicing, and salvaging facilities;
- 3. Reclaimed wastewater;
- 4. New landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste of more than two thousand (2,000) cubic yards, and inert and demolition waste landfills;
- 5. Injection wells used for disposal of waste products including, but not limited to, stormwater discharge, hazardous or radioactive waste, or industrial waste;
- Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
- 7. Commercial coal, ore mining operations, and natural gas exploration and extraction;
- 8. Facilities that store, process, or dispose of chemicals containing perchloroethylene (PCE) or methyl tertiary butyl ether (MTBE) or other chemicals with the potential to contaminate groundwater;
- 9. Dairy farms and feedlots;
- $10. \, Man-made \ stormwater \ detention \ or \ infiltration \ ponds, \ manure \ lagoons, \ and \ irrigation \ ponds; \ and$

Commented [JDL(22]: Please check with Commerce on this, but I don't believe you can designate in the UGA; it would remain under the County's purview until annexation. If this same reference is used in any of the other critical areas categories, you will want to modify it depending on what the answer is.

11. Any other alteration or development that the Designated Official determines – based on best available science— is likely to have a significant adverse impact on ground water.

#### D. Protection Standards.

- Storage tanks. Aboveground and underground storage tanks or vaults used for the storage of hazardous substances, animal wastes, sewage sludge, fertilizers, other chemical or biological hazards, dangerous wastes as defined in WAC-Chapter 173-303 WAC, or any other substances, solids, or liquids in quantities identified by City of Cle ElumKittitas County Public Health as a risk to groundwater quality, shall be designed and constructed to:
  - a. Prevent the release of such substances to the ground, ground waters, or surface waters;
  - Include an impervious containment area with a volume greater than the volume of the storage tank or vault to avoid an overflow of the containment area;
  - c. Provide for release detection;
  - d. Provide written spill response and spill notification procedures to the local fire district;
  - e. Use material in the construction or lining of the storage containment area which is compatible with the substance to be stored to protect against corrosion or leakage, or otherwise designed in a manner to prevent the release or threatened release of any stored substance; and
  - f. Comply with <u>WAC-Chapters</u> 173-303 and <u>173-360 WAC</u> as well as International Building Code requirements.
- 2. Commercial vehicle repair, servicing, and salvaging facilities. Vehicle repair and servicing activities shall be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair, servicing, and salvaging must be stored in a manner that protects them from weather and provides containment should leaks occur. Dry wells shall not be allowed on sites used for vehicle repair, servicing, and salvaging. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the Washington State Department of Ecology prior to commencement of the proposed development.
- Reclaimed wastewater. Use of reclaimed wastewater must be in accordance with adopted water or sewer comprehensive plans that have been approved by Ecology.
- Other regulated uses. Protection standards for other uses regulated under CEMC 14.70.030 shall be based on analysis and recommendations contained in the hydrogeologic reports required for specific projects.

#### E. Reporting

- When required. Except for storage tanks, all uses listed in CEMC 14.70.030 require
   City review and approval of a special hydrogeological assessment prepared by a
   qualified professional.
- 2. **Contents.** The hydrogeological assessment shall include the general critical areas report requirements of CEMC 14.70.080 in addition to the following:
  - a. Geologic setting and soils information for the site and surrounding area;
  - Water quality data, including pH, temperature, dissolved oxygen, conductivity, nitrates, and bacteria;
  - c. Location and depth of perched water tables;
  - d. Recharge potential of site (permeability/transmissivity);
  - e. Hydrologic budget;
  - f. Local groundwater flow, direction, and gradient;
  - g. Location, depth, and other water quality data on the three (3) shallowest wells or springs located within one thousand (1,000) feet of the site;
  - h. Potential impacts to wellhead protection areas located within the site;
  - i. Surface water locations within one thousand (1,000) feet of the site;
  - j. Discussion of the effects of the proposed development on groundwater quality and quantity;
  - Recommendations on appropriate mitigation, if any, to assure that there shall be no measurable exceedance of minimum state groundwater quality standards or measurable reduction in available quantity of groundwater;
  - I. Emergency management plan; and
  - m. Containment release detection.

## 14.70.180 Fish and Habitat Conservation Areas

## A. Purpose and Intent.

The purpose of this chapter is to identify, designate, and protect regulated critical fish and wildlife species and habitats, including anadromous species and their habitats, consistent with best available science.

# B. Designation, and Mapping, Checklist, and Classification.

- 1. **Designation**. Fish and wildlife habitat conservation areas include:
  - a. Waters of the state.
  - b. Areas with which federally-designated endangered, threatened, and sensitive fish and wildlife species have a primary association. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current federal listing status.
  - c. Areas with which state-designated endangered, threatened, and sensitive fish and wildlife species have a primary association. The Washington State

- Department of Fish and Wildlife should be consulted for current state listing status
- d. State priority habitats and areas associated with state priority species. The state Department of Fish and Wildlife should be consulted for current listing of priority habitats and species.
- e. **Habitats and species of local importance.** City of Cle Elum recognizes that the priority habitats and species designated by the Washington Department of Fish and Wildlife that occur within the City are locally important and are hereby designated as habitats and species of local importance.
- f. Naturally occurring ponds smaller than twenty (20) acres.
- g. Lakes, ponds, streams, and rivers planted with game fish by a government or tribal entity.
- State natural area preserves, natural resource conservation areas. Natural
  area preserves and natural resource conservation areas are defined,
  established, and managed by the Washington State Department of Natural
  Resources.
- State wildlife areas. State wildlife areas are defined, established, and managed by the Washington State Department of Fish and Wildlife.
- 2. Mapping. The approximate location and extent of fish and wildlife habitat conservation areas are shown through BAS resources, including the WDFW Priority Habitats and Species maps, the United States Fish and Wildlife Service, and the NOAA Fisheries critical habitat maps. These maps are to be used as a guide and do not provide definitive information about fish and wildlife habitat conservation area size or presence. Fish and wildlife habitat conservation areas may exist that do not appear on the maps. The City shall encourage state and federal agencies to update their mapping sources periodically as new fish and wildlife habitat conservation areas are identified and as new information becomes available.
- 3. Habitat boundary survey. If the Designated Official determines that a fish and wildlife habitat conservation area may be present within the project vicinity, he/she may require the habitat area to be delineated and/or mapped by a qualified professional who is knowledgeable about fish and wildlife habitat conservation areas within City of Cle Elum, or confirmed by the Washington Department of Fish and Wildlife. The existing maps showing the locations of fish and wildlife habitat conservation areas are coarse-scaled, and for planning purposes only. A survey performed by a qualified biologist may be necessary to determine the precise boundary of a habitat area. Unless otherwise defined in this Chapter, the boundary of aquatic habitats shall be the ordinary high water mark of the waterbody. The management recommendations for Washington's priority habitats and species or federal equivalent should be used as a tool for identifying and delineating fish and wildlife habitat boundaries. The City may waive this requirement if there is

- adequate information available on the area proposed for development to determine the impacts of the proposed development and appropriate mitigating measures.
- 4. Waters of the state classification. For purposes of this Chapter, City of Cle Elum hereby adopts the water typing system specified in WAC 222-16-030, as described below:
  - a. Type S: all waters, within their ordinary high water mark, meeting the criteria as "shorelines of the state" and "shorelines of statewide significance" under RCW Chapter 90.58. The current list of Shoreline waters, along with their specific shorelines environments, is provided in the City of Cle Elum Shoreline Master Program (CEMC Chapter 18.02). Type S streams and lakes are protected by the Shoreline Master Program, rather than through this Title.
  - b. **Type F**: segments of natural waters other than Type S Waters, which are within the bankfull widths of defined channels and periodically inundated area of their associated wetlands, or within lakes, ponds, or impoundments having a surface area of 0.5 acre or greater at seasonal low water and which in any case contain fish habitat.
  - c. **Type Np**: all segments of natural waters within the bankfull width of defined channels that are perennial non-fish habitat stream. Perennial stream waters do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Type Np Waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.
  - d. Type Ns: All segments of natural waters within the bankfull width of the defined channels that are not Type S, F, or Np waters. These are seasonal, non-fish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np, F or S Water. Ns Waters must be upstream from and physically connected by an above-ground channel system to Type S, F, or Np Waters. [WAC 222-16-030]

## C. Riparian Management Zones and Buffers.

- Purpose. Riparian Management Zones (RMZs) and Buffers shall be established and maintained to protect fish and wildlife habitat conservation areas. RMZs refer to areas established and maintained to protect streams. Buffers refer to areas established and maintained to protect nonaquatic fish and wildlife habitat conservation areas.
- Measurement. RMZs for streams shall be measured in all directions from the
  ordinary high water mark (OHWM) as identified in the field. Building setbacks
  (14.70090.5) are in addition to RMZs and buffers and are measured outward from
  the edge of the RMZ or buffer boundary. (See 14.70.030(8) for information regarding
  nonaquatic fish and wildlife habitat conservation area buffers.)
- RMZ and Buffer Condition. RMZs and buffers shall be maintained in a predominantly well-vegetated and undisturbed condition to ensure that they

perform their intended function of protecting the FWHCA. Tree removal is prohibited in RMZs and FWHCA buffers other than in accordance with 14.70.050.3.j.

4. Standard Riparian Management Zones.

Stream Type	RMZ for development defined as "infill" <sup>1</sup>	RMZ for all other development
Type S (Shoreline)	See the SMP	See the SMP
Type F	150	Site Potential Tree Height (200 year) <sup>2</sup>
Type Np	100	Site Potential Tree Height (200 year) <sup>2</sup>
Type Ns	50	Site Potential Tree Height (200 year) <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> For the purposed of this code, "infill" is defined as any development or redevelopment proposed within the existing incorporated limits of the City of Cle Elum, where existing development trends, property dimensions, and age of the original plat disallow Reasonable Use through implementation of a stricter standard or current Best Available Science.

- 5. Increased RMZs. The Designated Official shall increase the fish and wildlife habitat conservation area RMZ width where the standard RMZ is inadequate to prevent significant adverse environmental impacts or to address hazards associated with the site or the proposed alteration or development. The Designated Official may increase the buffer up to a maximum of two times the standard width. The Designated Official shall consider increasing the RMZ when any of the following conditions are present:
  - a. The composition, quality and density of the buffer vegetation is insufficient to protect the habitat area;
  - There is evidence of historical or current susceptibility to severe erosion, channel instability, or aggrading;
  - c. There are multiple channels or islands present; or
  - d. The land adjacent to the ordinary high water mark and extending throughout the standard habitat buffer is steeply sloped (greater than forty

<sup>&</sup>lt;sup>2</sup> In accordance with Washington State Department of Fish and Wildlife (WDFW), Site Potential Tree Height (SPTH) shall be utilized to determine the Riparian Management Zone width. Best Available Science reports, SPTH tools and collaboration with WDFW staff may be utilized to determine the SPTH.

percent (40%) slope) and there are no designated landslide hazards such that an increased buffer may be required to protect ecological functions.

- 6. Riparian Management Zone or Buffer averaging. The Designated Official may allow averaging of the standard RMZ or buffer widths of fish and wildlife habitat sites in accordance with an approved habitat management plan on a case-by-case basis. With RMZ or buffer averaging, the RMZ or buffer width is reduced in one location and increased in another location to maintain the same overall standard area. Proposals for RMZ or buffer averaging shall meet all the following:
  - a. The Fish and wildlife habitat conservation area RMZ or buffer has not been averaged or reduced by any prior actions administered by City of Cle Elum;
  - b. No feasible site design could be accomplished without buffer averaging;
  - The RMZ or buffer averaging will not reduce habitat functions or adversely affect anadromous fish habitat;
  - d. The minimum width of the RMZ or buffer at any given point is at least seventy-five percent (75%) of the standard width, or thirty (30) feet, whichever is greater; and
  - e. The area that is added to the RMZ or buffer to offset the reduction is well-vegetated or will be densely planted with native vegetation along with monitoring and management to ensure that it becomes so. The Designated Official may require such native vegetation enhancement if needed to ensure this criterion is met.
- 8. **Buffers for non-aquatic habitats.** Appropriate site- and species-specific buffers for nonaquatic fish and wildlife habitat conservation areas shall be based upon best available science, and recommendations by the Washington Department of Fish and Wildlife or a qualified professional biologist. Buffers will be measured in all directions from the habitat boundary, as mapped by the Washington State Department of Fish and Wildlife or qualified professional pursuant to 14.70.020 and verified by the Designated Official.
  - a. Interrupted Buffers: When a fish and wildlife habitat conservation area buffer contains an existing legally established public or private road and/or a legally established development which creates a significant interruption of buffer function, the Designated Official may allow an alteration or development on the opposite side of the road from the habitat area provided that the actions will not have a detrimental impact to the habitat area. The Designated Official may require a habitat management plan if after considering the hydrologic, geologic, and/or biological habitat connection potential and the extent and permanence of the buffer interruption such a plan is deemed necessary to confirm the lack of detrimental impact on the habitat area.

 Multiple buffers: In the event that buffers for any fish and wildlife habitat conservation area or other critical area (including RMZs) are contiguous or overlapping, the most protective of the collective buffers shall apply.

#### D. General Protection Standards.

- Alterations. All alterations and development shall be prohibited from fish and
  wildlife habitat conservation areas and their buffers, except in accordance with this
  Title. A fish and wildlife habitat conservation area, RMZ, or buffer may be altered
  only if the proposed alteration of the habitat and/or any required compensatory
  mitigation does not degrade the functions and values of the habitat.
- Mitigation requirement. Mitigation of alterations to fish and wildlife habitat conservation areas and their buffers shall meet the requirements of CEMC 14.70.040.
- 3. Anadromous fish. All alterations and development proposed to be located in aquatic fish and wildlife habitat conservation areas used by anadromous fish or in areas that affect such aquatic habitat areas shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:
  - a. An alternative alignment or location for the alteration or development is not feasible:
  - The alteration or development is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;
  - Stream bank erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to the WDFW Integrated Stream Bank Protection Guidelines (WDFW, 2003) (an approved habitat management plan, and
  - Any impacts to the functions or values of the aquatic fish and wildlife habitat conservation area are mitigated in accordance with a habitat management plan.

## 4. Timing restrictions.

- a. Fish. In-water work alteration or development shall be timed to occur only during the allowable work window as designated by the Washington State Department Fish and Wildlife (WDFW) for the applicable species and aquatic fish and wildlife habitat conservation area type.
- b. Wildlife. The City shall impose limitations on construction activities during breeding and/or nesting periods for priority species when necessary to protect the species and avoid adverse impacts. Appropriate timing restrictions for wildlife species shall be based upon best available science and WDFW recommendations.

## E. Permitted Alterations and Development.

The following alterations and development may be permitted in fish and wildlife habitat conservation areas and/or their riparian management zones or buffers when all feasible

measures have been taken to avoid and mitigate adverse effects on species and habitats and a net loss of habitat functions will not occur.

- Clearing and grading. When clearing and grading is permitted in a fish and wildlife
  habitat conservation area or its associated RMZ or buffer as part of an authorized
  alteration or development or as other allowed in these standards, the following shall
  apply:
  - a. Grading is allowed only during the dry season, as determined by the Designated Official;
  - Clearing and grading shall be limited to the minimum necessary to accomplish the alteration or development; and
  - c. Erosion and sediment control will meet or exceed the standards set forth in the current version of the Stormwater Manual for Eastern Washington.
- Stream bank stabilization. Stream bank stabilization and protection shall be
  permitted subject to all the following standards, and those standards described in
  WDFW's Integrated Streambank Protection Guidelines (WDFW, 2003), WDFW's
  2012 Stream Habitat Restoration Guidelines (SHRG), and CEMC 14.70.120(4):
  - a. Natural riverine processes, including channel migration, will be maintained to the maximum extent practicable;
  - b. The alteration or development will not result in increased erosion and will not alter the size or distribution of stream substrate;
  - c. Nonstructural measures, such as placing or relocating the development further from the aquatic habitat area, planting vegetation, or installing onsite drainage improvements, are not feasible or not sufficient to protect the stream bank;
  - d. Stabilization is achieved through bioengineering or soft armoring techniques;
  - e. Hard bank armoring may occur only when the property contains a primary, already existing, legally-established, permanent structure, which is unable to be relocated, that is in danger from erosion caused by riverine processes, as documented in a geotechnical analysis prepared by a qualified professional. The armoring shall not expand beyond the original structural footprint, unless necessary to protect existing permanent buildings, roads or utility infrastructure adjacent to the bank, and shall not increase erosion or flooding on adjacent properties.
- 3. **Docks and launching ramps.** Construction, reconstruction, repair, and maintenance of docks and public or private launching ramps are subject to all the following, and those standards described in CEMC 14.70.120(4):
  - The dock or ramp is located and oriented and constructed in a manner that minimizes adverse effects on water quality, movement of aquatic and terrestrial life, ecological processes, spawning habitat, and wetlands;

- b. Docks and ramps shall meet or exceed all relevant state and federal permit requirements; and
- c. No adverse impact to fish or wildlife habitat areas or associated wetlands will
- 4. Roads, trails, bridges, and rights-of-way. Construction of trails, roadways, and bridges through or across streams, other fish and wildlife habitat conservation areas and/or their RMZs or buffers are subject to all the following, and those standards described in WDFW's Water Crossing Guidelines and CEMC 14.70.120(4):
  - a. There is no other feasible alternative route with less impact on the fish and wildlife habitat conservation area;
  - b. The crossing minimizes interruption of downstream movement of wood, ice, sediment, and the movement of all fish and wildlife. Bridges are preferred for all stream crossings and should be designed to maintain the existing stream substrate and gradient, provide adequate horizontal clearance on each side of the ordinary high water mark, and provide adequate vertical clearance above the ordinary high water mark;
  - c. Roads within a stream buffer shall not run parallel to the water body when there is an alternative alignment that has less adverse effect on stream functions:
  - d. Trails shall be located on the outer edge of the fish and wildlife habitat conservation area buffer, except for limited viewing platforms and at the crossing, and shall use pervious materials where feasible;
  - e. Stream crossings, where necessary, shall be perpendicular with the stream, or as close to perpendicular as possible, and shall be the minimum width necessary. Common or shared crossings are the preferred approach where multiple properties can be accessed by one crossing; and
  - f. Culverts and bridges shall be designed according to applicable state and federal guidance criteria for fish passage as identified in Fish Passage Design at Road Culverts, WDFW, 2003, and/or the National Marine Fisheries Services Guidelines for Anadromous Salmonid Passage Facility Design, 2011, (and subsequent revisions) or WDFW's Water Crossing Design Guidelines (WDFW, 2013). The applicant or property owner shall maintain fish passage through the culvert.
- Utility facilities. New utility lines and facilities may cross streams or Fish and wildlife habitat conservation areas if they comply with the following standards, and those standards described in CEMC 14.70.120(4):
  - There is no other feasible alternative route with less impact on the Fish and wildlife habitat conservation area;
  - Installation at a stream crossing shall be accomplished by boring beneath the scour depth and hyporheic zone of the stream and the entire channel migration zone width, where feasible;

- c. Where boring under the channel is not feasible. the utilities shall cross at an angle of no less than sixty (60) degrees, but as close to ninety (90) degrees as possible, relative to the centerline of the channel:
- d. Crossings shall be contained within the footprint of an existing road, bridge or utility crossing where possible;
- e. The utility route shall avoid paralleling the stream or following a down-valley course near the channel; and
- f. The utility installation shall not increase or decrease the natural rate of channel migration.
- Instream structures. Instream structures shall only be allowed as part of a Cityapproved restoration project. The structure shall be designed to avoid modifying flows and water quality in ways that may adversely affect habitat conservation areas.
- 7. Stormwater conveyance and discharge facilities. Stormwater conveyance or discharge facilities such as dispersion trenches, level spreaders, and outfalls may be placed within the outer 25% of a standard fish and wildlife habitat conservation area buffer on a case-by-case basis when the Designated Official determines that all the following are met:
  - a. Due to topographic or other physical constraints, there are no feasible locations for these facilities outside the standard fish and wildlife habitat conservation buffer;
  - b. The discharge is located as far from the ordinary high water mark (OHWM) as possible and in a manner that minimizes disturbance of soils and vegetation;
  - c. The discharge outlet is located in the outer 25% of the standard buffer and is designed to prevent erosion and promote infiltration; and
  - d. The discharge meets state water quality standards, including total maximum daily load (TMDL) standards as appropriate at the point of discharge.

# F. Reporting.

- 1. When required. If a proposed development is located within or adjacent to a known or suspected fish and wildlife habitat conservation area, the Designated Official shall require the applicant to submit a habitat management plan prepared by a qualified professional, defined in CEMC 14.70.080, which includes the information listed in this section. The requirement to provide a habitat management plan for fish and wildlife habitat conservation areas may be waived on a case by case basis if the Designated Official determines that there are no potential direct and/or indirect impacts on designated species or habitats that would result from the proposed development.
- 2. **Contents.** When required by this chapter, habitat management plans for habitat conservation shall include the general critical areas report requirements, in addition the following:

- Identification of any state or federal endangered, threatened, sensitive, or candidate species that have a primary association with habitat on the project area:
- b. Map showing the location of the ordinary high water mark and/or locations of fish and wildlife habitat conservation area(s) and their buffers in;
- c. The vegetative, faunal, topographic, and hydrologic characteristics of the fish and wildlife habitat conservation area;
- d. A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitat located on or adjacent to the project area;
- A detailed discussion of the direct and/or indirect potential impacts on the fish and wildlife habitat conservation area by the project. Such discussion shall include a discussion of the ongoing management practices that will protect habitat after the project site has been developed;
- f. The general mitigation plan requirements of CEMC 14.70.100 as well as the fish and wildlife habitat conservation area mitigation requirements of CEMC 14.70.100, if the alteration or development will result in unavoidable impacts to fish and wildlife habitat conservation areas; and
- g. Methods and measures to avoid, minimize and/or compensate for adverse impacts associated with the proposed development, including, but not limited to:
  - i. Prohibition or limitation of use, alteration, and development within the fish and wildlife habitat conservation area;
  - ii. Retention of vegetation and/or re-vegetation of areas/habitats critically important to species;
  - iii. Special construction techniques;
  - iv. Implementation of erosion and sediment control measures;
  - Habitat restoration or enhancement (e.g., fish passage barrier removal);
  - vi. Seasonal restrictions on construction activities on the subject property;
  - vii. Clustering of alterations or development on the subject property; and
  - viii. Any other requirements and/or recommendations from federal, state, or local special management recommendations, including the Washington State Department of Fish and Wildlife's habitat management guidelines.

# G. Mitigation Requirements.

 General Mitigation Requirements. Mitigation for alteration or impacts to fish and wildlife habitat conservation areas shall achieve equivalent or greater biological functions and shall include mitigation for adverse impacts upstream and

downstream of the development project site. Mitigation shall address each functional attribute affected by the alteration to achieve functional equivalency or improvement on a per function basis. Mitigation elements may include, but are not limited to: restoration of previously degraded areas and key habitat features; restoration of riparian vegetation communities to provide shade and large woody debris; addition of large woody debris; and installation of upland habitat features.

- Buffer for aquatic habitat conservation mitigation sites. Any aquatic fish and
  wildlife habitat conservation area that is created, restored, or enhanced as
  compensation for approved alterations shall be assigned the same buffer as would
  be required for the category of the original aquatic fish and wildlife habitat
  conservation area.
- 3. **Type of mitigation required.** In determining the extent and type of mitigation required, the Designated Official may consider all the following:
  - a. The ecological processes that affect and influence habitat structure and function within the watershed or sub-basin;
  - b. The individual and cumulative effects of the action upon the functions of the critical area and associated watershed;
  - Observed or predicted trends regarding the gains or losses of specific habitats or species in the watershed, in light of aggregated natural and human processes;
  - d. The likely success of the proposed mitigation measures;
  - e. Effects of the mitigation actions on neighboring properties; and
  - f. Opportunities to implement restoration actions formally identified by any of the following plans (or equivalent plans): an adopted shoreline restoration plan; a watershed planning document prepared and adopted pursuant to Chapter 90.82 RCW; and/or a salmonid recovery plan or project that has been identified on the Salmon Recovery Board Habitat Project List or by the Washington State Department of Fish and Wildlife as essential for fish and wildlife habitat enhancement.
- 4. Timing. Where feasible, mitigation projects shall be completed prior to or concurrently with permitted and approved alterations and development that will disturb fish and wildlife habitat conservation areas. In all other cases, as approved by the Designated Official, mitigation shall be completed as quickly as possible following disturbance and, aside from monitoring requirements, shall be completed prior to use or occupancy of the alteration or development. Construction of mitigation projects shall be timed to reduce impacts to existing fish, wildlife and flora; provided, that the Designated Official may adjust the timing requirements to allow grading, planting, and other alterations to occur during the appropriate season(s).
- 5. **Location.** Compensatory mitigation shall be provided on-site or off-site in the location that will provide the greatest ecological benefit to the species and/or

habitats affected and have the greatest likelihood of success. Mitigation shall occur as close to the impact site as possible, within the same sub-basin, and in a similar habitat type as the permitted alteration unless the applicant demonstrates to the satisfaction of the Designated Official through a watershed- or landscape-based analysis that mitigation within an alternative sub-basin of the same watershed would have greater ecological benefit.

6. Design. Mitigation projects involving in-water work including, but not limited to, stream relocation and installation of engineered large woody debris structures shall be professionally engineered and designed to ensure there are no adverse hydraulic effects on upstream or downstream properties, and shall comply with all applicable permits such as a hydraulic project approval (HPA) from the WA Department of Fish and Wildlife.

# 14.70.190 Frequently Flooded Area

### A. Purpose and Intent

It is the purpose of this chapter to reduce the risk to life, property damage, and public facilities that result from floods; mitigate flood hazards that may be exasperated by climate change; and to protect fish and wildlife habitat conservation areas that occur wholly or partially within frequently flooded areas. Based on historical observation and information collected by the Federal Emergency Management Agency (FEMA), the City endorses a cautious posture that limits construction within areas that are designated to be flood prone.

# **B.** Classification

- Classification. Classification of frequently flooded areas, according to the minimum guidelines, should include, at a minimum, the 100-year floodplain designations of FEMA and the National Flood Insurance Program (NFIP). The following are categories of frequently flooded areas established for the purpose of classification:
  - a. **Floodways.** The channel of the stream, plus any adjacent floodplain areas, that must be kept free of encroachment in order to ensure that the base flood be carried without substantial increases in flood heights.
  - b. **Special Flood Hazard Areas.** The areas adjoining the floodway which are subject to a one percent or greater change of flooding in any given year, as identified and determined by FEMA.
  - c. Floodplains. The floodway and special flood hazard areas.

## C. Designation

All city lands and waters which are currently identified within the 100-year floodplain in the FEMA publication entitled "Flood Insurance Study for Kittitas County, Washington and Incorporated Areas" dated September 24, 2021, and any amendments hereto, with accompanying flood insurance rate maps are designated a frequently flooded areas.

#### D. Protection Standards.

All new development within designated frequently flooded areas shall be in compliance with CEMC Chapter 15.24 – Flood Hazard Prevention.

# 14.70.200 Geologically Hazardous Areas

#### A. Purpose and Intent

The purpose of this Chapter is to protect human life and safety, prevent damage to structures and property, and minimize impacts to water quality and fish and wildlife caused by geologic hazards.

#### B. Designation, Classification, and Mapping

- Designation. Lands classified as landslide, erosion (including channel migration zones), alluvial fan, seismic, and mine hazard areas, are hereby designated as geologically hazardous areas.
- 2. Classification.
  - a. Potential Landslide Hazard Areas. Landslide hazard areas shall include areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Potential landslide hazard areas include but are not limited to the following areas:
    - i. Areas of historic failures;
    - ii. Areas designated as quaternary slumps, earth-flows, mudflows, or landslides on maps published by the U.S. Geological Survey or Washington State Department of Natural Resources;
    - iii. Areas with all three (3) of the following characteristics:
      - 1. Slopes steeper than fifteen percent (15%);
      - Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
      - 3. Springs or groundwater seepage;
    - iv. Areas that have shown movement and/or are underlain or covered by mass wastage debris;
    - v. Slopes that are parallel or sub-parallel to planes of weakness (which may include but not be limited to bedding planes, soft clay layers, joint systems, and fault planes) in subsurface materials;
    - vi. Slopes having gradients steeper than eighty percent (80%) subject to rock fall during seismic shaking;
    - vii. Areas that show evidence of, or are at risk from snow avalanches; and
    - viii. Any area with a slope of forty percent (40%) or steeper and with a vertical relief of ten (10) or more feet except areas composed of competent bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten (10) feet of vertical relief;
    - ix. Potentially unstable slopes resulting from river erosion or undercutting;

- x. Areas that show past sloughing or calving of sediment or rocks resulting in a steep slope that is poorly vegetated;
- xi. Deep-seated landslide areas characterized by one or more of the following features: scalloped ridge crests at the top of the slope, crescent shaped depressions, head scarps, side scarps, ponds or sag areas on mid slopes, benches and scarps on mid slope areas, hummocky ground, linear fractures in the ground. These features may be evident in aerial images, topographic maps, LiDAR imagery or on the ground;
- xii. Areas below unstable slopes or that have been identified as landslide hazard areas that could be impacted by landslide run out; and
- Areas above or adjacent to unstable slopes that could be impacted if the landslide area expands.
- b. **Potential Erosion Hazard Areas.** Erosion hazard areas shall include areas containing soils that may experience significant erosion, including:
  - i. Soil areas identified by the Natural Resources Conservation Service as having "severe" or "very severe" erosion hazard.
  - ii. Slopes forty percent (40%) or steeper with a vertical relief of ten (10) or more feet, except areas composed of consolidated rock.
  - iii. Concave slope forms equal to or greater than fifteen percent (15%) with a vertical relief of ten (10) or more feet, except areas composed of consolidated rock.
  - iv. Channel migration zones, which are defined as the areas along a river or stream within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings.
- c. Alluvial Fan Hazard Areas. Alluvial fan hazard areas shall include those areas on alluvial fans where debris flows, debris floods, or clear water floods have the potential to significantly damage or harm the health or welfare of the community. They include the area generally corresponding to the path of potential flooding, channel changes, sediment and debris deposition, or debris flow paths as determined by analysis of watershed hydrology and slope conditions, topography, valley bottom and channel conditions, potential for channel changes, and surface and subsurface geology.
  - i. If the approval authority determines that a proposed use along a Type S or F stream is within a historic channel migration zone, based on field conditions, historic information, LIDAR imagery or aerial photography, and the one-hundred-year channel migration hazard area has not been mapped, the approval authority shall require the applicant to determine if a one-hundred-year channel migration

- hazard area is present on the site and, if so, delineate its location and extent.
- ii. The determination as to whether the one-hundred-year channel migration hazard area affects the subject property shall be based on the findings of a qualified professional proficient in fluvial geomorphology using a reliable methodology to determine channel migration accepted by the department (e.g., as described in the Washington Department of Natural Resources' Forest Practices Board Manual, Standard Methods for identifying Channel Migration Zones and Bankfull Channel Features, dated 8/2001, as amended; or in "A Framework for Delineating Channel Migration Zones," Washington Department of Ecology, 2003, as amended). Maps delineating the one-hundred-year channel migration hazard area shall be of a scale and format specified by the department.
- d. Seismic Hazard Areas. Seismic hazard areas shall include areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting.
- e. Volcanic Hazard Areas. Volcanic hazard areas shall include areas subject to pyroclastic flows, lava flows, debris avalanche, inundation by debris flows, mudflows, or related flooding resulting from volcanic activity. There are no active or dormant volcanoes located within City of Cle Elum; however, Mount Rainer and Mount St. Helens are relatively near. Hazards to City of Cle Elum residents from these volcanoes are likely limited to ash deposition.
- f. Mine Hazard Areas. Mine hazard areas shall include areas underlain by abandoned mine shafts, secondary passages between shaft tunnels, or air vents. Mine hazards include subsidence, which is the uneven downward movement of the ground surface caused by underground workings caving in; contamination to ground and surface water from tailings and underground workings; concentrations of lethal or noxious gases; and underground fires.
- 3. Mapping. The approximate location and extent of geologically hazardous areas are shown on maps maintained by the City. These maps are useful as a guide for project applicants and/or property owners but do not provide a conclusive or definitive indication of geologically hazardous area presence or extent. Other geologically hazardous areas may exist that do not appear on the maps, and some geologically hazardous areas that appear on the maps may not meet the geologically hazardous areas designation criteria. The City shall update the maps periodically as new information becomes available and may require additional studies during the development review process to supplement and/or confirm the mapping. Historic maps showing the locations of known coal mines within the City are available from the Washington Department of Natural Resources.

#### C. General Protection Standards

- 1. Generally. New developments shall be located and/or engineered and constructed to minimize risk to health and safety, protect the building and occupants from the hazard, and not increase the risk of landslides or erosion that could impact either other properties, public resources, or other critical areas such as wetlands and fish and wildlife habitat conservation areas. If impacts to other properties, public resources or other critical areas cannot be avoided these impacts should be mitigated for. The Designated Official may impose conditions on alterations and development in a geologically hazardous area as needed to:
  - a. Protect slope stability and minimize erosion, seismic, and/or landslide hazard risks:
  - Maintain natural sediment and erosion processes that are integral to the health and sustainability of freshwater ecosystems as well as minimizing impacts to stream and river processes such as channel infill, channel migration or flooding;
  - Minimize the potential for property damage related to seismic events, erosion and/or landslides;
  - d. Minimize the need for stream or river bank stabilization in the future;
  - e. Protect human health and safety; and
  - f. Reduce public liabilities for damages associated with seismic events, erosion and/or landslides
- 2. Impact Avoidance. Impact avoidance measures shall include, but not be limited to, locating the use/development outside of the hazard area, reducing the number, size or scale of buildings, driveways and other features; altering the configuration or layout of the proposed development; using environmentally favorable construction materials; implementing special engineering methods for construction, drainage, runoff management etc.; foregoing construction of accessory structures; preserving native vegetation; and other reasonable measures.
- Location of Alterations. New development shall be directed toward portions of a
  parcel or parcels under contiguous ownership that are not subject to, or at risk from,
  geological hazards and/or are outside any setback or buffer established by this
  Chapter.
- Critical Facilities Prohibited. Critical facilities shall not be sited within landslide, erosion, alluvial fan, or mine hazard areas unless there is no other practical alternative.
- 5. Review by Qualified Professional. A qualified geologist or engineering geologist, or professional engineer licensed in the state of Washington, shall review development projects that occur in potentially geologically hazardous areas to determine the risk. If development takes place within an identified geologically hazardous area requiring design or structural elements to mitigate the hazard, a report describing the geologically hazardous area and conditions shall be prepared as described in CEMC

- 14.70.080, the design shall be approved by an qualified engineering geologist, or professional engineer licensed in State of Washington with expertise in geologically hazard mitigation.
- 6. Life of Structure. Proposed developments shall be sited far enough from erosion and landslide hazard areas to ensure at least one hundred (100) years of useful life for the proposed structure(s) or infrastructure. The location should be determined by a qualified geologist or engineering geologist, licensed in the state of Washington and be should be based on site specific evaluation of the landslide and/or erosion hazard.

#### D. Landslide Hazard Area Standards

- 1. **Generally.** Alterations and development may be allowed adjacent to landslide hazard areas, provided that all responsible measures have been taken to minimize risks and other adverse effects, and the amount and degree of the alteration are limited to minimum needed to accomplish the project purpose. Prior to approving a new alteration or development in or adjacent to a landslide hazard area the Designated Official shall determine that all the following standards are met:
  - a. A minimum setback equal to the height of the slope or 40 feet, whichever is greater or as recommended in an approved geotechnical report;
  - The alteration or development includes all appropriate measures to eliminate, reduce, or otherwise mitigate risks to health and safety;
  - The alteration or development is located outside of a landslide hazard area and any required setback, as determined by a qualified engineer, engineering geologist, or geologist, licensed in the state of Washington;
  - d. The alteration or development will not decrease slope stability on adjacent properties;
  - e. The alteration or development shall not increase the risk or frequency of landslide occurrences;
  - f. The removal and disturbance of vegetation, clearing, or grading shall be limited to the area of the approved alteration or development;
  - g. The alteration or development will not increase surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions;
  - h. The proposed alterations will not adversely impact other critical areas; and
  - Structures and improvements including drainage and vegetation management are designed to have no impact on the slope stability; and
  - j. If development takes place within an identified geologically hazardous area, the development must be designed to fully mitigate the risk to the structure(s) and not increase the risk to the public, other properties or public infrastructure or resources.
- Permitted Alterations and Development. The following alterations and development may be allowed in landslide hazard areas when all reasonable

measures have been taken to minimize risks and other adverse effects associated with landslide hazards, and when the amount and degree of alteration is limited to the minimum needed to accomplish the alteration or development:

- a. Above-Ground Utility Lines and Pipes. Utility lines and pipes that are above-ground, properly anchored and/or designed so that they will not increase the risk or consequences of static or seismic slope instability or result in an increased risk of mass wasting. Such utility lines may be permitted only when the applicant demonstrates that no other feasible alternative is available to serve the affected population. For pipelines, automatic shut off valves should be located as close as practical to the landslide area so that the release from the pipe upon breakage is minimized.
- b. Access Roads and Trails. Access roads and trails that are engineered and built to standards that avoid the need for major repair or reconstruction beyond that which would be required in non-hazard areas. Access roads and trails may be permitted only if the applicant demonstrates that no other feasible alternative route exists. Standards to minimize impacts may be specified by the Designated Official.
- c. Stormwater Conveyance. Stormwater conveyance through a properly designed stormwater pipe when no other stormwater conveyance alternative is available. The pipe shall be located above-ground and be properly anchored and/or designed so that it will continue to function in the event of a slope failure or movement of the underlying materials and will not increase the risk or consequences of static or seismic slope instability or result in increased risk of mass wasting activity.
- 3. **Setbacks**. The Designated Official shall require setbacks from the edges of any landslide hazard area in accordance with the following:
  - a. The size of the setbacks shall be based on the findings of a qualified engineering geologist or geologist, licensed in the state of Washington, and shall protect critical areas and minimize the risk of property damage, death, or injury resulting from landslides caused in whole or part by the alteration or development and shall be sized to provide protection for a period of at least 100 years based on the assessment of the geologic processes within the landslide hazard area;
  - b. The setback above the landslide hazard area shall include consideration of hydrologic contribution to the landslide area and/or the area subject to the potential for mass movement, and the setback down slope from the landslide hazard area shall include consideration of landslide run out; and
  - c. The Designated Official shall have the authority to require appropriate management of vegetation or land use within the setback area to minimize the risk of increasing the risk of landslides.
- E. Erosion Hazard Area Standards

- 1. Generally. Alterations or development may be allowed within erosion hazard areas, provided that all responsible measures have been taken to minimize risks and other adverse effects with erosion hazards, and the amount and degree of the alteration are limited to minimum needed to accomplish the project purpose. Prior to approving a development or alteration in or adjacent to an erosion hazard area, a report will be prepared as defined in CEMC 14.70.080. Based on this information, the Designated Official shall determine whether all the following standards are met.
  - a. The alteration or development includes all appropriate measures to eliminate or otherwise mitigate risks to health and safety;
  - b. The alteration or development includes best management practices to prevent, control and minimize erosion;
  - c. The alteration or development will not increase erosion potential;
  - d. The removal and disturbance of vegetation, clearing, or grading shall be limited to the area of the approved alteration or development;
  - e. The alteration or development will not increase surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions, as documented in a geologically hazardous area risk assessment and/or geotechnical report;
  - f. The proposed alterations will not adversely impact other critical areas; and
  - g. Structures and improvements are designed to minimize alterations to the erosive soils and slopes.
- 2. Channel Migration Zones. If City maps or consultation by the Designated Official with qualified professionals or agencies with expertise indicate that a potential channel migration zone hazard exists on or adjacent to a proposed development site, the applicant shall either:
  - a. Locate the proposed development outside of an already defined channel migration hazard area as indicated on the map; or
  - Submit a Channel Migration Zone Report prepared by a qualified geologist, or engineering geologist, or professional engineer, licensed in the state of Washington with experience in analyzing channel response in the fluvial systems of the Pacific Northwest.
- 3. **Permitted Alterations and Development in Channel Migration Zones**. The following alterations and development shall be allowed as specified below and previous sections:
  - a. Surface Water Discharge. Discharge of surface water, provided there are no other alternatives for discharge. The pipe shall be located on the surface of the ground and be properly anchored so that it will continue to function under erosion conditions and not create or contribute to adverse effects on downstream critical areas.
  - b. **Utility Lines**. Utility lines, when no feasible location is available. Aboveground lines shall be anchored and/or designed so that it will not preclude or

- interfere with channel migration. Below ground lines shall be of sufficient depth as to not be affected by future channel migration.
- c. Public Roads, Bridges, and Trails. Public roads, bridges, and trails when no feasible alternative alignment is available. Facilities shall be designed such that the roadway prism and/or bridge structure will not be susceptible to damage from active erosion.
- Stream Bank Stabilization. Stream bank stabilization may be permitted subject to all of the standards listed in CEMC 14.70.050.
- 4. CMZ Buffers or Setbacks. Based upon the results of the channel migration zone assessment, the Designated Official shall prohibit or limit use or development within a channel migration zone and may require a setback or a buffer of undisturbed natural vegetation from the edge of the channel migration zone in accordance with the following:
  - a. The size of the setback or buffer shall be based on the findings of a qualified engineer, engineering geologist, or geologist, licensed in the state of Washington, and shall protect critical areas and processes and minimize the risk of property damage, death, or injury resulting from channel migration;
  - b. The buffer shall include the area subject to bank failure as a result of erosion; and
  - c. If the designated buffer lacks adequate woody vegetation, the Designated Official shall have the authority to require vegetation enhancement or other measures to improve natural channel processes and large wood recruitment.

#### F. Alluvial Fan Hazard Standards

- 1. Permitted Alteration and Development. Alluvial fan hazards will be determined by City maps, LIDAR, and aerial photography. The following alterations and development may be allowed in alluvial fan hazard areas, after accounting for restrictions defined by other critical area regulations, when all reasonable measures have been taken to minimize risks and other adverse effects associated with alluvial fan hazards, and when the amount and degree of alteration are limited to the minimum needed to accomplish the alteration or development:
  - a. Roads, Utilities, Bridges, and Other Infrastructure. Roads, utilities, bridges, and other infrastructure when located and designed to prevent adverse impacts on critical areas and avoid the need for channel dredging or diking or other maintenance activities that have the potential to substantially degrade river and stream functions.
  - b. Residential and Commercial Developments. Permanent residential structures and commercial developments shall be allowed in alluvial fan hazard areas only if the alluvial fan has undergone a City-approved study to assess potential hazards, determine risks, and identify mitigation measures and is deemed suitable for development. The Designated Official shall make this determination based on a detailed assessment by a qualified engineer,

- engineering geologist, or geologist, licensed in the state of Washington, that identifies the risks associated with a 500-year return period debris flow or the maximum credible event that could impact the alluvial fan.
- Accessory Structures. Accessory structures not involving human occupancy shall be allowed.

#### **G.** Seismic Hazard Standards

 Permitted Alterations and Development. Alterations and development within seismic hazard areas shall follow the provisions of the City of Cle Elum-adopted version of the Uniform Building Code. Alterations and development within seismic hazard areas shall not require the submission of a geologically hazardous area risk assessment or geotechnical report.

#### H. Volcanic Hazard Areas

Permitted Alterations and Development. Because volcanic hazards in City of Cle
Elum are limited to ash deposition, alterations and development located only within
volcanic hazard areas, and not other geologically hazardous areas, shall not require
the submission of a geologically hazardous area risk assessment or geotechnical
report.

#### I. Mine Hazard Areas

1. **Alteration.** There are no additional protection standards for mine hazard areas; the standards of CEMC 14.70.030 shall apply.

#### J. Reporting

- 1. Geologically Hazardous Area Risk Assessment . If a proposed development is located within or adjacent to a known or suspected landslide, mine, alluvial fan, or erosion hazard area, the applicant shall submit a Geologically Hazardous Area Risk Assessment prepared by a qualified professional geologist or engineering geologist. No further analysis shall be required if the Geologically Hazardous Area Risk Assessment concludes that the alteration or development is not at risk from potential geologic hazards, and that there is no geologic hazard present on or adjacent to the site. If the Geologically Hazardous Area Risk Assessment and/or the Designated Official concludes that a geologically hazardous area is located on or adjacent to the alteration or development and/or the alteration or development is at risk from potential geologic hazards, the applicant shall submit a Geotechnical Report consistent with the provisions of CEMC 14.70.120(J)(3), and prepared by a qualified engineer or engineering geologist.
- Geologically Hazardous Area Risk Assessment Contents. When required by this Chapter, Geologically Hazardous Area Risk Assessments shall include the general critical areas report requirements of CEMC 14.70.080 in addition to the following:
  - a. A description of the geology of the site and the proposed development;
  - An assessment of the potential impact the project may have on the geologic hazard;

- An assessment of what potential impact the geologic hazard may have on the project:
- d. Appropriate mitigation measures, if any;
- e. A conclusion as to whether further analysis is necessary; and
- f. The signature and stamp of the engineering geologist, or geologist that prepared the assessment.
- Geotechnical Report Contents. When required by this Title, the Geotechnical Report shall include the general critical areas report requirements of CEMC 14.70.080 in addition to the following:
  - a. A detailed description of the geology and soil conditions of the site;
  - b. Evaluation of the geologic conditions giving rise to the geologic hazard;
  - c. An evaluation of the safety of the proposed project;
  - d. Conclusion and recommendations regarding the effect of geologic conditions on the proposed development;
  - e. Conclusions and recommendations on the suitability of the site to be developed;
  - f. A statement regarding the risk of damage from the project, both on- and offsite; and whether or not the project will materially increase the risk of occurrence of the hazard;
  - Recommendations concerning drainage practices, vegetation retention and other mitigation and monitoring measures which may be needed to ensure slope stability;
  - h. Recommended erosion and sediment control measures;
  - i. A bibliography of scientific citations;
  - j. Any other specific measures which must be incorporated into the design and operational plan of the project to eliminate or reduce the risk of damage due to the hazard. This shall include a recommendation on the required buffer or setback distance that must be maintained between the proposed development and the hazard to ensure the safety of the development; and

The signature and stamp of the engineer or engineering geologist who prepared the Geotechnical Report.

#### 4. Channel Migration Zones Studies Contents

When required by this Chapter, Channel Migration Zone Studies shall include the general critical areas report requirements of CEMC 14.70.080, and shall demonstrate the following:

a. The parcel on which the development is proposed is effectively protected (disconnected) from channel movement due to the existence of permanent levees that are actively maintained by public agencies or infrastructure such as roads and bridges constructed and maintained by public agencies (not all roads and levees will be considered disconnection points): or

b. The proposed development site has minimal risk of channel migration during the next one hundred (100) years as indicated by the existing channel type, land cover (and low likelihood of future alterations in land cover), presence of adjacent toe slope landslide hazard areas, surficial geology, low soil erosion potential, lack of evidence of likely avulsion pathways (including areas upstream of, but proximate to, the site), and/or low inundation frequency(ies). The assessment shall include a review of available data regarding historical channel locations at the site; identification of the site within a broader geomorphic reach of the river system and the general characteristics of that reach; description of existing channel type, existing channel alteration and likelihood of future alterations with changes in land cover; surficial geology, soils and erosion potential; and geotechnical setbacks relating to erosion at the toe of adjacent slope(s). The approach to assessing location shall be generally equivalent to the methods detailed in "A framework for Delineating Channel Migration Zones" (Ecology Publication # 03-06-027), or similar method approved or sanctioned by Ecology.

#### 14.70.210 Wetlands

#### A. Purpose and Intent.

The purpose of this Chapter is to maintain the biological and physical functions and values of wetlands with respect to groundwater recharge and discharge, water quality, stormwater and floodwater retention, storage and conveyance, fish and wildlife habitat conservation areas, recreation, and education.

#### B. Designation, Mapping, Delineation, and Categorization

- 1. Designation. Wetlands are those areas that are inundated or saturated by surface or groundwater 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, but are not limited to, swamps, marshes, bogs, ponds, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.
- 2. Mapping. The approximate location and extent of wetlands are shown on maps maintained by the City, most current National Wetland Inventory (NWI), and other best available science sources. These maps are useful as a guide for project applicants and/or property owners but do not provide a conclusive or definitive indication of wetland presence or extent. Other wetlands may exist that do not

- appear on the maps, and some wetland areas that appear on the maps may not meet all of the wetland designation criteria. The City shall update the maps periodically as new wetland areas are identified and as new wetland information becomes available.
- 3. Delineation. The City may require the applicant to identify the location or presence of any wetlands within two hundred fifty (250) feet of a proposed development. Wetlands shall be identified and delineated by a qualified wetland professional in accordance with the approved federal wetland delineation manual and applicable regional supplements. This professional shall field stake, flag or otherwise mark the wetland boundary to aid the City in reviewing the development proposal. The City may require the on-site wetland boundary to be surveyed by a professional land surveyor. Wetlands that occur outside of or extend beyond the boundaries of the development site, onto adjoining properties, do not need to be flagged or formally delineated but their general location must be determined and disclosed in order to assess wetland buffer impacts.
- 4. Categorization. Wetlands shall be categorized by a qualified wetland professional in accordance with the current version of the Washington State Wetland Rating System for Eastern Washington and the appropriate rating forms approved by the Washington State Department of Ecology. These categories are generally defined as follows:
  - a. Category I wetlands are those that represent a unique or rare wetland type, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime or provide a high level of functions. Category I wetlands include:
    - i. Alkali wetlands;
    - Wetlands with high conservation value that are identified by scientists of the Washington Department of Natural Resources Natural Heritage Program;
    - iii. Bogs and calcareous fens;
    - iv. Mature and old-growth forested wetlands over ¼ acre with slowgrowing trees;
    - v. Forests with stands of aspen; and
    - vi. Wetlands scoring between twenty-two and twenty-seven (22-27) points in the Eastern Washington Rating System.
  - Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection. Category II wetlands include:
    - i. Forested wetlands in the floodplains of rivers;

- ii. Mature and old-growth forested wetlands over ¼ acre with fastgrowing trees;
- iii. Vernal pools; and
- iv. Wetlands scoring between nineteen and twenty-one (19-21) points in the Eastern Washington Rating System.
- c. Category III wetlands have a moderate level of functions and score between sixteen and eighteen (16-18) points in the Eastern Washington Rating System. These wetlands can be often adequately replaced with a wellplanned mitigation project. Category III 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.
- d. Category IV wetlands have the lowest level of functions and are often heavily disturbed. They score fewer than sixteen (16) points in the Eastern Washington Rating System. These are wetlands that can usually 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. Buffers

- 1. **Purpose**. Buffers shall be established and maintained to protect the functions and values of regulated wetlands.
- Measurement. Wetland buffers shall be measured horizontally in all directions from
  the outer edge of wetland boundary as established in the field. Building setbacks are
  in addition to wetland buffers and are measured outward from the edge of the
  wetland buffer boundary.
- Buffer Condition. Wetland buffers shall be maintained in a predominantly well-vegetated and undisturbed condition to ensure that they perform their intended function of protecting the wetland. Tree removal is prohibited in wetlands and wetland buffers other than in accordance with CEMC 14.70.050(3)(J)
- 4. **Standard Buffer Widths**. The width of the standard buffer does not include the building setback and shall be based on the wetland category and the intensity of the proposed land use adjacent to the buffer as indicated in the proceeding table

Category of	Land Use with	Land Use with	Land Use with
Wetland	Low Impact <sup>1</sup>	Moderate Impact <sup>2</sup>	High Impact <sup>3</sup>
1	75 ft	90 ft	150 ft
II	75ft	100 ft	125 ft
III	60 ft	90 ft	100
IV	40 ft	40 ft	40 ft

- <sup>1</sup>Low impact use and developments include: forestry (cutting of trees only), low intensity open space (hiking, bird-watching, and like uses), unpaved trails, and utility corridor without a maintenance road and little or no vegetation management.

  <sup>2</sup> Moderate impact use and developments include: residential, moderate intensity open space (parks with biking, jogging, and like uses), conversion from non-agricultural lands to moderate intensity agricultural (asshad, have fields, and like uses), paved trails.
- space (parks with biking, jogging, and like uses), conversion from non-agricultural lands to moderate intensity agriculture (orchard, hay fields, and like uses), paved trails, building of logging roads, and utility corridor or right-of-way shared by several utilities and including access/maintenance roads.
- <sup>3</sup> High impact use and developments include: commercial, urban, industrial, institutional, retail sales, multi-family residential, conversion from non-agricultural lands to high intensity agriculture (dairies, animal feed lots, nurseries and green houses, and like uses), high intensity recreation (golf courses, ball fields, and like uses).
- 5. Wetland buffer condition. Wetland buffer areas shall be retained in a natural condition or may be improved to enhance buffer functions and values. Where buffer disturbance is allowed pursuant to this Title, re-vegetation with native vegetation shall be required. The City of Cle Elum noxious weed ordinance shall be adhered to. Alterations of the buffer that are inconsistent with this Title shall be prohibited.
- Multiple buffers. In the event that buffers for any shorelines and/or critical areas
  are contiguous or overlapping, the landward-most edge of all such buffers shall
  apply.
- 7. Interrupted buffer. When a wetland buffer contains an existing legally established public or private road and/or a legally established development which creates a significant interruption of buffer function, the Administrator may allow development on the landward side of the road or development provided that the actions will not have a detrimental impact to the wetland. The applicant may be required to provide a wetland critical areas report to describe the potential impacts. In determining whether a critical areas report is necessary, the City shall consider the hydrologic, geologic, and/or biological habitat connection potential and the extent and permanence of the buffer interruption.
- 8. **Buffers of restored wetlands**. 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.
- 9. Increased Buffers. The Designated Official shall increase the wetland buffers widths where the standard buffer is inadequate to prevent significant adverse environmental impacts or address hazards associated with the site or the proposed development. The Designated Official may increase the buffer up to a maximum of two times the standard width. When determining how much to increase the standard buffer, the Designated Official shall consider the following conditions:
  - a. Whether the wetland provides habitat for state priority or federally listed endangered, threatened, or sensitive species for which a habitat

- management plan indicates a larger buffer is necessary to protect habitat values for such species; or
- Whether the land adjacent to the wetland is susceptible to severe erosion, and erosion control best management practices will not effectively prevent adverse wetland impacts.
- 10. Buffer Averaging. The Designated Official may allow averaging of the standard buffer widths in accordance with an approved critical areas report on a case-by-case basis. With buffer averaging, the buffer width is reduced in one location and increased in another location to maintain the same overall buffer area. In such cases, the minimum width of the buffer at any given point shall be at least seventy-five percent (75%) of the standard width, or twenty-five (25) feet, whichever is greater. Proposals for buffer averaging shall meet all the following:
  - The wetland buffer has not been averaged or reduced by any prior actions;
  - b. No feasible site design could be accomplished without buffer averaging;
  - c. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
  - d. The averaging will not have a significant adverse impact on wetland functions and values; and
  - e. The area that is added to the buffer to offset the reduction will be well-vegetated. The Designated Official may require vegetation enhancement if needed to ensure this criterion is met.
  - 11. **Mitigation for Buffer Averaging.** Prior to approving a request for wetland buffer averaging, the Designated Official shall ensure the development is designed to separate and screen the wetland from impacts such as noise, glare, vegetation trampling, intrusion, etc to the degree feasible. The site design shall consider the varying degrees of impacts of different land uses. For example, parking lots, store entrances, and roads generally have higher noise and glare impacts than the rear of a store. Site screening should take advantage of natural topography or existing vegetation, wherever possible. Where natural screening is not available, berms, landscaping, and structural screens should be implemented as may be required by the Designated Official (e.g., orient buildings to screen parking lots and store entrances from critical areas).
  - 12. **Allowed Buffer Uses.** The Designated Official may allow the following alterations and development within a wetland buffer provided that they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland, including wetland functions and values:

- a. Conservation or restoration activities aimed at protecting or enhancing the soil, water, vegetation, or wildlife.
- b. The following passive recreation facilities designed in accordance with an approved critical areas report:
  - i. Walkways and trails; provided that those pathways which are generally parallel to the perimeter of the wetland shall be located in the outer twenty-five percent (25%) of the buffer area and constructed with a surface that is not impervious to water. Raised boardwalks utilizing nontreated pilings may be acceptable; and
  - ii. Wildlife viewing structures less than five hundred (500) square feet in size, including hunting blinds.
- c. Stormwater management facilities, limited to stormwater conveyance and dispersion facilities, outfalls and bioswales, may be allowed within the outer twenty-five percent (25%) of the buffer of wetlands in accordance with an approved critical areas report provided that:
  - i. No other location is feasible;
  - ii. The facility is designed to meet or exceed the standards set forth in the current version of the Stormwater Manual for Eastern Washington; and
  - The location of such facility will not degrade the functions or values of the wetland.

#### **D.** General Protection Standards

 Alterations. New development shall be located outside of wetlands and their buffers, unless this Title specifically allows the development to occur in the wetland or buffer. A wetland or buffer may not be altered if the proposed alteration will result in a net loss of wetland functions and values. Developments shall be designed to avoid and minimize wetland and buffer impacts to the maximum extent practicable and to offset unavoidable impacts through compensatory mitigation as required in CEMC 14.70.130(G)

#### E. Alterations and Development Permitted without a Critical Areas Report

The following alterations and development are permitted in wetlands and/or buffers and do not require submission of a critical areas report, provided they are designed to avoid and minimize wetland and buffer impacts to the maximum extent practicable, but are subject to review by the Designated Official:

- 1. **Conservation and Preservation Activities**. Conservation or preservation of soil, water, vegetation, fish, and other wildlife that does not entail permanently changing or altering the structure or functions of the existing wetland.
- 2. Wetland Enhancement. Enhancement of a wetland through the removal of non-native invasive species, provided that the weed removal does not require soil excavation or grading and provided that weed material is removed from the site and disposed of at an approved location. Bare areas that remain after weed removal shall be re-vegetated with native shrubs, trees and herbs/forbs native to City of Cle Elum.

#### F. Reporting

- When Required. If a proposed development is located within or adjacent to a known or suspected wetland, the Designated Official shall require the applicant to submit a wetland critical areas report prepared by a qualified professional that includes the information listed in this Section.
  - a. The requirement to provide a wetland critical areas report may be waived for a single-family residence where no encroachment into a regulated wetland or its standard buffer will occur. Prior to issuance of a building permit, site development permit, or on-site sewage system permit, the applicant shall submit a single-family wetland certification form completed by a wetland specialist that certifies either:
    - No regulated wetlands are present within 250 feet of the project area; or
    - ii. Wetlands are present within 250 feet of the project area, but all regulated alterations and development associated with the dwelling (i.e., landscaped areas, septic facilities, outbuildings, etc.) will occur outside of the standard buffer of the identified wetland.
      - If regulated wetland buffers extend onto the site and are
        within 250 feet of the project area, the wetland specialist shall
        place permanent, clearly visible, wetland buffer signs at the
        edge of the buffer. A wetland buffer sign affidavit, signed by
        the wetland specialist, shall be submitted to the Department
        as verification that the wetland buffer signs have been placed
        on the site.
      - 2. The single-family certification form may be used only to authorize single-family dwellings and associated homesite features such as garages, driveways, gardens, fences, wells, lawns, and on-site septic systems. It may not be used for new agricultural activities, expansion of existing agricultural activities, forest practice activities, commercial projects, land divisions, buffer width modifications, or violations. The singlefamily form may not be used to make a claim for exemption.
        - The single-family certification process will be monitored by the Department for accuracy, and enforcement actions will be initiated should encroachment into a regulated wetland or buffer occur.
        - The applicant/property owner assumes responsibility for any and all errors of the single-family certification form and all associated mitigation imposed by the Department.

- Single-family certification forms shall be filed with the City of Cle Elum Auditor's Office in accordance with the department standards.
- Contents. When required by this Title, wetland critical areas reports shall include the general critical areas report requirements of CEMC 14.70.080 in addition to the following:
  - a. Map showing the location of all wetlands and required buffers within two hundred fifty (250) feet of the proposed development; and
  - b. An analysis of the onsite wetland(s) including the following site- and proposal-related information:
    - i. Historical and Existing On site and Surrounding Land use /Conditions
    - ii. Wetland acreage;
    - iii. Wetland category;
    - iv. Soils and Soil Attributes
    - v. Hydrogeomorphic position (HGM);
    - vi. Cowardin Classification and Upland/Wetland Vegetation Characterization
    - vii. Hydroperiods;
    - viii. A description of the Federal methodologies used to conduct the wetland delineations;
    - ix. Priority Habitats and Species;
    - x. Wetland delineation data sheets for the appropriate region;
    - xi. Wetland rating and forms;
    - xii. Wetland Functional Analysis;
    - xiii. Federal, State, and City Regulatory Discussion with buffer recommendations;
    - xiv. A detailed discussion of the project, direct and/or indirect potential impacts on the wetland by the project; and if impacts are expected;
    - xv. A discussion of measures, including the general mitigation sequence requirements of CEMC 14.70.100(1) proposed to preserve and protect existing wetlands;
    - xvi. A wetland mitigation plan if the alteration or development will result in unavoidable impacts to wetlands or their buffers.

#### G. Mitigation Requirements

 Generally. Compensatory mitigation is required for all unavoidable alterations to wetland or their buffers, except for buffer averaging when done in accordance with CEMC 14.70.130(10). Compensatory mitigation actions shall replace functions affected by the alteration and shall provide equal or greater functions compared to the impacted wetland.

- Buffer for Wetland Mitigation Sites. Any wetland area that is created, restored, or enhanced as compensation for approved alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.
- 3. Mitigation Timing. Mitigation projects shall be completed prior to or concurrently with permitted alterations and development that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the alteration or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
- 4. Delay in Mitigation. The Designated Official may authorize a one-time temporary delay, up to one hundred eighty (180) days, in completing minor construction and landscaping when environmental conditions could produce a high probability of failure or significant construction difficulties. 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, and general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints which preclude implementation of the mitigation plan. The justification must be verified and approved by the City and include a financial guarantee.
- 5. **Preference of Mitigation Actions.** Compensatory wetland mitigation shall occur in the following order of preference:
  - a. Purchasing credits from an approved Mitigation Bank if available and feasible, Purchasing credits from an approved In-Lieu Fee program if available and feasible, and Permittee Responsible Mitigation (PRM).
  - b. In order of preference, the following PRM methods are available: (1)
    Restoration [re-establishment or rehabilitation], (2) Establishment [creation],
    (3) Preservation of existing high quality habitats, and (4) Enhancement of degraded wetlands..
- 6. Replacement Ratios for Wetland Impacts. The first number specifies the acreage of replacement wetlands, and the second specifies the acreage of wetlands altered. Compensatory mitigation shall restore, rehabilitate, create, or enhance equivalent or greater wetland functions. The ratios shall apply to mitigation that is in-kind, is onsite, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. The Designated Official may increase these ratios for remedial mitigation actions resulting from unauthorized wetland alterations, depending on the nature and extent of the alteration. These ratios do not apply to the use of credits from a certified wetland mitigation bank or in-lieu fee program. When credits from a certified bank or in-lieu fee program are used, replacement ratios should be consistent with the requirements of the bank's/program's certification.

Category and Type of Impacted Wetland	Restoration or Creation <sup>1,2</sup>	Rehabilitation <sup>1,2</sup>	Enhancement Only <sup>1,3</sup>
Category I, forested	6:1	12:1	24:1
Category I, non- forested	4:1	8:1	16:1
Category II, forested	4:1	8:1	16:1
Category II, vernal pool <sup>4</sup>	2:1	4:1	Case-by-case
All other Category II	3:1	6:1	12:1
All Category III	2:1	4:1	8:1
All Category IV	1.5:1	3:1	6:1

<sup>&</sup>lt;sup>1</sup> Natural heritage sites, alkali wetlands, and bogs are considered irreplaceable wetlands because they perform special functions that cannot be replaced through compensatory mitigation. Impact to such wetlands would therefore result in a net loss of some functions no matter what kind of mitigation is provided.

- 7. **Increased Replacement Ratios.** The Designated Official may increase the wetland mitigation ratios under the following circumstances:
  - Uncertainty exists as to the probable success of the proposed restoration or creation;
  - A significant period of time will elapse between impact and replication of wetland functions;
  - c. Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacts; or
  - d. The impact was an unauthorized impact.
- 8. **Alternative Mitigation Ratios.** The Designated Official may approve different mitigation ratios when the applicant proposes a combination of wetland creation, restoration, rehabilitation, and/or enhancement, provided that federal and state

<sup>&</sup>lt;sup>2</sup> Provides gains in a whole suite of functions both at the site and sub-basin scale. Rehabilitation actions often focus on restoring environmental processes that have been disturbed or altered by previous and/or ongoing human activity.

<sup>&</sup>lt;sup>3</sup> Actions which provide gains in only a few functions. Enhancement action often focuses on structural or superficial improvements to a site and generally does not address larger scale environmental processes.

<sup>&</sup>lt;sup>4</sup> Compensatory mitigation for vernal pool impacts must be seasonally ponded wetland area(s).

- resource agencies approve the mitigation plan and the plan achieves no net loss of wetland functions and values.
- 9. Mitigation Ratios for Wetland Buffer Impacts. To mitigate impacts to functions and values of wetland buffers, a minimum buffer ratio of 1:1 (alteration area: mitigation area) is required. This ratio assumes that creation/restoration of a wetland buffer with appropriate native vegetation is sufficient to compensate for the wetland buffer functions and values affected by alteration of an existing wetland buffer. If enhancement of an existing wetland buffer is proposed as mitigation, a higher mitigation ratio may be required. For any proposed wetland buffer alterations or development, the applicant must show that the functions and values of the altered wetland buffer will be fully replaced by the proposed mitigation. The Designated Official may increase the buffer mitigation ratios under the following circumstances:
  - a. The replacement ratio needed to recover the lost functions and values of buffer area is greater than 1:1 based upon the existing type of vegetative cover of either the impact site or the proposed mitigation site.
  - Uncertainty exists as to the probable success of the proposed restoration or creation:
  - A significant period of time will elapse between impact and replication of wetland functions;
  - d. The impact was an unauthorized impact.
- 10. Mitigation Plans. Compensatory wetland mitigation plan shall be consistent with "Guidance on Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans" (Ecology Publication # 06-06-011b), or as revised. Mitigation plans shall include the general mitigation plan requirements in CEMC 14.70.100, as well as the following information:
  - a. Existing and proposed wetland acreage;
  - b. Vegetative and faunal conditions;
  - Surface and subsurface hydrologic conditions including an analysis of existing and future hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;
  - d. Relationship within watershed and to existing waterbodies;
  - e. Soils and substrate conditions, topographic elevations;
  - f. Existing and proposed adjacent site conditions;
  - g. Required wetland buffers (including any buffer reduction or averaging and mitigation proposed to enhance buffers);
  - h. Property ownership;
  - A discussion of ongoing management practices that will protect wetlands
    after the project site has been developed, including proposed monitoring
    and maintenance programs and an addition to the property's title identifying
    the wetland as a mitigation area;

j. A bond estimate for the installation (including site preparation, plant materials and installation, fertilizers, mulch) and the proposed monitoring and maintenance work for the required number of years, pursuant to CEMC 14.70.100.



## DEPARTMENT OF FISH AND WILDLIFE

South Central Region • Region 3 • 1701 South 24<sup>th</sup> Avenue, Yakima, WA 98902-5720 Telephone: (509) 575-2740 • Fax: (509) 575-2474

July 5, 2022

Rob Omans City Administrator City of Cle Elum 119 West First Street Cle Elum, WA 98922

# SUBJECT: WDFW COMMENTS ON PROPOSED CLE ELUM CRITICAL AREAS ORDINANCE

Dear Mr. Omans,

Thank you for the opportunity to revie the draft Cle Elum Critical Areas Ordinance (CAO). The Washington Department of Fish and Wildlife (WDFW) provides this letter in keeping with our legislative mandate to preserve, protect, and perpetuate fish and wildlife and their habitats—a mission we can only accomplish in partnership with local governments.

WDFW has reviewed the draft CAO and recognizes the effort that the City of Cle Elum has put into this updated process. Although there are areas throughout the draft ordinance which we believe would benefit from further refinement, WDFW is of the opinion that this version is an improvement over the current ordinance.

Two primary areas of concern are 1) measurement of the Riparian Management Zone should begin at the edge of the Channel Migration Zone and not the Ordinary High Water Mark as is described in WDFW's most recent Riparian Ecosystems Science Synthesis (Volume 1) and Management Recommendations (Volume 2); and 2) we recommend that additional language be included within the frequently flooded areas designation to include local data and evidence of flooding as the Federal Emergency Management Agency (FEMA) maps may not have all of the areas known to flood locally designated within their maps.

In addition to the substantive changes recommend above, we recommend adding a definition for "Primary Association". "Primary association" means the area used on a regular basis by, is in close association with, or is necessary for the proper functioning of the habitat of a critical species. This is important for protecting the habitats important to listed species.

WDFW recognizes and appreciates the City's efforts to update this ordinance and we look forward to assisting staff, residents, landowners, and business owners in Cle Elum implement the updated ordinance.

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Thank you again for the opportunity to participate in this important update process. We look forward to helping the City protect Fish and Wildlife Habitat Conservation Areas as well as the other critical areas.

Sincerely,

Jennifer Nelson

Area Habitat Biologist

Jennifer.nelson@dfw.wa.gov

(509) 961-6639