



Chelan County Planning Commission

Chair: Ryan Kelso

Vice Chair: Carl Blum

Commissioners District 1: Vicki Malloy, Ryan Kelso, Will Wiggs

Commissioners District 2: Jim Newberry, Randy Baldwin, Jordan McDevitt

Commissioners District 3: Carl Blum, Pat Hammersmith, Greg Becker

Meeting Agenda

Wednesday, July 22, 2020 at 7:00 P.M.

Chelan County Community Development

In response to the [Governor's Proclamation 20-28](#), the Planning Commission will hold all their Meetings via Zoom Video Conference until further notice. Click the link below to join the meeting, beginning at 7:00 pm on July 22, 2020.

Zoom Meeting Link:

<https://us02web.zoom.us/j/89883542758?pwd=c29Qdm4rbVN3VG0veFJ5ZXh4NENxZz09>

Meeting ID: 898 8354 2758

Password: 048691

Find your local number: <https://us02web.zoom.us/j/kcKXNI9hnC>

Call Meeting to Order

I. Administrative

A. Review/Approval of Special Meeting Minutes from July 9, 2020

II. Public Comment Period

Comment for any matters not identified on the agenda (limit 2 minutes per person)

III. Old Business

IV. New Business

Workshop on the proposed updates on the County's Critical Area Ordinance

V. Discussion, at the Chair's discretion

VI. Adjournment *Meeting will go no longer than 9:00 PM.

Materials available on the Community Development website

Next Meeting Dates: Deliberation and Decision – August 26, 2020 at 7:00 pm

** All Planning Commission meetings and hearings are open to the public.*

CHELAN COUNTY CRITICAL AREAS ORDINANCE UPDATE
General Provisions and Administration

Sections:

- 11.~~77~~.010 Purpose
- 11.~~77~~.020 Applicability
- 11.~~77~~.030 Administration
- 11.~~77~~.040 Exemption, Exceptions, and Allowed Uses
- 11.~~77~~.050 General regulations
- 11.~~77~~.060 General Critical Areas Report
- 11.~~77~~.070 Mitigation Sequencing
- 11.~~77~~.080 Variance Provisions
- 11.~~77~~.090 Subdivision Notation
- 11.~~77~~.100 Non-compliance
- 11.~~77~~.110 Incentives
- 11.~~77~~.120 Education

11.~~77~~.010 Purpose

It is the purpose of this chapter to protect critical areas as required by the Growth Management Act. This chapter adopts regulations and establishes review procedures to assure the protection of critical areas and reduce the threat posed to the public health, safety, environment, and welfare of Chelan County residents when development occurs in and near critical areas.

The purposes of this Chapter with regards to each critical area are to:

- (1) Wetland **Areas**: Recognize and protect the beneficial functions performed by many wetlands, which include, but are not limited to, providing food, breeding, nesting and/or rearing habitat for fish and wildlife; recharging and discharging ground water; contributing to stream flow during low flow periods; stabilizing stream banks and shorelines; storing storm and flood waters to reduce flooding and erosion; and improving water quality through biofiltration, adsorption, and retention and transformation of sediments, nutrients, and toxicants. This protection is achieved by regulating land use to avoid adverse effects on wetlands and to maintain the functions and values that wetlands provide to society and the environment.
- (2) **Frequently Flooded Areas**~~Floodplains~~: To protect the important hydrologic functions of the county's one hundred-year floodplains, which include floodways and floodway fringe areas, in order to protect human health and safety and minimize damage to property.
- (3) Geologic Hazard **Areas**: Certain portions of the county are characterized by geologic hazards that may pose a risk to public and private property, human life and safety and the natural systems that make up the environment of the county. These lands are affected by natural processes that make them susceptible to landslides, erosion, earthquake, or snow avalanche. Some geological hazards can be reduced or mitigated by engineering, design, or modified construction so that risks to health and safety are acceptable. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided.
- (4) Fish and Wildlife Habitat Conservation Areas: To identify, protect, and maintain the present high quality of Chelan County's fish and wildlife habitat conservation areas.

- (5) Critical Aquifer Recharge Areas: The availability of good quality, potable water is essential to the citizens of Chelan County in order to maintain a high quality of life. Identification and protection of aquifer recharge areas that are highly susceptible to potential contamination risks is essential in maintaining the quality of available potable water supplies. This district is intended to identify and protect areas vulnerable to contamination and protect potable groundwater supplies by reducing the possibility of groundwater contamination.

~~Compliance with the provisions of the Chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Substantial Development Permits, WDFW Hydraulic Project Approval permits, Army Corps of Engineers Section 404 permits, Endangered Species Act Section 7 Consultation, NPDES permits). The applicant is responsible for complying with these requirements, apart from the process established in this Chapter.~~

11.~~77~~~~XX~~77.020 Applicability

- (1) The provisions of this chapter shall apply to development or actions that are within, likely to be within, or are adjacent to a critical area whose buffers may overlap the proposed action, are proposed to be located within or adjacent to a designated critical area or buffer, whether or not a County development permit is required.
- (2) The provisions of this chapter include the specific development regulations within:
 - (A) Chapter 11.78 Fish and Wildlife Habitat Conservation Areas Overlay District (FWOD);
 - (B) Chapter 11.80 Wetland Areas Overlay District (WOD);
 - (C) Chapter 11.82 Aquifer Recharge Areas Overlay District (AROD);
 - (D) Chapter 11.84 Frequently Flooded Areas Overlay District (FFOD); and
 - ~~(A)(E)~~ Chapter 11.86 Geologically Hazardous Areas Overlay District (GHOD)
- (3) In the event of any conflict between this title and regulations contained in any other zoning or development regulations, those regulations which provide greater protection of critical areas shall apply.
- (4) ~~Compliance with the provisions of the Chapter does not constitute compliance with other County codes and permits and other state and federal permits that may be required. The applicant is responsible for complying with other requirements apart from the process established in this Chapter.~~
- ~~(2)–~~
(5) ~~This~~ The provisions of this chapter shall not apply to lands which are subject to the provisions of the shoreline master program or existing agricultural ~~activities-~~lands which are part of an approved Voluntary Stewardship Program stewardship plan, except for those agricultural activities subject to this chapter that are within a flood hazard area or critical aquifer recharge area.

11.~~XX~~77.030 Administration

- (1) The Director of Chelan County Community Development Department or designee shall serve as the Administrator to this ~~e~~Chapter.
- (2) Critical area review is required for all land uses, development activity, and alteration of any land, water, vegetation, structure or improvement in Chelan County that proposed land use action is within, likely to be within, or is adjacent to a critical area whose buffers may overlap the proposed action may be adjacent to or within a critical area or its buffer, regardless of whether or not a permit or authorization is required from the County.
- (3) Pursuant to Section 14.08.010, applicants may request a pre-application meeting with the community development department and applicable state agencies to discuss proposed development proposals ~~with applicable reviewing agencies.~~

- (4) Critical areas review shall be classified and processed in the manner delineated in Chapter 14.08 for the underlying development permit or approval being sought. When an applicant submits an application for any development proposal, the application shall indicate whether any critical areas or buffers are located on or within 250 feet of the development. If the applicant states there are no known critical areas, the County should review and confirm whether critical areas exist through office and/or site visit, and, if critical areas or buffers are present that ~~may~~ would be impacted, ~~require~~ the applicant shall be required to complete a critical areas report.
- (5) All projects without an underlying development permit shall submit a Critical Area Determination Application to the County to determine the necessary level of critical area review. The County will decide if the project is likely to alter one or more critical areas. If alteration is likely to occur, the Critical areas alteration review for actions not subject to an underlying permit or -approval shall be classified and processed as either a Limited Administrative Review or Full Administrative Review as defined in Sections 14.10.020 or 14.10.030, at the discretion of the Administrator. Projects requiring Full Administrative Review with public notice generally include those projects that are not exempt from SEPA review.
- (6) When sufficient information is not available to determine whether a critical area exists on a site based on critical area maps, development project files, or publicly available data (e.g. the WDFW PHS data, the National Wetland Inventory (NWI), etc.), or the applicant challenges the decision of the Administrator that a critical area exists on the site, a field investigation or site assessment by a qualified professional may be necessary to confirm the existence, location, and classification of a critical area. The cost of a field investigation or site assessment is the responsibility of the applicant.
- (7) Any change or alteration to a development action approved by the County under this title shall be ~~processed~~ prosed as a new action; provided that the Administrator may approve minor changes or alterations deemed consistent with the provisions of this title and the findings and conclusions on the original application.

Commented [CW1]: Kirsten - Is this what you want to call it?

11.~~XX77~~.040 Exemption, Exceptions, and Allowed Uses

(1) Exemptions. The following actions are exempt from critical areas review, provided the actions do not alter or degrade the critical areas or buffers or increase the risk of natural hazard in compliance with this Chapter. Additional exemptions specific to each critical area are listed within each individual section. Water quality and erosion control BMPs for vegetation clearing and land grading, maintenance, and/or repair for exempt activities shall adhere to the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chapter 13.16. The granting of an exemption does not relieve the applicant from other applicable state, federal, and local laws and requirements.

(A) Emergency Actions:

- (i) Emergency actions include those activities necessary to prevent an immediate threat to public health, safety, and welfare, or that post an immediate risk of damage to public and/or private property and require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this section.
- (ii) Any emergency exemption granted shall incorporate, to the greatest extent practical and feasible but not inconsistent with the emergency situation, the standards and criteria required for nonemergency activities under this act that will address the emergency with the least possible impact to the critical area, and shall be limited in duration to the time required to complete the authorized emergency activity.
- (iii) The Administrator shall be notified of the emergency action within one working day of the action taking place. The Administrator shall review the action taken to determine if the action taken was beyond the scope of this exemption, and if any restoration or mitigation is required.

- (iv) Issuance of an emergency exemption under this section by the Administrator does not preclude the necessity to obtain other necessary approvals from appropriate federal and state agencies/authorities.
 - ~~(v) Protective structures shall be removed and the site restored and mitigated, and any permit which would have been required, absent an emergency, shall be obtained within 30 days of resolution of the emergency situation.~~
 - ~~(+)(vi) Emergency action does not include construction of new permanent protective structures where none previously existed. Where new permanent protective structures are deemed by the Administrator to be the appropriate means to address the emergency situation, within 30 days of upon abatement resolution of the emergency situation the new structure shall be evaluated for consistency with this chapter removed and the site restored and mitigated, and/or any permit which would have been required, absent an emergency, shall be obtained.~~
 - (B) Operation, maintenance, repair or improvements of existing structures or infrastructure, if the activity doesn't alter or increase impacts to critical areas and there is no increased risk to life or property. ~~{CAO Handbook}~~
 - (C) Passive outdoor activities including recreation, education, and scientific research activities that do not degrade critical areas, ~~including such as by~~ altering topography or critical area functions. ~~A~~ Passive outdoor activities may include fishing, hiking, horseback riding, swimming, and bird watching. ~~{CAO Handbook}~~
 - (D) Those activities and uses conducted pursuant to the Washington State Forest Practices Act and its rules and regulations, WAC 222-12-030, where state law specifically exempts local authority, except those developments requiring local approval for Class 4 – General Forest Practice Permits (conversions) as defined in RCW 76.09 and WAC 222- 12.
- (2) Allowed Uses. The following actions are allowed within the critical areas and buffers unless the action will result in ~~ana~~ negative alteration to the critical area as determined by the Administrator. These actions are subject to review by the County but do not require a critical area report, unless otherwise stated. All critical area standards apply to these actions. Water quality and erosion control BMPs for clearing and grading, maintenance, and/or repair for allowed uses shall adhere to the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chapter 13.16. The granting of an allowed use under this section does not relieve the applicant from other applicable state, federal, and local laws and requirements.
- (A) Projects previously reviewed for critical areas impacts through a Critical Areas Determination Application or Critical Areas Report within the previous five years, except for projects requiring a geotechnical report, which must be reviewed every three years. Development permits and approvals that involve both discretionary land use approvals (such as subdivisions, rezones, or conditional use permits), and construction approvals (such as building permits), may not need to complete a new critical area review.
 - (B) Modification of legally established existing structures. Structural modifications or replacement of an existing legally constructed structure that doesn't alter or increase impacts to a critical area or buffer and doesn't increase risk to life or property.
 - (C) Activities within the improved right-of-way. Replacement, modification, installation, ~~or~~ construction, or reconstruction of utility or transportation facilities, such as roads, lines, pipes, mains, equipment or appurtenances, but not including substations, when such facilities are located within the improved portion of an existing public right-of-way or a County authorized private roadway. These activities are allowed and provided that the maintenance or repair does not expand the footprint of the facility or right- of-way or alter the functions of the critical area. ~~, subject to the following: These activities should provide the following when possible:~~

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- (i) The critical area and/or buffers widths shall be increased, where possible, -equal to the width of the right-of-way improvement, including disturbed areas; and
 - (ii) Retention and replanting of native vegetation shall occur when possible along the right-of-way and resulting disturbance.
- (D) Minor utility or transportation projects. Utility or transportation projects with minor or short-duration impacts to critical areas that have provided a critical area report and meet the following criteria, as determined by the Administrator:
- (i) The activity has no significant impact on the function or values of the critical area;
 - (ii) The activity is constructed with best management practices and additional restoration measures.
 - (iii) There is no practical alternative with less impact on the critical area; and
 - (iv) The activity involves the placement of a small utility or transportation facility (e.g., pole, street sign, etc.).
- (E) Public and private pedestrian trails. Public and private pedestrian trails, except in wetlands, fish and wildlife habitat conservation areas, or their buffers, subject to the following:
- (i) The trail surface must meet all other requirements including stormwater regulations outlined in Chapter 13.16;
 - (ii) Critical area and/or buffer widths must be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and
 - (iii) Trails proposed in landslide or erosion hazard areas must be constructed so as to not increase the risk of landslide or erosion in accordance with an approved geotechnical report.
- (F) Vegetation Removal
- (i) Minor vegetation removal. Selective removal of invasive, noxious and non-native vegetation with hand labor and light hand equipment is permitted within a critical area and buffer. No other native vegetation shall be removed from a critical area or its buffer without approval of the Administrator.
 - (ii) Removal of hazard trees. Removal of hazard trees from critical areas and buffers that are hazardous, posing a that pose an imminent threat to public safety, or poseposing an imminent risk of damage to public and/or private property, is permitted within a critical area and buffer with the approval of the Floodplain Administrator, subject to the following:
 - (a) All vegetation cut (tree stems, branches, etc.) shall be left within wetland or fish and wildlife habitat conservation areas and buffers unless removal is warranted due to the potential for disease, or pest transmittal to other healthy vegetation, or safety and health hazards;
 - (b) The method by which the tree is removed should minimize intrusion into, and impacts to, the critical area and buffer; and
 - (c) Any critical area or buffer areas that are disturbed by tree removal must be restored, with any damaged vegetation replaced through replanting of similar native vegetation types and densities.
 - (a) — within a critical area and buffer, provided that:

~~The applicant shall submit a report from a certified arborist, licensed professional landscape architect, or professional forester that documents the hazard and provides a replanting plan for replacement trees;~~

~~Tree cutting shall be limited to pruning and crown thinning, unless otherwise justified by a qualified professional. Where pruning or crown thinning is not sufficient to address the hazard, trees should be removed or converted to wildlife snags;~~

~~All vegetation cut (tree stems, branches, etc.) shall be left within wetland or fish and wildlife habitat conservation areas and buffers unless removal is warranted due to the potential for disease, or pest transmittal to other healthy vegetation, or safety and health hazards; The landowner shall replace any trees that are removed with new trees at a ratio of two replacement trees for each tree removed (2:1) within one year in accordance with an approved restoration plan. Replacement trees may be planted at a different, nearby location if it can be determined that planting in the same location would create a new hazard or potentially damage the critical area. Replacement trees shall be species that are native and indigenous to the site and a minimum of one inch in diameter at breast height for deciduous trees and a minimum of six feet in height for evergreen trees as measured from the top of the root ball; Hazard trees determined to pose an imminent threat or danger to public health or safety, to public or private property, or of serious environmental degradation, may be removed or pruned by the landowner prior to receiving written approval from the County pursuant to Section 11.XX.040(1)(A); provided, that within 14 days following such action, the landowner shall submit a restoration plan that demonstrates compliance with the provisions of this chapter;~~

~~(iii) Disease or insects. Measures to control a fire or halt the spread of disease or damaging insects should be consistent with the state Forest Practices Act (Chapter 76.09 RCW) provided that removed vegetation be replaced within one year in accordance with an approved restoration plan.~~

~~(iv) Fire Protection. -Property owners with legally established existing structures may request fire protection measures which are recommended through an adopted wildfire protection plan or from the Washington Department of Natural Resources, Cascadia Conservation District, or other similar group/agency. These provisions are intended to support fire suppression protection and shall not be used for the development of trails or yard areas. A critical area report may be required. The Administrator shall review the proposal based on:~~

- ~~(a) The ability of the proposal to reduce fire risk and/or fire spread for the site and the surrounding properties;~~
- ~~(b) The inability to alter the critical area buffer through averaging;~~
- ~~(c) The vegetation removal is the minimum necessary to achieve defensible space or fuels reduction; and~~
- ~~(d) The impact to the vegetation and habitat function which may require mitigation to ensure no-net-loss.~~

(G) Chemical applications. The application of herbicides, pesticides, fertilizers, or other hazardous substances, if necessary, as approved by the County. Provided, their use should be restricted in accordance with state Department of Fish and Wildlife Priority Habitat and Species and other Management Recommendations and the regulations of the state Department of Ecology, Department of Agriculture and the U.S. Environmental Protection Agency.

(H) Minor site investigation work. Work necessary for land use permit submittals, such as surveys, soil logs, percolation tests, and other related activities, where such work does not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area should be minimized and disturbed areas immediately restored.

(I) Navigational aids and boundary markers. Construction or modification of navigational aids and boundary markers.

(3) Public Agency and Utility Exception (PAUE) ~~{CAO Handbook}~~

(A) If the application of these regulations will prohibit a development proposal from a public agency or utility, the public agency or utility may apply for an exemption. The exemption shall be

processed as a Full Administrative Review pursuant to Chapter 14.10.030. The public agency or utility shall provide the Administrator with a critical areas report and mitigation plan, if necessary, and all other project related documents such as identified permits from other agencies, special studies, and SEPA documents.

- (B) The Administrator shall review the application based on all of the following criteria:
- (i) There is no other practical alternative to the proposed development with less impact on the critical area; and
 - (ii) The proposal minimizes the impact on the critical area; ~~and~~
 - (iii) The application of this chapter would unreasonable restrict the ability of the public agency or utility to provide utility services to the public;
 - (iv) The proposal does not pose an unreasonable threat to the public health, safety or welfare;
 - (v) The proposal attempts to protect and mitigate impacts to the critical area functions and values consistent with the best available science; and
 - ~~(iii)~~(vi) The proposal is consistent with other applicable regulations and standards.
- (C) The Administrator shall prepare a decision based upon review of the submitted application and the proposal's ability to comply with the criteria in subsection B of this section.

~~(4)~~(6) Reasonable Use Exception

- (A) Nothing in this chapter is intended to preclude reasonable use of property, or to effect a taking in violation of the U.S. Constitution, the State of Washington Constitution and substantive due process. If the application of this chapter would deny all reasonable economic use of the subject property, the property owner may apply for an exception pursuant to this section. The reasonable use exception shall be processed pursuant to Chapter 11.98. The application for a reasonable use exception shall include a critical areas report and mitigation plan, if necessary, and all other project related documents such as permits from other agencies, special studies, and SEPA documents.
- (B) In addition to the criteria listed in Section 11.98.020(5), the Board of County Commissioners~~BOCC~~ shall review the application based on all of the following criteria:
- (i) No other reasonable economic use of the property has less impact on the critical area;
 - (ii) The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;
 - (iii) 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 regulation, or its predecessor; and
 - (iv) The proposal will result in no net loss of critical area functions and values consistent with the best available science.
- (C) The Board of County Commissioners~~BOCC~~ shall make a final decision based upon review of the submitted application and the proposal's ability to comply with the criteria in subsection B of this section.

11.~~XX77~~.050 General regulations

- (1) Financial guarantee. The Administrator may require a financial guarantee ensuring fulfillment of the mitigation project, monitoring program, and any contingency measures authorized by this title. The guarantee shall be in accordance with the following:

(A) The financial guarantee shall be in a form of a performance assurance surety bond, performance bond, assignment of funds, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the County Attorney.

~~(A)~~(B) The financial guarantee shall be at one hundred fifty percent of the cost of uncompleted actions or the estimated cost of restoring the functions and values of the critical area, whichever

is greater. The surety shall be based on estimated cost ~~estimate~~ of the mitigation activity including but not limited to clearing and grading, plant materials, plant installation, irrigation, weed management, monitoring, adaptive management, and other costs.

~~(B) The financial guarantee shall be in a form of a performance assurance surety bond, performance bond, assignment of funds, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the County Attorney.~~

(C) The financial guarantee shall remain in effect until the County determines, in writing, that the standards bonded for have been met. The financial guarantee shall be held by the County for a minimum of the length of the time specified for monitoring in the plan and shall be released after a request by the applicant and a final inspection, but may be held for longer periods when necessary. ~~[Skamania, adapted]~~

(D) Public development proposals shall be relieved from having to comply with the financial guarantee requirements of this section if public funds have previously been committed for mitigation, maintenance, or monitoring.

(2) Inspection and right of entry. The Administrator may inspect any development activity or mitigation site to enforce the provisions of this chapter. The applicant consents to entry upon the site by the Administrator during regular business hours for the purposes of making reasonable inspections to verify information provided by the applicant and to verify that work is being performed in accordance with the approved plans, permits, and requirements of this chapter.

(3) Marking and/or fencing.

(A) Temporary markers or fencing. The outer perimeter of a critical area or buffer, whichever is greater, and the clearing limits identified by an approved permit or authorization shall be marked or fenced in the field in a manner approved by the Administrator to prevent unauthorized intrusion and to protect the critical area and buffer from construction activities. Fencing shall be a highly visible and durable protective barrier. The marking or fencing is subject to inspection by the Administrator prior to the commencement of permitted land clearing or construction activities. ~~This temporary marking, and~~ shall be maintained throughout land clearing and construction and shall not be removed until directed by the Administrator, or until permanent signs and/or fencing, if required, are in place.

~~(B) Permanent markers. The Administrator may require, as a condition of any permit or variance, that the perimeter of the critical area or buffer, whichever is greater, be permanently identified. If required, this identification shall include permanent ~~wood or~~ metal signs affixed to non-treated wood or metal posts. Sign content and spacing shall be determined by the Administrator as necessary to meet the purposes of this section, ~~unless specified under specific critical areas subsections of this Chapter.~~~~

~~i. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another non-treated material of equal durability. Signs must be posted at regular intervals to assure visibility, or one per lot if the lot is less than fifty feet wide, and must be maintained by the property owner or homeowners association in perpetuity. The signs shall be worded as follows or with alternative language approved by the Administrator:~~

Protected [specify type] Critical Area

Do Not Disturb

Contact Chelan County Community Development Department
Regarding Uses, Restrictions, and Opportunities for Stewardship

ii. The provisions of subsection (i) may be modified as necessary to assure protection of sensitive features or wildlife.

~~(B)~~

- (C) Permanent fencing. The Administrator shall require permanent fencing where there is a substantial likelihood of intrusion into the critical area ~~or~~ buffer with the development proposal or when domestic grazing animals are present or may be introduced on site. The Administrator may also require such fencing when, subsequent to approval of the development proposal, intrusions result in damage to critical areas. Fencing installed as part of a proposed activity or as required in this Subsection shall be designed and constructed in a manner that does not interfere with species movements, including fish runs, and shall be constructed in a manner that minimizes impacts to the critical area and buffer functions.
- (4) Buffers.
- (A) All buffers shall be measured horizontal to and perpendicular from the critical area boundary. The width of the buffer shall be determined according to the requirements of this title and the findings of a critical areas report.
- (B) When a road, railroad, levee, other improvement or vertical separation completely functionally isolates the buffer from the critical area, the regulated critical area buffer shall not extend beyond the edge of the road, railroad, levee, other improvement, or vertical separation closest to the critical area. Whether a buffer is functionally isolated shall be determined by the Administrator subject to a critical area report and review.
- (C) If buffers for two or more critical areas (regardless of type) are contiguous with or contained within one another, the widest buffer width shall apply. Standard buffer dimension modifications and maximum intrusion distances shall apply to each individual critical area.
- (D) Buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the critical area functions and values. If the vegetation or protection area is inadequate, the Administrator may require an increase in the buffer width or additional native plantings within the buffer width. This determination shall be supported by appropriate documentation showing that it is reasonably related to protection of the functions and values of the critical area.
- (5) Construction Stormwater.
- (A) Water quality and erosion control best management practices BMPs for vegetation clearing, land grading, and soil disturbing activities shall adhere to the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chapter 13.16.

11.~~XX77~~.060 General Critical Areas Report

- (1) If the Administrator determines that the parcel(s) of a proposed land use action is within, likely to be within, includes, is likely to include, or is adjacent to a critical area, special status species location or habitat, or is adjacent to a critical area whose buffers may overlap the proposed action, a critical areas report prepared by a qualified professional specific to each critical area shall be required. The expense of preparing the critical area report shall be borne by the applicant.
- (2) The County may retain independent qualified consultants, at the expense of the applicant, to assist in review of critical area reports.
- (3) ~~Minimum Standards for Critical Areas Reports.~~ In addition to the requirements specified under each critical area, the written report and the accompanying figures, maps, and plan sheets shall contain the following information, at a minimum:
- (A) A site map or set of maps of the project area, including:
- (i) Reference streets and tax parcel property lines (noting the source of the geographic data

such as land survey, County GIS data, etc.);

- (ii) Existing and proposed project-related tracts, easements, rights-of-way, utility corridors, internal property/lot lines, and trail corridors;
 - (iii) Existing and proposed final contour lines (at the smallest readily available intervals, preferably 2-foot or better) if proposing land contour alterations;
 - (iv) Existing and proposed built features of the project including structures, fences, roads, impervious surfaces, utilities, mechanical facilities, landscaping, and other built modifications to the existing land conditions;
 - (v) Existing and proposed locations of stormwater management and discharge features;
 - (vi) Project construction, land disturbance, and clearing limits;
 - ~~(vii)~~ (vii) Temporary erosion and sediment control best management practices, TESC water quality controls/BMPs for all vegetation and soil disturbance areas, including utility corridors, stormwater discharge points, and critical areas mitigation sites;
 - ~~(viii)~~ (viii) All delineated and/surveyed critical areas, and their classification, occurring within or adjacent to the proposed project area or/ tax parcel(s);
 - ~~(ix)~~ (ix) Standard buffers, proposed buffer modifications with area measurements, and building setback limits for critical areas illustrated in (viii) above;
 - ~~(x)~~ (x) All existing and/or proposed critical areas mitigation sites; and
 - ~~(xi)~~ (xi) Location of existing and/or proposed critical area tracts and/or easements.
- (B) A written report, including:
- (i) The name and contact information of the landowner and applicant/agent (if different than the landowner);
 - (ii) The name, qualifications, and contact information for the primary author(s) of the critical area report;
 - (iii) Location information (parcel number(s), address(es), parcel acreages)
 - (iv) Narrative of the proposed action and all project-related elements including, but not limited to utility corridor improvements, stormwater discharge locationspoints, grazing and habitat changes, proposed mitigation, and/or other physical activities that will alterchange the critical areas existing habitat and functions.
 - (v) Identification of all local, state, and/or federal permit(s) or regulatory review(s) required for the project;
 - (vi) Vicinity map for the project;
 - (vii) Description of the project area and surrounding landscape existing conditions;
 - (viii) Description of the methodologies and techniques used to identify, delineate, and characterize critical areas, special status species, and the impacts analysis, and the dates of and who conducted the field studies;
 - (ix) A statement specifying the accuracy of the report and all assumptions made and relied upon;
 - (x) Identification and characterization of all critical areas and buffers existing conditions, functions and values, including any functionally isolated conditions on or adjacent to the proposed project area;
 - (xi) Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc; and
 - (xii) Tabulated area quantities of each critical area(s) and associated buffers present in or adjacent to the proposed project area(s), and if proposed, the area quantities of proposed impacts and proposed mitigation for each critical area impacted.
- (C) The Administrator may waive selected components of the report or accept an alternative form of the required information if the Administrator determines that sufficient detail will be

provided to determine whether all applicable criteria and standards have been met. The administrator may consult with resource agencies prior to making a decision.

11.~~XX77~~.070 Mitigation Sequencing

Development proposals affecting critical areas and/or special status species shall demonstrate that reasonable efforts have been examined with the intent to avoid and ~~minimize-prevent~~ impacts to the functions and values of the critical area or species. When an alteration to a critical area is proposed that is known or expected to have adverse impacts to a critical area and/or special status species, ~~such alteration~~ shall be avoided, minimized or compensated for in the following order of preference:

- (1) Avoid the impact altogether by not taking a certain action or parts of an action.
- (2) Minimize impacts by limiting the degree, magnitude, and duration of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
- (3) Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
- (4) Reduce or eliminate the impact over time by preservation and maintenance operations.
- (5) Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.
- (6) Monitor the required compensation and take remedial or corrective measures when necessary.

11.~~XX77~~.080 Variance Provisions

If the application of this chapter would cause undue or unnecessary hardship for use of the subject property, the property owner may apply for a variance pursuant to this Section. The variance shall be processed pursuant to Chapter 11.95. The application for a variance shall include a critical areas report and mitigation plan, if necessary, and all other project related documents such as permits from other agencies, special studies, and SEPA documents.

- (1) In addition to all of the evaluation criteria within Section 11.95.030, a variance shall not be granted unless it can be shown that all of the following conditions exist:
 - (A) Significant impacts to the critical area and buffer functions as stated in Section 11.06.020 would be mitigated by the applicant by addressing with conditions of approval where practical; and
 - (B) No other reasonable use with less impact is possible; and
 - (C) Impacts to critical areas and their buffers cannot be lessened through location or design changes to the proposed use.
- (2) The Hearing Examiner shall make a final decision based upon review of the submitted application and the proposal's ability to comply with the criteria in subsection B of this section. The Hearing Examiner may approve, approve with conditions, or deny a request for a variance.

11.~~XX77~~.090 Subdivision Notation

In the event the applicant is dividing property through the short subdivision, major subdivision, binding site plan, plat alteration or amendment process, a notation shall appear on the face of the final plat mylar referencing the requirements of this chapter, as amended. The boundaries of the critical area, buffer, 1% chance floodplain, and floodway shall also be shown on the face of the final plat.

11.~~XX77~~.100 Non-compliance

- (1) When a critical area or its buffer has been altered in violation of this Chapter, all ongoing activity shall stop and the critical area shall be restored. The Administrator shall have the authority to

issue a “stop-work” order pursuant to Title 16 to cease all ongoing activity and order restoration, rehabilitation, replacement, or other measures at the owner’s or other responsible party’s expense to compensate for violation of provisions of this Chapter. Activity shall not ~~shall not~~ resume until such time as the violation has been corrected and the County determines that the same or similar violation is not likely to reoccur.

- (2) If the County determines that a plan for restoration or other measures is required, all activity shall remain stopped until a plan is prepared and approved by the Administrator. Such a plan shall be prepared by a qualified professional using the currently accepted scientific principles and shall describe how the actions proposed meet the minimum requirements described in Subsection 3. The Administrator may, at the applicant or other responsible party’s expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.
- (3) Minimum Performance Standards. ~~The~~All of the following minimum performance standards shall be met for the restoration or other required measures of a critical area, :
 - (A) The historic structure, functions, and values of the affected critical area shall be restored, including water quality and habitat functions.
 - (B) The historic soil types and configuration shall be restored to the extent practicable.
 - (C) The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration.
 - (D) Information demonstrating compliance with other applicable provisions of this Chapter shall be submitted to the Administrator.
 - (E) All provisions for public health and safety have been addressed.
- (4) Site Investigations. The Administrator is authorized to make site inspections and take such actions as are necessary to enforce this Chapter. The Administrator shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.
 - (A) Penalties. Civil fines for violations of these provisions shall be pursuant to Chapter 16.16. If the wetland or fish and wildlife habitat area affected cannot be restored, monies collected as penalties shall be deposited in a dedicated account for the preservation or restoration of landscape processes and functions in the watershed in which the affected wetland is located. The County may coordinate its preservation or restoration activities with other agencies in the watershed to optimize the effectiveness of the restoration action.

11.~~XX77~~.110 Incentives

- (1) The County encourages such mechanisms as the open space tax program, conservation easements and donations to land trusts, in order to provide taxation relief upon compliance with these regulations.
- (2) Chelan County has adopted a public benefit rating system, which is a voluntary tax incentive program that allows landowners a reduced tax assessment of their land in return for a defined public benefit. There are federal income tax advantages that can be realized by an individual or estate, for gifts of real property for conservation purposes to local governments or nonprofit organizations such as land trusts. The specific rules on federal income tax deductions can be found in Section 170 of the Internal Revenue Code.
- (3) Chelan County encourages citizens to work with the Chelan County natural resource department to develop and implement voluntary habitat restoration projects and practices on their property.

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11.~~XX77~~.120 Education

A variety of educational materials are available through the Chelan County natural resource department for private landowners. Chelan County recognizes and encourages supports community-based educational and service organizations to participate in programs which rehabilitate and/or maintain the quality of streams and other environmentally sensitive areas.

- (1) Applicants have the opportunity of scheduling a preapplication conference through the Chelan County community development department to discuss pending development proposals with applicable reviewing agencies.
- (2) Chelan County supports and encourages training and educational opportunities for staff to facilitate the implementation of this section.

Chapter 11.78
FISH AND WILDLIFE HABITAT CONSERVATION AREAS

Sections

- 11.78.010 Designation and Identification
- 11.78.020 Exemptions
- 11.78.030 Regulations
- 11.78.040 Fish and Wildlife Habitat Conservation Area Report requirements
- 11.78.050 Habitat Management and Mitigation Plan requirements

11.78.010 Designation and Identification

- (1) Designation. All areas within the County meeting one or more of the following designations, regardless of formal identification, are considered fish and wildlife habitat conservation areas and are subject to the provisions of this Chapter.
 - (A) Areas where federal or state endangered, threatened, and sensitive species have a primary association;
 - (B) Habitats and species of local importance, as determined locally. Currently, the County has determined that mule deer and ~~for~~ elk winter range and migration corridors are habitats of local importance.
 - (C) Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat. This does not include ponds deliberately designed and created from dry sites, such as canals, stormwater detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.
 - (D) Waters of the state;
 - (E) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; and
 - (F) State natural area preserves, natural resource conservation areas, and state wildlife areas.
- (2) Identification. The Chelan County Community Development Department will maintain maps to provide information to the public and aid in the administration of this section; however, maps showing known critical areas are only for information and illustrative purposes. Sites that include fish and wildlife habitat conservation areas not mapped shall be subject to the provisions of this section. In the event of a conflict between the information shown on the maps and information shown as a result of field investigations, the latter shall prevail. Maps utilized by Chelan County to identify fish and wildlife habitat conservation areas include the following maps and map databases:
 - (A) The Washington State Department of Fish and Wildlife Priority Habitats and Species (PHS) and Wildlife Heritage Maps and Database, as amended;
 - (B) ~~Washington Rivers Information System Maps and Database, as amended;~~ State Department of Fish and Wildlife SalmonScape Map;
 - (C) National Wetlands Inventory Maps and Database, as amended;

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- (D) Chelan County shoreline master program, as amended;
- (E) DNR Stream Type Maps for Type S, F, Np, and Ns waters per criteria as set forth in WAC 222-16-031, Interim water typing system, as amended;
- (F) Mule deer and ~~for~~ elk winter range and migration corridors identified on the Chelan County mule deer and elk winter range maps in the community development department.

(3) Site Assessment.

The Administrator may require the applicant to conduct a site assessment to confirm the presence or absence of a fish and wildlife habitat conservation area. A site assessment must be performed by a qualified professional biologist. If the field investigation concludes that the site is not within and/or would not impact a fish and wildlife habitat conservation area or buffer, compliance with this chapter is not required. Referral may be necessary to determine if compliance of this chapter is required. The county may request assistance from pertinent agencies, including but not limited to Washington State Department of Fish and Wildlife, to review the results of the site assessment. If agency assistance is desired, the county will mail a specific notice to those agencies. Agencies must submit written comments to the County not later than thirty days from the date of the mailing of the notice in order to receive consideration. ~~Pertinent agencies, including but not limited to the Washington State Department of Fish and Wildlife, may be consulted with to review the results of the site assessment. In order for agency comments to be considered, the agencies shall have thirty days from the date of mailing of the notice to submit written comments to the County.~~

(4) Habitats and species of local importance designation.

- (A) In order to nominate an area, species, or corridor to the category of locally important, an individual or organization must:
 - (i) Demonstrate a need for special consideration based on:
 - (a) Declining population;
 - (b) Sensitivity to habitat manipulation;
 - (c) Commercial, recreational, cultural, or other special value; or
 - (d) Maintenance of connectivity between habitat areas.
 - (ii) Propose relevant management strategies considered effective and within the scope of this chapter;
 - (iii) Identify effects on property ownership and use; and
 - (iv) Provide a map showing the species or habitat location(s).
- (B) Submitted proposals shall be reviewed by the County and may be forwarded to local, state, federal, and/or tribal agencies or experts for comments and recommendations regarding accuracy of data and effectiveness of proposed management strategies.
- (C) If the proposal is found to be complete, accurate, and consistent with the purposes and intent of this chapter and the various goals and objectives of the Chelan County Comprehensive Plan, the Growth Management Act, the Shoreline Management Act, and the critical areas ordinance; the Board of County Commissioners will hold a public hearing

to solicit comment. Approved nominations will then be processed as amendments to this ordinance in conformance with Chapter 14.13, in order to be considered as a designated locally important habitats, species, or corridors and if approved will be subject to the provisions of this chapter.

11.78.020 Exemptions

Activities exempt from the provisions of this section are specified in Section 11.~~XX77~~.040, including the following:

- (1) One access/view corridor per parcel, twenty feet or less in width; provided, that clearing is done in a manner that prevents erosion. When possible, view corridors shall be located to avoid and minimize impacts to native vegetation and in areas dominated with non-native vegetation and/or invasive species.
- (2) Modification of a legally constructed single-family residence; provided, that no new construction shall be closer to the critical area and does not increase the square footage of the primary residence to be modified by more than twenty-five percent of the existing square footage.

11.78.030 Regulations

(1) ~~Proposed activities or development shall be prohibited from fish and wildlife habitat conservation areas and their buffers, except in accordance with this Chapter.~~ Development within fish and wildlife habitat conservation areas or buffers shall be subject to the following standards.

~~(A) Proposed activities or development shall be prohibited from fish and wildlife habitat conservation areas and their buffers, except in accordance with this Chapter.~~

~~(B)~~(A) Development and clearing within a fish and wildlife habitat conservation area or an associated buffer shall protect the functions and values of the existing habitat to the extent feasible; activities shall protect critical area functions and values. Site planning shall minimize disruption of existing topography and vegetation. Protection of existing topography and vegetation is to be provided by avoiding (the preferred alternative) or minimizing and mitigating impacts as specified in Section 11.~~XX77~~.080.

~~(C)~~(B) Any limitations to site disturbance, such as clearing restrictions, imposed as a condition of development approval shall be marked in the field and approved by the County prior to undertaking the project.

~~(D)~~(C) Fencing requirements as outlined in Section 11.78.190.

~~(E)~~(D) An erosion and drainage control plan will be required for any clearing, grading and/or excavation of one acre or greater in area.

~~(F)~~(E) Building sites are encouraged to be located away from critical wildlife habitat corridors as feasibly as possible

(2) Riparian Buffers.

(A) Riparian buffer areas shall be established for habitats that include aquatic and terrestrial ecosystems that mutually influence each other and that are located adjacent to waters of the state. Unless otherwise allowed in this title, all structures and activities shall be

located outside of riparian buffers.

- (i) Isolated Riparian Buffers. When impervious surfaces from previous development or flood control structures, such as levees, completely functionally isolate the riparian area from the watercourse, the riparian buffer shall extend from the ordinary high water mark (OHWM) to the impervious surfaces, or toe of the flood control structure.
 - (ii) Vegetation within the riparian buffer shall be maintained as riparian habitat. Noxious weeds in the riparian buffer should be controlled according to best management practices. The Chelan County noxious weed control board should be consulted for recommendations. Where riparian buffer vegetation disturbances have occurred, only revegetation with locally prescribed native vegetation is permitted, except as provided for in this section. Consultation with one of the following agencies is recommended: the WSU Cooperative Extension Service, the Cascadia Conservation District, the Washington State Department of Ecology, the Washington State Department of Fish and Wildlife, or the USDA—Natural Resource Conservation Service.
 - (iii) All riparian buffers shall be temporarily fenced between the construction activity and the riparian buffer ~~as required by Section 11.77.050(3)(A), with a highly visible and durable protective barrier, such as filter fencing and straw bales, during construction to prevent access and protect the riparian buffer. The Administrator may waive this requirement if an alternative to fencing which achieves the same objective is proposed and approved.~~
- (B) Required Riparian Buffer. The point of measurement for the riparian buffer begins at the ordinary high water mark on each bank and is measured horizontally from this point ~~or from the top of the bank where the ordinary high water mark cannot be identified.~~ No development, except as outlined in the provisions of this section, is allowed in this area. Buffer distances are shown in Table 1.

Table 1. Riparian Buffers Widths

Stream Type	Riparian Buffer Width (ft)	
	High Intensity (feet)	Low Intensity (feet)
Type S Waters	See County SMP	See County SMP
Type F Waters	200	150
Type Np Waters	150	100
Type Ns Waters	50	50

~~(C) The buffer widths in Table 1 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.~~

Commented [CW1]: Removed this because it's stated in general chapter.

- ~~(D)~~(C) Riparian buffer widths may be modified by averaging the buffer widths, pursuant to an administrative modification. Riparian buffer width averaging shall be allowed only where the applicant demonstrates all of the following:
- (i) That width averaging will not degrade the riparian habitat structure, functions and values; and

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- (ii) The total area contained within the riparian buffer after averaging is no less than that contained within the riparian buffer width, outlined by the requirements of this chapter, prior to averaging.
 - (iii) The revised riparian buffer width shall not be less than seventy-five percent of the riparian buffer widths outlined within this chapter or be less than twenty-five feet, whichever is greater; and
 - (iv) The newly incorporated area contained within the revised riparian buffer provides habitat structure, functions and values that are at least equal to, if not superior to, the area that is being replaced; and~~habitat with at least equal or superior habitat structure, functions and values to that area that it is replacing; and~~
 - (v) Failure to adjust the buffer would result in a hardship to the property owner; and
 - (vi) The need for buffer width averaging is not due to the landowner's own actions; and
 - (vii) ~~That Only~~ low intensity land uses would be located adjacent to areas where the buffer width is reduced, and that such low intensity land uses are guaranteed in perpetuity by covenant, deed restriction, easement or other legally binding mechanism; and
 - (viii) Submission of a habitat management and mitigation plan, if required by the Administrator, pursuant to Section 11.78.040, in support of the requested buffer width averaging.
- (3) Increased Buffer Area Width. Buffer widths shall be increased on a case-by-case basis as determined by the Administrator when a larger buffer is necessary to protect habitat functions and values. This determination shall be supported by appropriate documentation showing that it is reasonably related to protection of the functions and values of the fish and wildlife habitat conservation area. The documentation must include but not be limited to the following criteria:
- (A) The habitat is used by a state or federally listed plant or animal species or has essential or outstanding habitat for those species, or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or
 - (B) The adjacent land is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse habitat impacts; or
 - (C) The adjacent land has minimal vegetative cover or slopes greater than 30 percent.
- (4) Specific Development Standards
- (A) Bulkheads and retaining walls.
 - (i) New bank stabilization may be placed only after imminent threat to existing residential or commercial structures or public facilities has been demonstrated through a geotechnical or hydrologic analysis prepared by a qualified professional. Structure relocations and bioengineering alternatives to hard armoring should always be considered first.
 - (ii) If bank protection cannot be avoided, follow bank protection recommendations in the Washington State Integrated Streambank Protection Guidelines.
 - (B) Roadways and water crossings.
 - (i) Proposed new roads within riparian buffers shall be avoided. If proposed new roads within the riparian buffer cannot be avoided, roads should be kept to a minimum and should not run parallel to the water body. Crossings, where necessary, shall cross riparian buffers at as

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near right angles as possible. If no alternative exists to placing a new roadway in the buffer, the Administrator may require a habitat management and mitigation plan pursuant to Section 11.78.100, adequate to avoid degradation of the riparian habitat functions, structure and value, utilizing the criteria in Section 11.78.080(1)(C)(i) through (vii) in reaching a conclusion.

- (ii) Water crossings must be approved by the Washington State Department of Fish and Wildlife in accordance with RCW ~~75.20.100~~75.55.021.

(C) Equestrian/pedestrian/bike trails and associated facilities may be permitted in riparian buffers after review of a site plan by the Administrator but should be set back fifty feet from the ordinary high water mark if possible and shall be a maximum of fourteen feet in width. The planning department may require a habitat management and mitigation plan, pursuant to Section 11.78.040, to address riparian habitat impacts in consultation with the Washington State Department of Fish and Wildlife, the Washington State Department of Ecology, the Army Corps of Engineers or other agencies as appropriate.

(D) Wells, tunnels, utilities and on-site septic systems.

- (i) Where no other practical alternative exists to the excavation for and placement of wells, tunnels, utilities, or on-site septic systems in a riparian buffer, the Administrator may require a habitat management and mitigation plan pursuant to Section 11.78.100, adequate to avoid degradation of the riparian habitat functions, structure and value, utilizing the criteria in Section 11.78.080(1)(C)(i) through (vii) in reaching a conclusion. Wells and on-site septic systems shall be in conformance with the Chelan-Douglas health district requirements. On-site septic systems located within one hundred feet of the ordinary high water mark require a health district waiver which will provide for additional health district and reclamation conditions for approval.
- (ii) Riparian vegetation disturbances within the riparian buffer shall be revegetated within one growing season with native vegetation.

(E) Fences in Deer and Elk Wintering Range.

The intent of this section is to identify the type of fencing that is necessary and appropriate to protect the deer and elk migration in the County while providing for the operation and protection of livestock or other agriculturally related land uses. New and replacement fencing in deer and elk migration corridors, identified by Section 11.78.010, shall conform to the following types:

- (i) Type A Fence. Where fencing is proposed for development in mule deer migration corridors, Type A fencing, or other fencing type approved by Washington State Department of Fish and Wildlife, shall be required. Type A fence shall consist of no more than four horizontal, well-stretched, evenly spaced wires, placed so that the top wire is no more than forty-two inches above the ground and the bottom wire is at least seventeen inches from the ground and all other wires at intervals evenly spaced no less than eight inches, sixteen inches and twenty-four inches below the top wire. If posts are set more than sixteen feet apart, the wires shall be supported by stays, placed not more than eight feet from each other or from the posts. All other fences as strong and as well calculated as the fence described above shall be allowed.
- (ii) Type B Fence. Type B fence may be permitted for swimming pools, dog kennels, garden fences, corrals, horse pastures, sheep pastures, agricultural crops, and similar uses.

Type B fence shall consist of braid mesh fabric or any other combination of materials that may create a continuous solid enclosure. Fence material shall be securely fastened to substantial posts.

11.78.040 Fish and Wildlife Habitat Conservation Area Report requirements

- (1) A critical areas report for fish and wildlife habitat conservation areas shall be prepared by a qualified professional biologist when a development activity is proposed in ~~or will impact~~ a fish and wildlife habitat conservation area or buffer. The expense of preparing the critical area report shall be borne by the applicant. The County may retain independent qualified consultants, at the expense of the applicant, to assist in review of reports.
- (2) In the case of bald eagles, if no other PHS Habitat or Species are present that require a habitat management and mitigation plan, an approved bald eagle management plan by the Washington State Department of Fish and Wildlife meeting the requirement and guidelines of the bald eagle protection rules (WAC ~~220-610-100232-12-292~~, as amended) will satisfy the requirements for a habitat management and mitigation plan.
- (3) In addition to the requirements of Section 11.~~XX77~~.160, a critical area reports for fish and wildlife habitat conservation areas shall provide an assessment of existing habitats. The Administrator has the authority to determine the applicability of individual critical areas report requirements and may waive report requirements determined to be unnecessary on a case-by-case basis. Critical areas reports for fish and wildlife habitat conservation areas must include, at a minimum, the following information ~~as determined necessary by the Administrator~~:
 - (A) Identification of any species of local importance, priority species, or endangered, threatened, sensitive or candidate species that have a primary association with habitat in or adjacent to the project area;~~;~~
 - (B) Methodologies used to determine and characterize water body ~~Ordinary High Water Marks (OHWM)~~, fish and/or wildlife presence/absence surveys, mapping habitats of primary association, and ~~WDFW priority habitatsPHS;~~
 - (C) Delineation of water body OHWM and the WAC 222-16-030 Water Type ~~classification;recommendation;~~
 - (D) Characterization of the water body dimensions, morphology, flow regime (i.e., perennial, seasonal, intermittent, or ephemeral), substrate, erosion potential, and floodplain capability;~~;~~
 - (E) Detailed characterization of the identified species usage and/or habitat characteristics present in or adjacent to the project area;~~;~~
 - (F) Tabulated summary of quantities of identified species usage, water bodies, and priority habitats present in or adjacent to the project area;~~;~~
 - (G) An assessment of direct and probable indirect project impacts to the identified species, water bodies, and/or ~~WDFW priority habitatsPHS in the project area;~~
 - (H) A discussion of management recommendations identified by any federal, state, or local agency for the species or habitats in the project area;
 - ~~(H) A discussion of any federal, state, or local species / habitat management recommendations, including the WDFW habitat management recommendations, that~~

~~have been developed for the identified species or habitat.~~

- (I) Recommended buffers necessary for the protection of the identified species.
- (J) Developments that propose alterations to streams or stream buffers shall also include the following within the critical areas report:
 - (i) In-water habitat conditions for fish and wildlife life history requirements,
 - (ii) Characterization of riparian (streamside) corridor - vegetation species, composition, corridor width, and habitat functions;
 - (iii) Determination of the presence or absence of fish, including reference sources;
 - (iv) Downstream and upstream fish passage constraints.
- (K) Report maps and figures shall illustrate:
 - (i) Location(s) of the identified species / habitat(s);
 - (ii) Locations of all water body OHWM, existing stream crossings, and existing in-water constructed features.
 - (iii) Top and toe of any slopes 25 percent or greater occurring within 25 feet of a stream OHWM;
 - (iv) Special status species and habitats point, polygon, and/or buffers locations obtained from project field studies and/or agency data sets.
 - (v) Location of the standard riparian buffer(s), recommended species buffer dimensions, and project proposed modified buffer dimensions allowable by Section 11.78.030(3).
 - (vi) If direct impacts or probable indirect impacts to fish and wildlife habitat conservation areas or species may be anticipated, include:
 - (a) The location of proposed stream crossings, proposed stream or buffer modifications, recommended water type changes, or detailed explanation of proposed in-water work and timing;
 - (b) The location of identified species usage or habitat modifications in or adjacent to the proposed project area; and
 - (c) The location of proposed stream, riparian buffer, species and habitat mitigation.

11.78.050 Habitat Management and Mitigation Plan requirements

~~(5)~~ Development proposals or alterations within a fish and wildlife habitat conservation area or buffer shall prepare and submit as part of its critical areas report, a habitat management and mitigation plan.

- (1) Habitat management and mitigation plans must be prepared by a qualified professional biologist that includes written goals, objectives, performance standards, a monitoring and maintenance plan, and an adaptive management plan, a contingency plan. Mitigation projects must be monitored and maintained for a period necessary to establish that performance standards have been met, as determined by the Administrator.
- (2) The habitat management and mitigation plan shall 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 habitat conservation area and any associated buffer.

(3) When an alteration to a critical area is proposed, the plan shall demonstrate that all reasonable efforts have been taken to mitigation impacts per the sequence in Section 11.~~XX~~77.100.

~~(4)~~ The habitat management and mitigation plan shall demonstrate, when implemented, no net loss of ecological functions of the habitat conservation area and buffer.

~~(B)~~

~~(1)~~(5) Restoration is required when the critical area or its buffer will be temporarily impacted during the construction of an approved development proposal. At a minimum, all impacted areas shall be restored to their previous condition pursuant to an approved mitigation plan. A qualified professional biologist should determine whether restoration is possible before any temporary disturbance occurs. If it is determined that full restoration of ecological functions is not possible, the habitat management and mitigation plan shall include actions to fully compensate for the unavoidable impacts.

~~(2)~~(6) Species specific mitigation, performance standards, monitoring, and adaptive management shall be based on species current best available science and/or WDFW or USFWS management recommendations.

~~(3)~~ Mitigation should be guided by applicable watershed, fish recovery, sub-basin or other science-based plans. Any science used to guide mitigation actions, whether on site or off site, must meet the criteria and characteristics of best available science listed in

~~(4)~~(7) —WAC 365-195-905, or the state standards in effect at the time of application.

~~(5)~~(8) Water quality and erosion control BMPs for mitigation area vegetation clearing and soil disturbing activities shall adhere to the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chapter 13.16.

~~(6)~~(9) Mitigation ratios shall be used when impacts to critical areas or their buffers are unavoidable. Compensatory mitigation shall restore, create, rehabilitate or enhance to achieve equivalent or greater ecological functions. Mitigation shall be located according to the priorities for mitigation location and type, in the following sequential order of preference: on-site, in-kind; off-site, in-kind; on-site, out-of-kind; and off-site, out-of-kind and result in no net loss of ecological functions onsite unless the biologist can demonstrate, and the County approves that onsite mitigation will result in a net loss of ecological functions. If offsite mitigation measures are determined to be appropriate, offsite mitigation shall be located preferentially within the same watershed as the development, within Chelan County.

The onsite mitigation ratio (mitigation ~~amount-area~~: disturbed area) for impacts to critical areas shall be at a minimum ratio of 1:1 ~~for development within riparian buffers~~. A ratio of 2:1 shall apply to off-site mitigation for impacts to critical areas. native vegetation removal within these areas. Mitigation for diverse, high quality habitat or off-site mitigation may require a higher level of mitigation. Mitigation and management plans shall evaluate the need for a higher mitigation ratio on a site by site basis, dependent upon the ecological functions and values provided by the habitat being impacted and the habitat available for mitigation. Recommendations by resource agencies in evaluating appropriate mitigation shall be encouraged.

~~(7)~~(10) The habitat management and mitigation plan shall be approved or denied in writing by

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the Administrator and shall contain a report including but not limited to, the following information:

- (A) The location of the proposed site;
- (B) A map or maps indicating the boundary of the habitat conservation areas and buffers; the width and length of all existing and proposed structures, utilities, roads, easements; wastewater and stormwater facilities; and adjacent land uses;
- (C) 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;
- (D) A detailed discussion of surface and subsurface hydrologic features both on and adjacent to the site where the review authority determines appropriate;
- (E) A description of the vegetation in the habitat conservation area, on the overall project site and adjacent to the site;
- (F) A detailed description of the proposed project's effect on the habitat conservation area, and
- (G) A discussion of management recommendations identified by any federal, state, or local agency management recommendations which have been developed for the species or habitats in the project area;
- (H) A plan which explains how the applicant will avoid, minimize, rectify, reduce, or eliminate impact over time, and compensate for the proposed activity. ~~or mitigate adverse impacts to fish and/or wildlife habitats created by the proposed use or activity.~~ Mitigation measures within the plan may include, but are not limited to:
 - (i) Establishment of buffer areas;
 - (ii) Preservation of critically important plants and trees, preferably in consolidated areas;
 - (iii) Limitation of access to the habitat conservation area;
 - (iv) Seasonal restriction of construction activities;
 - (v) Directing lights away from the habitat conservation area and buffer;
 - (vi) Clustering of development and preservation of open space, if permitted by the underlying zoning district;
 - (vii) Post signs marking habitats or habitat buffer areas and boundaries to clearly indicate the location of the critical area pursuant to Section 11.~~xx~~77.060(4);
 - (viii) Use low impact development when appropriate;
 - (ix) Establish covenants prohibiting the use of pesticides within the buffer or habitat area;

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- (x) Implement integrated pest management programs;
- (xi) Title notice or plat dedication warning statements;
- (xii) Conservation easements;
- (xiii) Preserve and introduce native plant species which serve as food and shelter from climatic extremes and predators and structure and cover for reproduction and rearing of young for critical wildlife;
- (xiv) The use of native species or species recommended by the Washington State Department of Fish and Wildlife in the revegetation or landscaping of disturbed or developed areas and in any enhancement of habitat or buffers.

~~(8)~~(11) Review comments by a habitat biologist from the Washington State Department of Fish and Wildlife may be required, as determined by the Administrator. The Administrator shall provide notice to the agency. Agencies shall have 30 days from the date of mailing of the notice to submit written comments to the County. The agencies shall respond in writing to the Administrator with review comments or a request for additional time for review within 30 days from the date of notice. The Administrator may grant an additional seven days for an agency to provide review comments.

~~(9)~~(12) Conditions shall be imposed, as necessary, based on the measures identified in the habitat mitigation plan.

~~(10)~~(13) Performance Standards. The following performance standards shall apply to compensatory mitigation projects: ~~{Douglas County and Current Code, revised}~~

- (A) Mitigation planting survival will be 100% for the first year and 80% for the following years. The survival standard can be met by replanting dead plants to achieve the required survival rate.
- (B) Mitigation construction shall be completed prior to granting of final occupancy, or the completion of final approval of any development activity for which mitigation measures have been required. Bonding according to the provisions of Section 11.~~XX~~77.050(1) for the cost of uncompleted activities is an acceptable alternative to completion where a contract to complete the work is in force.
- (C) -The monitoring period is determined by the Administrator consistent with this section. Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met. For mitigation containing exclusively herbaceous vegetation, where applicable, a minimum monitoring period of three years shall one year may be prescribed or until performance criteria are met. For mitigation containing scrub-shrub vegetation, three to five years or until performance criteria are met. Monitoring shall be required for a minimum of five years, and potentially more years, when any of the following conditions apply:
 - (i) The project does not meet the performance standards identified in the mitigation plan.
 - (ii) The project does not provide adequate replacement for the functions and values of the impacted critical area.
 - (iii) The project results in unanticipated changes to hydrology of the impacted and/or mitigated critical area.

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- (iv) The project involves establishment of mixed scrub-shrub and forested plant communities, which require longer time for establishment.
- (D) Where necessary, a permanent means of irrigation shall be installed for the mitigation plantings ~~that is designed by a landscape architect or equivalent professional, as approved by the Administrator.~~ The design shall meet the specific needs of riparian vegetation.
- (E) Monitoring reports must include verification that the planting areas have less than 20% total non-native, exotic, or invasive plant cover.
- (F) Plants, wildlife, or fish species not indigenous to the region shall not be introduced into a habitat conservation area unless authorized by a state or federal permit or approval.
- (G) Exotic and invasive species may include any species on the state noxious weed list, or considered a noxious or problem weed by the Natural Conservation Services Department or local conservation districts.
- (H) The monitoring period is determined by the Administrator consistent with this section. Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met. The length of time involved in monitoring and monitoring reports may be increased by the Administrator for a development project on a case-by-case basis when longer monitoring time is necessary to establish or re-establish functions and values of the mitigation site.
- ~~(H)(I)~~ (I) Monitoring reports shall be submitted to the Administrator at site completion (as-built) and annually for up to three years following construction and every two years thereafter pursuant to the approved monitoring period. Monitoring reports shall be submitted by a qualified professional biologist. The biologist must verify that the conditions of approval and provisions in the fish and wildlife management and mitigation plan have been satisfied.
- ~~(I)(A) The monitoring period is determined by the Administrator consistent with this section. Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met. The length of time involved in monitoring and monitoring reports may be increased by the Administrator for a development project on a case-by-case basis when longer monitoring time is necessary to establish or re-establish functions and values of the mitigation site.~~
- (J) For mitigation containing exclusively herbaceous vegetation a minimum monitoring period of one year may be prescribed or until performance criteria are met. For mitigation containing scrub-shrub vegetation, three to five years or until performance criteria are met. Monitoring shall be required for a minimum of five years, and potentially more years, when any of the following conditions apply:
 - (i) The project does not meet the performance standards identified in the mitigation plan.
 - (ii) The project does not provide adequate replacement for the functions and values of the impacted critical area.
 - (iii) The project results in unanticipated changes to hydrology of the impacted and/or mitigated critical area.

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- (iv) The project involves establishment of mixed scrub-shrub and forested plant communities, which require longer time for establishment.
- (K) If the mitigation plan is not installed per the timeline defined in this section or monitoring reports indicate that mitigation is not achieving its goals in accordance with this section, the Administrator may, based on the recommendations of a qualified professional, increase the required monitoring to annually for up to 10-years after mitigation is installed.
- (L) Mitigation sites shall be maintained to ensure that the mitigation and management plan objectives are successful. Maintenance shall include corrective actions to rectify problems, ~~include-including~~ rigorous, as-needed elimination of undesirable plants, protection of shrubs and small trees from competition by grasses and herbaceous plants, and repair and replacement of any dead plants.

Chapter 11.80
WETLANDS OVERLAY DISTRICT

Sections

- 11.80.010 Wetland Designation and Identification
- 11.80.020 Regulated Activities
- 11.80.030 Exemptions and Allowed Uses in Wetlands
- 11.80.040 Wetland Classification and Rating
- 11.80.050 Wetland Buffers
- 11.80.060 Wetland Reports
- 11.80.070 Wetland Mitigation
- 11.80.080 Compensatory Mitigation Plan and Monitoring

11.80.010 Wetland Designation and Identification

- (1) All wetlands in Chelan County meeting the definition of wetlands in RCW 36.70A.030 are designated wetlands.
- (2) Identification of wetlands and delineation of their boundaries pursuant to this Chapter shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements in accordance with Chapter 173-22 WAC. All areas within the County meeting wetland identification procedures are hereby designated critical areas and are subject to the provisions of this Chapter. Wetland delineations are valid for five years; ~~after such date the County shall determine whether a revision or additional assessment is necessary.~~
- (3) The approximate location and extent of wetlands in the County may be displayed on the National Wetlands Inventory (NWI) Maps and the Chelan County wetland inventory map, as it is developed. Wetland maps, along with other supportive documentation, are to be used as a guide only to the general location and extent of probable wetlands. NWI maps were prepared through photointerpretation of high-altitude aerial photography with limited ground truthing. Therefore, there are wetlands that are not shown on wetland inventory maps and also wetland areas mapped that may not meet wetland determination criteria. Each proposal application must be evaluated by the Administrator to determine the requirement of a site-specific wetland delineation/characterization. In the event that wetland designations shown on resource maps conflict with the criteria set forth in this chapter, the criteria set forth shall take precedence.
- (4) Wetland delineation/characterization shall be performed by a qualified professional wetland biologist/consultant and shall be prepared according to Chapter 173-22 WAC.

11.80.020 Regulated Activities

- (1) For any regulated activity, a critical areas report may be required to support the requested activity.
- (2) The following activities are regulated if they occur in a regulated wetland and/or its buffer:
 - (A) The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind.

- (B) The dumping of, discharging of, or filling with any material.
 - (C) The draining, flooding, or disturbing the water level or water table.
 - (D) Pile driving.
 - (E) The placing of obstructions.
 - (F) The construction, reconstruction, demolition, or expansion of any structure.
 - (G) The destruction or alteration of wetland vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland.
 - (H) "Class IV - General Forest Practices" under the authority of the "1992 Washington State Forest Practices Act Rules and Regulations", WAC 222- 12-030, or as thereafter amended.
 - (I) Activities that result in:
 - (i) A significant change of water temperature;
 - (ii) A significant change of physical or chemical characteristics of the sources of water to the wetland;
 - (iii) A significant change in the quantity, timing or duration of the water entering the wetland; or
 - (iv) The introduction of pollutants.
- (3) Subdivisions. The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:
- (A) Land that is located wholly within a wetland or its buffer may not be subdivided, unless the lot or tract will be protected by a conservation easement.
 - (B) Land that is located partially within a wetland or its buffer may be subdivided provided that an accessible and contiguous portion of each new lot is:
 - (i) Located outside of the wetland and its buffer; and
 - (ii) Meets the minimum lot size requirements of Title 11.

11.80.030 Exemptions and Allowed Uses in Wetlands

In addition to those activities listed in Section 11.~~XX77~~.040, the following activities are exempt from wetlands review or allowed to occur within wetlands.

~~(1) Small isolated wetlands in arid landscapes often have a higher value and perform greater functions than in other settings. However, in certain circumstances, applying the buffers in Table XX.1 or XX. 2 may result in buffer areas greater than that of the wetland being protected. In these instances, the County may consult with the Department of Ecology to determine whether exemptions from mitigation sequencing and/or reduced buffers are warranted.~~

~~(2)~~(1) Activities Allowed in Wetlands. The activities listed below are allowed in wetlands. Exempted activities shall use all reasonable methods to avoid potential impacts to critical areas consistent with the standards and requirements of this chapter and all other applicable laws and regulations. These activities do not require submission of a critical area report, except where such activities result in a loss of the functions and values of a wetland or wetland buffer. These activities include:

- ~~(A) Existing and ongoing agricultural activities, provided that they implement applicable Best Management Practices (BMPs) contained in the latest editions of the USDA Natural~~

~~Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG); or develop a farm conservation plan in coordination with the local conservation district. BMPs and/or farm plans should address potential impacts to wetlands from livestock, nutrient and farm chemicals, soil erosion and sediment control and agricultural drainage infrastructure. BMPs and/or farm plans should ensure that ongoing agricultural activities minimize their effects on water quality, riparian ecology, salmonid populations, and wildlife habitat.~~

- ~~(B)~~(A) Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.
- ~~(C)~~(B) The harvesting of wild crops, naturally existing in a wetland, 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 wetland by changing existing topography, water conditions, or water sources.
- ~~(D)~~(C) Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer, provided that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a licensed hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column will be disturbed.
- ~~(E)~~(D) Enhancement of a wetland through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Re-vegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.
- ~~(F)~~(E) Stormwater management facilities. A wetland or its buffer can be physically or hydrologically altered to meet the requirements of a low impact development (LID), runoff treatment, or flow control best management practices (BMP)~~LID, Runoff Treatment or Flow Control BMP~~ if all of the following criteria are met:
- (i) The wetland is classified as a Category IV or a Category III wetland with a habitat score of 3-~~5~~4 points, and
 - (ii) There will be “no net loss” of functions and values of the wetland with mitigation, and
 - (iii) The wetland does not contain a breeding population of any native amphibian species, and
 - (iv) The hydrologic functions of the wetland can be improved as outlined in questions 3, 4, 5 of Chart 4 and questions 2, 3, 4 of Chart 5 in the “Guide for Selecting Mitigation Sites Using a Watershed Approach,” ~~(available here:~~ <http://www.ecy.wa.gov/biblio/0906032.html>); or the wetland is part of a priority

- restoration plan that achieves restoration goals identified in ~~the~~ Chelan County Shoreline Master Program or other local or regional watershed plan, and
- (v) The wetland lies in the natural routing of the runoff, and the discharge follows the natural routing, and
 - (vi) All regulations regarding stormwater and wetland management are followed, including but not limited to local and state wetland and stormwater codes, manuals, and permits, and
 - (vii) Modifications that alter the structure of a wetland or its soils will require permits.

Existing functions and values that are lost would have to be compensated/replaced. Stormwater LID BMPs required as part of ~~N~~new and ~~R~~redevelopment projects can be considered within wetlands and their buffers. However, these areas may contain features that render LID BMPs infeasible. A site-specific characterization is required to determine if a LID BMP is feasible at the project site.

11.80.040 Wetland Classification and Rating

- (1) Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Eastern Washington: 2014 Update (Ecology Publication #14-06-030, or as revised and approved by Ecology), which contains the definitions and methods for determining whether the criteria below are met.
 - (A) Category I wetlands are: ~~1(i)~~ alkali wetlands; ~~2(ii)~~ wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR; ~~3(iii)~~ bogs and calcareous fens; ~~4(iv)~~ mature and old-growth forested wetlands over ¼ acre with slow-growing trees; ~~5(v)~~ forests with stands of aspen; and ~~6(vi)~~ wetlands that perform many functions very well (scores between 22-27). These wetlands are those that ~~1(a)~~ represent a unique or rare wetland type; or ~~2(b)~~ are more sensitive to disturbance than most wetlands; or ~~3(c)~~ are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or ~~4(d)~~ provide a high level of function.
 - (B) Category II wetlands are: ~~1(i)~~ forested wetlands in the floodplains of rivers; ~~2(ii)~~ mature and old-growth forested wetlands over ¼ acre with fast-growing trees; ~~3(iii)~~ vernal pools; and ~~4(iv)~~ wetlands that perform functions well (scores between 19-21 points). These 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.
 - (C) Category III wetlands have a moderate level of functions (scores between 16-18 points). These wetlands can be often adequately replaced with a well-planned mitigation project. Wetlands scoring between 16-18 points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.
 - (D) Category IV wetlands have the lowest level of functions (scores fewer than 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, and in some cases be able to improve. 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.

- (2) Illegal modifications. Wetland rating categories shall not change due to illegal modifications made by the applicant, landowner, or with the applicant's or landowner's knowledge.

11.80.050 Wetland Buffers

- (1) Wetland buffer zones shall be required for all activities not deemed to be exempt in Section 11.80.030, contiguous to wetlands.

(2) Buffer Requirements. The following standard buffer widths in Table 1 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 wetland biologist/consultant using the Washington State Wetland Rating System for Eastern Washington: 2014 Update (Ecology Publication #14-06-030, or as revised and approved by Ecology), and by the level of impact from the proposed land use (Table 2). ~~The adjacent land use intensity is assumed to be high according to Table 4. For moderate intensity land uses, the buffer may be reduced to no less than 75 percent of the standard buffer. For low intensity land uses, the buffer may be reduced to no less than 50 percent of the standard buffer. At no time can the buffer be less than 25 feet.~~

(2)(3) ~~The buffer widths for proposed high impacts land uses can be reduced to the buffer widths for moderate impact land uses under the following conditions:~~

- (A) For wetlands that score 5-6 points or more for habitat function, ~~the buffers in Table 1 can be used if both of the following criteria are met:~~

~~(i)~~ A relatively undisturbed, vegetated corridor at least 100 feet wide is protected between the wetland and any other Priority Habitats as defined by the Washington State Department of Fish and Wildlife, where available. ~~The latest definitions of priority habitats and their locations are available on the WDFW web site at: <https://wdfw.wa.gov/species-habitats/at-risk/phs>.~~

~~(iii)(i)~~ The corridor must be protected for the entire distance between the wetland and the Priority Habitat by some type of legal protection such as a conservation easement.

~~(a) Presence or absence of a nearby habitat must be confirmed by a qualified wetland biologist/consultant. If no option for providing a corridor is available, Table 1 may be used with the required measures in Table 2 alone.~~

~~(iii)(ii)~~ The measures to minimize the impact of different land uses, such as the examples in Table 3, are applied in Table 2 are implemented, where applicable, to minimize the impacts of the adjacent land uses.

- (B) For wetlands that score ~~3-4~~3-5 habitat points, only application of the measures in Table ~~2~~3 are required to reduce the buffer width to those required for moderate impact land uses for the use of Table 1

- (C) If an applicant chooses not to apply the measures in Table ~~2~~3, or is unable to provide a protected corridor where available, then ~~Table 3 must be used~~high impact buffer widths must be applied.

(4) Small isolated wetlands in arid landscapes often have a higher value and perform greater functions than in other settings. However, in certain circumstances, applying the buffers in Table

1 may result in buffer areas greater than that of the wetland being protected. In these instances, the Administrator may consult with the Department of Ecology to determine whether exemptions from mitigation sequencing and/or reduced buffers are warranted.

(3)(5) The buffer widths in Table 1 ~~and 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 1. Standard Wetland Buffer Requirements ~~if Table 2 is Implemented and Corridor Provided~~

Wetland Category	Wetland Type	Level of Land Use Impact	Buffer width (in feet) based on habitat score		
			3-5	6-7	8-9
I	Based on total score and Forested Wetlands	Low	50	75	100
		Moderate	75	110	150
		High	100	150	200
	Bogs and Wetlands of High Conservation Value	Low	125		
		Moderate	190		
		High	250		
	Alkali Wetlands	Low	100		
		Moderate	150		
		High	200		
II	Based on total score and Riparian Forest Wetlands	Low	50	75	100
		Moderate	75	110	150
		High	100	150	200
	Vernal Pools	Low	100		
		Moderate	150		
		High	200		
III	All types of Wetlands	Low	40	75	Use Category II buffer widths
		Moderate	60	110	
		High	80	150	
IV	All types of Wetlands	Low	40	75	Use Category II buffer widths
		Moderate	60	110	
		High	80	150	

Table 2. Land Use Impact

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<u>Level of Impact from Proposed Land Use</u>	<u>Types of Land Uses</u>
<u>High</u>	<ul style="list-style-type: none"> • <u>Commercial</u> • <u>Urban</u> • <u>Industrial</u> • <u>Institutional</u> • <u>Retail sales</u> • <u>Residential (more than 1 unit/acre)</u> • <u>Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, cannabis farms, outdoor cannabis production, growing and harvesting crops requiring annual tilling, and raising and maintaining animals, etc.)</u> • <u>High-intensity recreation (golf courses, ball fields, etc.)</u> • <u>Hobby farms</u>
<u>Moderate</u>	<ul style="list-style-type: none"> • <u>Residential (1 unit/acre or less)</u> • <u>Moderate-intensity open space (parks with biking, jogging, etc.)</u> • <u>Conversion to moderate-intensity agriculture (orchards, hay fields, etc.)</u> • <u>Paved trails</u> • <u>Building of logging roads</u> • <u>Utility corridor or right-of-way shared by several utilities and including access/maintenance road</u>
<u>Low</u>	<ul style="list-style-type: none"> • <u>Forestry (cutting of trees only)</u> • <u>Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.)</u> • <u>Unpaved trails</u> • <u>Utility corridor without a maintenance road and little or no vegetation management.</u>

	Buffer width (in feet) based on habitat score			
Wetland Category	3-4	5	6-7	8-9
Category I: Based on total score	75	90	120	150
Category I: Forested	75	90	120	150

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Category I: Bogs and Wetlands of High Conservation Value	190			
Category I: Alkali	150			
Category II: Based on total score	75	90	120	150
Category II: Vernal pool	150			
Category II: Forested	75	90	120	150
Category III (all)	60	90	120	150
Category IV (all)	40			

Table 23. Required Examples of measures to minimize impacts to wetlands and reduce high impact buffer widths

Disturbance	<u>Required Examples of</u> Measures to Minimize Impacts
Lights	<ul style="list-style-type: none"> • Direct lights away from wetland
Noise	<ul style="list-style-type: none"> • Locate activity that generates noise away from wetland <p>If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source</p> <p>For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer</p>

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Toxic runoff	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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)
Change in water regime	<ul style="list-style-type: none"> Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	<ul style="list-style-type: none"> Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion; Place wetland and its buffer in a separate tract <u>or within dedicated open space or easement in a subdivision</u>, or protect with a conservation easement, where available
Dust	<ul style="list-style-type: none"> Use best management practices to control dust

Table 3. Wetland Buffer Requirements if Table 2 is NOT Implemented or Corridor NOT provided

Wetland Category	Buffer width (in feet) based on habitat score			
	3-4	5	6-7	8-9
Category I: Based on total score	100	130	180	200
Category I: Forested	100	130	180	200

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Category I: Bogs and Wetlands of High Conservation Value	250			
Category I: Alkali	200			
Category II: Based on total score	100	130	180	200
Category II: Vernal pool	200			
Category II: Forested	100	130	180	200
Category III (all)	80	130	180	200
Category IV (all)	50			

Table 4. Land Use Impact

Level of Impact from Proposed Change in Land Use	Types of Land Uses
High	<ul style="list-style-type: none"> ● Commercial ● Urban ● Industrial ● Institutional ● Retail sales ● Residential (more than 1 unit/acre) ● Conversion to high intensity agriculture (dairies,

	<p>nurseries, greenhouses, growing and harvesting crops requiring annual tilling, and raising and maintaining animals, etc.)</p> <ul style="list-style-type: none"> • High-intensity recreation (golf courses, ball fields, etc.) • Hobby farms
Moderate	<ul style="list-style-type: none"> • Residential (1 unit/acre or less) • Moderate-intensity open space (parks with biking, jogging, etc.) • Conversion to moderate-intensity agriculture (orchards, hay fields, etc.) • Paved trails • Building of logging roads • Utility corridor or right-of-way shared by several utilities and including access/maintenance road
Low	<ul style="list-style-type: none"> • Forestry (cutting of trees only) • Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.) • Unpaved trails • Utility corridor without a maintenance road and little or no vegetation management.

~~(4)~~(6) Increased Wetland Buffer Area Width. Buffer widths shall be increased on a case-by-case basis as determined by the Administrator when a larger buffer is necessary to protect wetland functions and values. This determination shall be supported by appropriate documentation, prepared by a qualified professional wetland biologist/consultant showing that it is reasonably related to protection of the functions and values of the wetland. The documentation must include but not be limited to the following criteria:

- (A) The wetland is used by a state or federally listed plant or animal species or has essential or outstanding habitat for those species, or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or
- (B) The adjacent land is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or
- (C) The adjacent land has minimal vegetative cover or slopes greater than 30 percent.

~~(5)~~(7) Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:

- (A) The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a “dual-rated” wetland with a Category I area adjacent to a lower-rated area;
- (B) The buffer is increased adjacent to the higher-functioning area of habitat or more-sensitive portion of the wetland and decreased adjacent to the lower-functioning or less-sensitive portion as demonstrated by a critical areas report from a qualified professional wetland biologist/consultant;

- (C) The total area of the buffer after averaging is equal to the area required without averaging; and
- (D) The buffer at its narrowest point is never less than either $\frac{3}{4}$ of the required width, ~~or 75 feet for Category I and II, 50 feet for Category III and 25 feet for Category IV, whichever is greater.~~

~~(6)~~(8) Buffer averaging to allow reasonable use of a parcel may be permitted when all of the following are met:

- (A) There are no feasible alternatives to the site design that could be accomplished without buffer averaging;
- (B) ~~Buffer vegetation shall be equal or greater in ecological function for t~~The averaged buffer ~~and~~ will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report from a qualified wetland professional;
- (C) The total buffer area after averaging is equal to the area required without averaging; and
- (D) The buffer at its narrowest point is never less than either $\frac{3}{4}$ of the required ~~standard~~ buffer width, ~~or 75 feet for Category I and II, 50 feet for Category III and 25 feet for Category IV, whichever is greater.~~

~~(7)~~(9) To facilitate long-range planning using a landscape approach, the Administrator may identify and pre-assess wetlands using the rating system and establish appropriate wetland buffer widths for such wetlands. ~~These ratings are only valid for 5 years.~~ The Administrator will prepare maps of wetlands that have been pre-assessed in this manner.

~~(8)~~(10) Measurement of Wetland Buffers. All buffers shall be measured perpendicular to and horizontal from the delineated wetland boundary. Walkways, driveways, and other paved areas will not be considered buffers or included in buffer area calculations.

~~(9)~~(11) Buffers on Mitigation Sites. All wetland mitigation sites shall have buffers consistent with the buffer requirements of this Chapter. Buffers shall be determined based on the expected or target category of the proposed wetland mitigation site.

~~(10)~~(12) Buffer Maintenance. Except as otherwise specified or allowed in accordance with this Chapter, wetland buffers shall be retained in an undisturbed or enhanced native vegetation condition. In the case of compensatory mitigation sites, removal of invasive non-native weeds is required for the duration of the mitigation performance assurance surety or bond.

~~(11)~~(13) Impacts to Buffers. Requirements for the compensation for impacts to buffers are outlined in Section 11.80.070.

~~(12)~~(14) Allowed Buffer Uses. The following uses may be allowed within a wetland buffer in accordance with the review procedures of this Chapter, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland :

- (A) Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.
- (B) Passive recreation. Passive recreation facilities designed and in accordance with an approved critical area report, including:
 - (i) Walkways and trails, provided that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent (25%) of

the wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five (5) feet in width for pedestrian use only. Raised boardwalks utilizing non-treated pilings may be acceptable.

- (ii) Wildlife-viewing structures.
 - (iii) Educational and scientific research activities.
- (C) Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, provided that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.
- (D) The harvesting of wild crops, naturally existing within the wetland, 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 wetland by changing existing topography, water conditions, or water sources.
- (E) Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, provided that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.
- (F) Enhancement of a wetland buffer through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.
- (G) Repair and maintenance of non-conforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.

~~(13) Wetland and Buffers Signs.~~

- ~~(A) Permanent signs. As a condition of any permit or authorization issued pursuant to this Chapter, the Administrator may require the applicant to install permanent signs along the boundary of a wetland or buffer.~~
- ~~(i) Permanent signs shall be made of an enamel coated metal face and attached to a metal post or another non-treated material of equal durability. Signs must be posted at an interval of one every fifty feet, or one per lot if the lot is less than fifty feet wide, and must be maintained by the property owner in perpetuity. The signs shall be worded as follows or with alternative language approved by the Administrator:~~

~~Protected Wetland Area Do Not Disturb
Contact Chelan County Community Development Department
Regarding Uses, Restrictions, and Opportunities for Stewardship~~

~~(ii) The provisions of Subsection (i) may be modified as necessary to assure protection of sensitive features or wildlife.~~

11.80.060 Wetland Reports

A wetlands report shall be prepared by a qualified professional wetland biologist/consultant when a development activity is proposed in or will impact a wetland or buffer. The expense of preparing the wetland report shall be borne by the applicant. The County may retain independent qualified consultants, at the expense of the applicant, to assist in review of reports. In addition to report elements required by Section 11.~~XX77~~.060, a written wetland report and the accompanying figures and/or plan sheets shall contain the following information, at a minimum:

- (1) The written report shall include at a minimum:
 - (A) For each wetland identified on-site and within 250 feet of the project area, provide: the wetland rating, including a description of and score for each function, per Section 11.77.040; required buffers; hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Tabulate acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site.
 - (B) An evaluation of the existing functions and habitat value of each wetland and adjacent buffer. Include reference for the method used and data sheets.
 - (C) An explanation of the proposed impact actions, including tabulating the area quantity (square feet or acres) of direct impacts to wetlands and wetland buffers based on the field delineation and survey.
 - (D) A discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land-use activity.
- (2) A copy of the site plan sheet(s) for the project must be included with the written report and must include, at a minimum:
 - (A) Maps (to scale) overlaid on current aerial photos depicting delineated and surveyed wetlands and required buffers in the project area, including buffers for off-site critical areas that may extend into the project area; the development proposal; other critical areas; grading and clearing limits for all land disturbing project elements; areas of proposed impacts to wetlands and/or buffers (include square footage estimates); and areas of proposed mitigation.
 - (B) Hydrologic analysis and mapping showing patterns of surface water movement and known subsurface water movement into, through, and out of the project area.

- (C) Location of all sample plots, test holes, and hydrologic monitoring stations, numbered to correspond with flagging in the field and field data sheets.;
- (D) A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including intrusion into the buffers of any critical areas. The written report shall contain an assessment of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project.

11.80.070 Wetland Mitigation

(1) Requirements for Compensatory Mitigation:

- (A) Compensatory mitigation for alterations to wetlands or buffers shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans--Version 1, (Ecology Publication #06-06- 011b, Olympia, WA, March 2006 or as revised), and Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington) (Publication #10-06-07, November 2010).
- (B) Mitigation ratios shall be consistent with Subsection 11.80.080(7) of this Chapter.
- (C) Mitigation requirements may also be determined using the credit/debit tool described in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report (Ecology Publication #11-06-015, August 2012 or as revised), consistent with Section 11.80.070(H) subsection H of this Chapter.

(2) Compensating for Lost or Affected Functions. Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland and/or buffer functions as those lost, except when either:

- (A) The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington state watershed assessment plan or protocol; or

(B) Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the County, such as replacement of historically diminished wetland types.

~~(B)~~(C) Buffers shall be provided for wetland mitigation associated with the mitigated wetland category.

(3) Approaches to Compensatory Mitigation. Mitigation for lost or diminished wetland and buffer functions shall rely on the approaches listed below.

- (A) Wetland mitigation banks. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the mitigation bank instrument. Use of credits from a wetland mitigation bank certified under Chapter 173-700 WAC is allowed if:
 - (i) The Administrator determines that it would provide appropriate compensation for the proposed impacts;
 - (ii) The impact site is located in the service area of the bank;

- (iii) The proposed use of credits is consistent with the terms and conditions of the certified mitigation bank instrument; and
 - (iv) Replacement ratios for projects using bank credits is consistent with replacement ratios specified in the certified mitigation bank instrument.
 - (B) ~~In-lieu Fee Mitigation:~~ Credits from an approved in-lieu_-fee program may be used when all of the following apply:
 - (i) The approval authority determines that it would provide environmentally appropriate compensation for the proposed impacts;
 - (ii) The proposed use of credits is consistent with the terms and conditions of the approved in-lieu_-fee program instrument;
 - (iii) Projects using in-lieu_-fee credits shall have debits associated with the proposed impacts calculated by the applicant's qualified professional wetland biologist/consultant using the credit assessment method specified in the approved instrument for the in-lieu_-fee program; and
 - (iv) The impacts are located within the service area specified in the approved in-lieu_-fee instrument.
 - (C) Permittee-responsible mitigation. In this situation, the permittee performs the mitigation after the permit is issued and is ultimately responsible for implementation and success of the mitigation. Permittee-responsible mitigation may occur at the site of the permitted impacts or at an off-site location within the same watershed. Permittee-responsible mitigation shall be used only if the applicant's qualified professional wetland biologist/consultant demonstrates to the approval authority's satisfaction that the proposed approach is ecologically preferable to use of a bank or ~~in-lieu fee~~ program, consistent with the criteria in this section.
- (4) Types of Compensatory Mitigation. Mitigation for lost or diminished wetland and buffer functions shall rely on a type listed below in order of preference. A lower-preference form of mitigation shall be used only if the applicant's qualified professional wetland biologist/consultant demonstrates to the approval authority's satisfaction that all higher-ranked types of mitigation are not viable, consistent with the criteria in this section.
 - (A) Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into:
 - (i) Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Re-establishment results in a gain in wetland acres (and functions). Activities could include removing fill material, plugging ditches, or breaking drain tiles.
 - (ii) Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain ~~or return tidal influence to a wetland.~~

- (B) Establishment (Creation): The manipulation of the physical, chemical, or biological characteristics of a site to develop a wetland on an upland or deepwater site where a wetland did not previously exist. Establishment results in a gain in wetland acres. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species.
- (i) If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the approval authority may authorize creation of a wetland and buffer upon demonstration by the applicant's qualified professional wetland biologist/consultant that:
 - (a) The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that creation of a wetland at the site will not likely cause hydrologic problems elsewhere;
 - (b) Adjacent land uses and site conditions do not jeopardize the viability of the proposed wetland and buffer (e.g., due to the presence of invasive plants or noxious weeds, stormwater runoff, noise, light, or other impacts); and
 - (c) The proposed wetland and buffer will eventually be self-sustaining with little or no long-term maintenance.
- (C) Enhancement. The manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Activities typically consist of planting vegetation, controlling non-native or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these activities. Applicants proposing to enhance wetlands or associated buffers shall demonstrate how the proposed enhancement will increase the wetland's ~~and~~/buffer's functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.
- (D) Protection/Maintenance (Preservation). Removing a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This includes the purchase of land or easements, or repairing water control structures or fences. This term also includes activities commonly associated with the term preservation. Preservation does not result in a gain of wetland acres. Permanent protection of a Category I or II wetland and associated buffer at risk of degradation can be used only if:
- (i) The approval authority determines that the proposed preservation is the best mitigation option;
 - (ii) The proposed preservation site is under threat of undesirable ecological change due to permitted, planned, or likely actions that will not be adequately mitigated under existing regulations;

- (iii) The area proposed for preservation is of high quality or critical for the health of the watershed or basin due to its location. Some of the following features may be indicative of high-quality sites:
 - (a) Category I or II wetland rating (using the wetland rating system for western Washington);
 - (b) Rare or irreplaceable wetland type (for example, bogs, mature forested wetlands, estuarine wetlands) or aquatic habitat that is rare or a limited resource in the area;
 - (c) The presence of habitat for priority or locally important wildlife species; or also list has provides biological and/or hydrological connectivity;
 - (d) Provides biological and/or hydrological connectivity; or
 - (e) Priority sites in an adopted watershed plan.
 - (iv) Permanent preservation of the wetland and buffer will be provided through a conservation easement or tract held by an appropriate natural land resource manager, such as a land trust.
 - (v) The approval authority may approve other legal and administrative mechanisms in lieu of a conservation easement if it determines they are adequate to protect the site.
 - (vi) Ratios for preservation in combination with other forms of mitigation generally range from 10:1 to 20:1, as determined on a case-by-case basis, depending on the quality of the wetlands being impacted and the quality of the wetlands being preserved. Ratios for preservation as the sole means of mitigation generally start at 20:1.
- (5) Location of Compensatory Mitigation. Compensatory mitigation actions shall generally be conducted within the same sub-drainage basin and on the site of the alteration except when the applicant can demonstrate that off-site mitigation is ecologically preferable. The following criteria will be evaluated when determining whether the proposal is ecologically preferable. When considering off-site mitigation, preference should be given to using alternative mitigation, such as a mitigation bank, an in-lieu-fee program, or advance mitigation.
- (A) There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);
 - (B) On-site mitigation would require elimination of high-quality upland habitat.
 - (C) Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the altered wetland.
 - (D) Off-site locations shall be in the same sub-drainage basin unless:

- (i) Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the County and strongly justify location of mitigation at another site; or
 - (ii) Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;
 - (iii) Fees are paid to an approved in-lieu fee program to compensate for the impacts.
- (E) The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland.
- (6) Timing of Compensatory Mitigation. It is preferred that compensatory mitigation projects be completed prior to activities that will disturb wetlands. At the least, it is preferred that compensatory mitigation construction shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
- (A) The Administrator may authorize a one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified professional wetland biologist/consultant as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the Administrator.
- (B) Bonding according to the provisions of Section 11.~~XX77~~.050(1) for the cost of uncompleted activities is an acceptable alternative to completion where a contract to complete the work is in force.

(7) Wetland Mitigation Ratios:

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

(8) Buffer Mitigation Ratios. Impacts limited to buffers shall be mitigated at a minimum 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

(9) Credit/Debit Method. To more fully protect functions and values, and as an alternative to the mitigation ratios found in the joint guidance “Wetland Mitigation in Washington State Parts I and II” (Ecology Publication #06-06-011a-b, Olympia, WA, March, 2006), the Administrator may allow mitigation based on the “credit/debit” method developed by the Department of Ecology in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report” (Ecology Publication #11-06-015, August 2012, or as revised).

11.80.080 Compensatory Mitigation Plan and Monitoring

- (1) Compensatory Mitigation Plan. When a project involves wetland and/or buffer impacts, a compensatory mitigation plan prepared by a qualified professional wetland biologist/consultant shall be required. The expense of preparing the mitigation plan shall be borne by the applicant. The County may retain independent qualified consultants, at the expense of the applicant, to assist in review of the plan. The plan shall meet the following minimum standards:
 - (A) Wetland Critical Area Report. A critical area report for wetlands must accompany or be included in the compensatory mitigation plan and include the minimum parameters described in Section 11.80.050.
 - (B) Compensatory Mitigation Report. The report must include a written report and plan sheets that must contain, at a minimum, the following elements. Full guidance can be found in Wetland Mitigation in Washington State– Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised).
 - (C) The written report must contain, at a minimum:
 - (i) The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the compensatory mitigation report; a description of the proposal; a summary of the impacts and proposed compensation concept; identification of all the local, state, and/or federal wetland-related permit(s) required for the project; and a vicinity map for the project.

- (ii) Description of how the project design has been modified to avoid, minimize, or reduce adverse impacts to wetlands.
 - (iii) Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding lands uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on Section 11.80.060 of this Chapter.
 - (iv) Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are NOT undertaken (i.e., how would this site progress through natural succession?).
 - (v) Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas.
 - (vi) Include illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions
 - (vii) A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands.
 - (viii) A description of the proposed mitigation construction activities and timing of activities.
 - (ix) Performance standards (measurable standards for years post- installation) for upland and wetland communities, a monitoring schedule, and a maintenance schedule and actions proposed by year.
 - (x) A discussion of ongoing management practices that will protect wetlands after the development project has been implemented, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands).
 - (xi) ~~Pursuant to Section 11.77.050(1), A surety estimate for the~~ financial guarantee of the entire compensatory mitigation project, including the following elements, is required: site preparation, plant materials, construction materials, installation oversight, maintenance twice per year for up to five (5) years, annual monitoring field work and reporting, and contingency actions for a maximum of the total required number of years for monitoring. The financial guarantee shall run concurrent with the prescribed monitoring period.
 - (xii) Proof of establishment of Notice on Title for the wetlands and buffers on the project site, including the compensatory mitigation areas.
- (D) The scaled plan sheets for the compensatory mitigation must contain, at a minimum:
- (i) Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions.

- (ii) Existing topography, ground-proofed, at one or two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be impacted, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation.
- (iii) Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes.
- (iv) Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this Chapter.
- (v) A planting plan for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species by community type, and timing of installation.

~~(2) Buffer Mitigation Ratios. Impacts to buffers shall be mitigated at a minimum 1:1 ratio.~~

~~Compensatory buffer mitigation shall replace those buffer functions lost from development.~~

~~(3)~~(2) Monitoring. Mitigation performance monitoring shall be done to the guidance and applicable content standards (denoting means and methods) of Corps of Engineers Regulatory Guidance Letter 08-03 which has been determined by Ecology to be consistent with Washington's interagency wetland mitigation guidance. The monitoring period is determined by the Administrator consistent with this section. Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met. For mitigation containing exclusively herbaceous vegetation a minimum monitoring period of one year may be prescribed or until performance criteria are met. For mitigation containing scrub-shrub vegetation, three to five years or until performance criteria are met. Monitoring shall be required for a minimum of five years, and potentially more years, when any of the following conditions apply:

- (A) The project does not meet the performance standards identified in the mitigation plan;
- (B) The project does not provide adequate replacement for the functions and values of the impacted critical area;
- (C) The project results in unanticipated changes to hydrology of the impacted and/or mitigated wetland;
- (D) The project involves establishment of mixed scrub-shrub and forested plant communities, which require longer time for establishment; or
- (E) The project involves wetland creation.

~~(4)~~(3) Monitoring Reports. Monitoring Reports shall be submitted at site completion (as-built) and annually for up to three years following construction and every two years thereafter pursuant to the approved monitoring period.

~~(5)~~(4) Advance Mitigation. Mitigation for projects with pre-identified impacts to wetlands may be constructed in advance of the impacts if the mitigation is implemented according to federal rules, state policy on advance mitigation, and state water quality regulations consistent with Interagency Regulatory Guide: Advance Permittee - Responsible Mitigation (Ecology Publication #12-06-015, Olympia, WA, December 2012).

~~(6)~~(5) Alternative Mitigation Plans. The Administrator may approve alternative wetland mitigation plans that are based on best available science, such as priority restoration plans that achieve restoration goals identified in the SMP. Alternative mitigation proposals must provide an equivalent or better level of protection of wetland functions and values than would be provided by the strict application of this chapter. The Administrator shall consider the following for approval of an alternative mitigation proposal:

- (A) The proposal uses a watershed approach consistent with Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington) (Ecology Publication #10-06-07, November 2010).
- (B) Creation or enhancement of a larger system of natural areas and open space is preferable to the preservation of many individual habitat areas.
- (C) Mitigation according to Section 11.80.070(4) is not feasible due to site constraints such as parcel size, stream type, wetland category, or geologic hazards.
- (D) There is clear potential for success of the proposed mitigation at the proposed mitigation site.
- (E) The plan shall contain clear and measurable standards for achieving compliance with the specific provisions of the plan. A monitoring plan shall, at a minimum, meet the provisions in Section 11.80.070(9).
- (F) The plan shall be reviewed and approved as part of overall approval of the proposed use.
- (G) A wetland of a different type may be justified based on regional needs or functions and values; the replacement ratios may not be reduced or eliminated unless the reduction results in a preferred environmental alternative.
- (H) Mitigation guarantees shall meet the minimum requirements as outlined in Section 11.80.070(9)(C)(ix).
- (I) Qualified professionals in each of the critical areas addressed shall prepare the plan.
- (J) The County may consult with agencies with expertise and jurisdiction over the critical areas during the review to assist with analysis and identification of appropriate performance measures that adequately safeguard critical areas.

Chapter 11.82

AQUIFER RECHARGE AREAS OVERLAY DISTRICT (AROD)

Sections:

- 11.82.010 Classification.
- 11.82.020 Designation.
- 11.82.030 Procedure.
- 11.82.040 Evaluation criteria.
- 11.82.050 ~~Hydrogeologic evaluation~~Determining vulnerability rating.
- 11.82.060 Performance standards for uses determined to have a medium or high aquifer vulnerability rating.
- ~~11.82.070—Subdivision notation.~~
- ~~11.82.080—Reasonable-use exemption.~~
- ~~Annex A—Critical materials use activity list.~~
- ~~Annex B—Vulnerability matrix.~~

11.82.010 Classification.

(1) Classification is based on an evaluation of the aquifer vulnerability defined as the combination of potential for contaminant loading of a proposed land use, and the susceptibility of the aquifer to contamination at the proposed site. ~~These factors identify a range, which shall be used to determine the relative vulnerability to contamination of an area.~~

(2) Sites identified by this chapter as having a medium or high aquifer vulnerability rating shall be subject to the protection measures of this chapter.

11.82.020 Designation.

(1) There is insufficient scientific data at this time, to determine with any specificity the location of areas having a critical recharging effect on aquifers used for potable water within the boundary of Chelan County. However, the best available science suggests that an aquifer ~~–~~ susceptibility determination will allow Chelan County to designate critical aquifer recharge areas using a conservative approach, which provides a worst case scenario for contaminant movement into and through the subsurface. Therefore, any area found via this chapter to be an area having a medium or high aquifer susceptibility rating shall be designated a critical aquifer recharge area (CARA), ~~and a map or maps maintained by the Chelan County department of building/fire safety and planning shall set forth such areas.~~

(2) In addition, sole source aquifer recharge areas designated pursuant to the Federal Safe Drinking Water Act, areas established for special protection pursuant to a groundwater management program, Chapters 90.44, 90.48 and 90.54 RCW, and Chapters 173-100 and 173-200 WAC; areas designated for wellhead protection pursuant to the Federal Safe Drinking Water Act; ~~and~~ aquifer recharge areas mapped and identified by a qualified groundwater professionalscientist ~~and~~ available from Chelan County shall also be designated as critical aquifer recharge areas.

11.82.030 Procedure.

(1) An applicant seeking to develop property which requires a development permit, not otherwise exempted from the requirements of this chapter, shall submit with the application a certified statement, on a form provided by the Chelan County Community Development ~~d~~Department of building, fire safety, and planning, which lists ~~each of the~~ criteria (6) through (10) as set forth in Section 11.82.040 and indicate whether the criteria applyes or does not apply to the site or development. Any development

Commented [HCM(1): Caution- review the use of susceptibility and vulnerability to ensure the correct word is used.

Commented [CW2R1]: Okay as writ

Commented [BS3R1]: This is OK as is. At second look, use of "susceptibility" is correct. We are talking here about properties of the aquifer only, not the proposed activity.

Commented [HCM(4): How does the County plan to tract where these areas are for future development proposal.

Commented [CW5R4]: Will reference back to the BAS report

Commented [BS6R4]: The County currently does not map these. Aspect's CARA BAS Report recommends developing a CARA map that would capture these.

Chelan County Code
DRAFT Chapter 11.82 AQUIFER RECHARGE AREAS OVERLAY DISTRICT (AROD)

application that fails to contain this statement or fails to indicate whether any one of the criteria applies or does not apply, shall be rejected and only accepted upon resubmission of the completed statement. "Unknown" or similar responses will not be accepted.

(2) If the ~~Administrator determines the~~ development meets ~~one or more~~ criteria (1) through (5), (4), (2), (3), or (4) under Section 11.82.040, ~~or if the site or development meets any two of the remaining criteria in Section 11.82.040,~~ the department shall require hydrogeologic evaluation as described in Section 11.82.050. ~~direct the applicant to determine the vulnerability rating for the development pursuant to Section 11.82.050.~~ If the development has a ~~high or medium~~ or high vulnerability rating, the development shall be subject to the performance standards of Section 11.82.060.

(3) If ~~the Administrator determines that criteria (1) through (11)~~ criteria (1) through (11) of Section 11.82.040 do not apply to the development and an applicant's statement asserts that the criteria ~~(6) through (10)~~ (6) through (10) of Section 11.82.040 do not apply to the development, ~~the~~ department will accept the statement and proceed with the permitting or approval process. Except, if the department has or obtains information prior to the permit or approval being finalized, which clearly establishes the applicant's statement is incorrect. In which case, the applicant will be advised in writing of the inconsistent information and advised to either (A) provide an amended statement adding the evaluation criteria as being applicable and complete a hydrogeologic evaluation ~~determine the vulnerability rating~~ of the development pursuant to Section 11.82.050, or (B) present sufficient countering information clearly establishing that the basis for the department's concern is incorrect. If the applicant selects to proceed under (B), upon receipt of the applicant's information, the department shall review the information and obtain whatever additional assistance may be required to resolve the issue. The final determination as to whether a determination of vulnerability is required shall be made by the ~~A~~ administrator.

(4) Development proposals for improvements to an existing or new construction of a single-family residential dwelling, accessory dwelling unit, or accessory building that is connected to a public sewer system shall be exempt from hydrogeologic evaluation under Section 11.82.050 except when criteria (6) through (11) of Section 11.82.040 apply.

(5) Development proposals for improvements to an existing single-family residential dwelling, accessory dwelling unit, or accessory building that uses an on-site sewage system shall be exempt hydrogeologic evaluation under Section 11.82.050 except when criteria (6) through (11) of Section 11.82.040 apply or when the proposal will result in increased effluent to the on-site sewage system.

11.82.040 Evaluation criteria.

The ~~department~~ applicant shall ~~be required to determine the an aquifer~~ vulnerability evaluation rating for any development permit, not otherwise exempted from this chapter, if the site or development meets ~~one of~~ one of ~~criteria (1) through (11), (2), (3), or (4) or meets two or more of the remaining criteria~~ below:

(1) Within a wellhead protection area designated under Chapter 246-290 135 WAC;

(2) Within an aquifer recharge area mapped and identified by a qualified groundwater professional ~~scientist~~;

(3) The site will be utilized for hazardous substance (as now or hereafter defined in RCW 70.105D.020(7)) processing, storage or handling in applications or quantities larger than is typical of household use;

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~~(4) The site will be utilized for hazardous waste treatment and storage as set forth in Chapter 70.105 – RCW, Hazardous Waste Management, as now or hereafter amended;~~

~~(5) The site contains highly permeable soils, which include soil types 1a, 24b and 32a under WAC 246-272A-022041004, Table V4 and soils mapped by U.S. Department of Agriculture Natural Resources Conservation Service as having saturated hydraulic conductivity (Ksat) classification of Moderately High or identified as Hydrologic Soil Group “A”;~~

~~(46) Within a sole source aquifer recharge area designated pursuant to the Federal Safe Drinking Water Act;~~

~~(57) Within an area established for special protection pursuant to a groundwater management program, Chapters 90.44, 90.48 and 90.54 RCW, and Chapters 173-100 and 173-200 WAC;~~

~~(6) The site will be utilized for hazardous substance (defined in Chapters 70.105 RCW) processing, storage or handling in applications or quantities larger than is typical of household use;~~

~~(7) The site is currently or will be utilized for commercial or industrial activities listed in the U.S. Environmental Protection Agency’s Potential Sources of Drinking Water Contamination Index that can be found in Appendix A to Department of Ecology’s Critical Aquifer Recharge Area Guidance Document;~~

(8) The development involves a major or short subdivision and includes present or future plans to construct three or more dwelling units where the dwelling units will not be connected to a public sewer system and any of the lots are less than one net acre in size;

(9) The proposed commercial and industrial site is not on a public sewer system and the main structure exceeds four thousand square feet;

(10) The proposed use is as a commercial feedlot;

~~(11) The site will be used for aboveground application of sewage or sludge;~~

~~(11) The development is within two hundred feet of the ordinary high water mark of a perennial river, stream, lake or pond.~~

11.82.050 Hydrogeologic evaluation. Determining vulnerability rating.

~~(1) Development proposals meeting any one of the evaluation criteria under Section 11.82.040 will require hydrogeologic evaluation completed by a qualified groundwater professional in accordance with this section. A minimum of a tier-one evaluation shall be completed. When required, tier-one and tier-two evaluations may be combined in a single report completed by the same qualified groundwater professional. General.~~

~~(2) Tier-one hydrogeologic evaluation. A tier-one evaluation comprises the first step to determine aquifer vulnerability by providing an assessment of aquifer susceptibility to contamination. A tier-one evaluation report shall include the following:~~

~~(A) A summary of readily available existing information for the site vicinity, including hydrogeological and other groundwater reports. Cite all references and information used in the evaluation preparation;~~

Commented [HCM(7): It may be beneficial to define this or provide a distance.

Commented [CW8R7]: Don’t make change

Commented [BS9R7]: Concur. Leave it to the GW scientist to determine.

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(B) Hydrogeologic characterization of the aquifer based on readily available existing information including permeability and thickness of the vadose zone, depth to groundwater, presence of confining layers and bedrock, estimated hydraulic conductivity of the saturated zone, and groundwater flow direction and gradient;

(C) Review of readily available existing groundwater quality information to characterize existing water quality conditions;

(D) Confirmation of the applicability of evaluation criteria (1) through (5) under Section 11.82.040 to the site proposed for development;

(E) Determination of a rating of low, medium, or high aquifer susceptibility to contamination based on properties of the aquifer as determined by the qualified groundwater professional;

(F) Recommendations for further study, including a specific recommendation for a tier-two evaluation when aquifer susceptibility is rated as medium or high, or whether more information is needed to complete an aquifer susceptibility rating.

(G) If, in the opinion of the groundwater professional, a tier-two evaluation is not necessary, the tier-one evaluation shall provide recommendations for best management practices and other measures to mitigate probable worse-case scenario release of contaminants.

(3) Tier-two hydrogeologic evaluation. A tier-two evaluation addresses aquifer vulnerability for subject development proposals. A tier-two evaluation shall be completed for developments meeting criteria (6) through (10) under Section 11.82.040, for sites determined as having an aquifer susceptibility rating of medium or high or as otherwise recommended by a qualified groundwater professional in a tier-one evaluation report, or as directed by the administrator to resolve uncertainty following completion of a tier-one evaluation. A tier-two evaluation report shall include the following:

(A) All elements of a tier-one evaluation or confirmation of findings from a tier-one evaluation if the evaluations are completed by different qualified groundwater professionals or if five years have passed since the tier-one evaluation was completed;

(B) Locations of known land-use activities listed in the U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index located within one thousand feet of the proposed development;

(C) Locations of releases of contaminants to the environment reported to Department of Ecology within one thousand feet of the proposed development;

(D) Locations of public water supply wells and wellhead protection areas within one half mile of the development proposal and locations of permit-exempt wells within one thousand feet of the proposed development;

(E) Locations of surface water bodies and springs within one thousand feet of proposed development;

(F) Determination of a rating of low, medium, or high aquifer vulnerability based on aquifer susceptibility and potential for contamination loading resulting from the proposed development as determined by the qualified groundwater professional;

Commented [HCM(10): Are there areas of known concern?

Commented [CW11R10]: Bill to make update

Commented [BS12R10]: No. There are no significant areas of degraded GW quality within the County. This line is intended to require a review of background GW quality so that current conditions can be evaluated and document as a baseline for future changes.

Commented [HCM(13): Consider "contamination" or something similar to section (G)(i) below

Commented [CW14R13]: Yes

Commented [BS15R13]: Addressed.

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(G) For development proposals having medium or high aquifer vulnerability ratings:

(i) Discussion of potential impacts to groundwater quality resulting from spills or acute releases of contaminants and long-term loading resulting from proposed activities, including evaluation of probable worse case spill scenario;

(ii) Recommendations for further study, including cumulative contaminant loading evaluation and groundwater monitoring;

(iii) Recommendations for mitigating measures, including BMPs and spill response planning.

(H) Recommendations for further study, or whether more information is needed to complete a vulnerability rating.

~~The vulnerability matrix is used to determine the vulnerability of the development and to rate it as a high, medium or low rating. This can be done by determining the "contaminant loading potential" of a proposed land use as outlined in subsection (4) of this section and the natural "susceptibility" of the site as outlined in subsection (3) of this section. A vulnerability rating is determined by numerical value for a proposed land use based on contaminant loading potential and susceptibility factors. When a proposed use is determined to have a medium or high vulnerability rating, protection measures, as specified in Section 11.82.060, shall be implemented that protect the potable water supply.~~

~~(2) Determining Susceptibility. The three basic components to determine a site's susceptibility are:~~

- ~~— Permeability of the vadose zone;~~
- ~~— Depth to groundwater;~~
- ~~— Slope.~~

~~(A) Permeability of the Vadose Zone. The vadose zone is composed of both the soil and the geologic materials underlying the soil. To adequately determine the overall ease with which water will travel from land surface to the aquifer, it is necessary to determine the overall permeability of both soil and geologic media. Soil permeability can be determined through use of the Chelan County soil survey developed by the USDA Soil Conservation Service, Table 6, pp. 66-73. The values shown on these pages~~

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are given in the inches per hour that water moves downward through a saturated soil. A determination of the permeability of the geologic material underlying the soil is more problematic.
 (i) Incrementally, the permeability of local soils (upper vadose zone) is grouped into four ranges, and can be assigned a relative value to be used for determining susceptibility on the matrix. These are:

Soil Permeability Table Based on Soil Survey

Condensed Description	Soil Survey Description	Permeability (in./hr.)	Permeability (cm./sec.)	Rating
Very slow	Very slow	<0.06	<0.00453	0
Slow	Slow	0.06—0.20	0.00453—0.1041	1
	Moderately slow	0.20—0.60	0.0131—0.0423	
Moderate	Moderate	0.60—2.0	0.0423—0.1411	2
	Moderately rapid	2.0—6.0	0.1411—0.4233	
Rapid	Rapid	6.0—20	0.4233—1.411	3
	Very rapid	>20	>1.411	

Where conclusive information does not exist for permeability of the soil, a relative value of 3 will be assigned.

(ii) Permeability of the lower vadose zone can be estimated using the geologic matrix table below by determining the material type and assigning the appropriate permeability range for the material(s) overlying the uppermost aquifer. In cases where heterogeneous materials are encountered, the least

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permeable layer with a thickness of not less than five feet shall determine the overall permeability to be applied to the entire vadose zone, excluding the soil layer.

Geologic Matrix Table

Condensed Description	Geologic Matrix	Permeability (cm./sec.)	Rating
Very slow	Unfractured Igneous or Metamorphic Bedrock, Shale	10⁻¹³—10⁻⁹	0
	Marine Clay, Clay, Dense Sandstone, Hardpan	10⁻⁹—10⁻⁷	
Slow	Loess, Glacial Till, Fractured Igneous or Metamorphic Bedrock	10⁻⁸—10⁻⁵	1
	Silt, Clayey Sands, Weathered Basalt	10⁻⁷—10⁻³	
Moderate	Silty Sands, Fine Sands, Permeable Basalt	10⁻⁴—10⁻¹ (0.0001—0.1)	2
	Clean Sands, Karst Limestone	>0.1—1.0	
Rapid	Sand and Gravel	>1.0—10	3
	Gravel	>10—100+	

Where conclusive information does not exist for permeability of the geologic matrix, a relative value of 3 will be assigned.

(B) Depth to Groundwater. Depth to groundwater can be determined by utilizing local well log information or specific well information for the site. Depth to groundwater is also assigned a relative value used for determining susceptibility on the matrix. These are:

Depth to Groundwater Table

Condensed Description	Depth to Water (Feet)	Rating
Very Low	Confined Aquifer	0
	>50	
Low	25—50	1
Moderate	10—25	2
High	0—10	3

Where conclusive information does not exist for depth to groundwater, a relative value of 3 will be assigned.

(C) Slope. Slope, or gradient, is related to the infiltration characteristics of an area. The steeper the slope, the less infiltration of surface waters occur. Slope is assigned a relative value used for determining susceptibility on the matrix. These are:

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Slope—As a Percent	Slope Relative Value
>45%	0
>30%—45%	1
15%—30%	2
<15%	3

Where conclusive information does not exist for slope, a relative value of 3 will be assigned.

(3) Determining the Susceptibility Rating. A susceptibility rating is determined by adding the relative values of permeability of the soils and geologic matrix of the vadose zone, depth to groundwater and slope. This is a baseline determination for susceptibility. The range of values are as follows:

High susceptibility rating = total range from	8—12 High
Medium susceptibility rating = total range from	4—7 Medium
Low susceptibility rating = total range from	0—3 Low

Low Susceptibility	Medium Susceptibility	High Susceptibility
0—3	4—7	8—12

(4) Determining the Contaminant Loading Rating.

(A) Contaminant loading potential is dependent on the presence of critical materials on the site. A critical material is a substance present in sufficient quantity that its accidental or intentional release would result in the impairment of the aquifer water to be used as potable drinking water. For the purpose of administration of this section, the critical materials use activity list in Annex A is established. (B) This is a list of commercial and industrial activities known to use critical materials, coupled with the names of critical materials normally associated with the activity. Proposed activities fitting one of the general business descriptions provided or having one of the specified standard industrial classification (SIC) codes should be assumed to have critical material on site with a high contaminant loading potential unless the proponent provides assurance otherwise. Activities with a high contaminant loading potential have a high contaminant loading rating.

Contaminants in addition to those listed on the critical material activities list may be found on some sites. In some cases SIC codes other than those listed may be associated with a general category. Sites or uses which the Department believes would be utilized for hazardous substance (as now or hereafter defined in RCW 70.105D.020(7)) processing, storage or handling in applications or quantities larger than is typical of household use or sites which the Department believes will be utilized for hazardous waste treatment and storage as set forth in Chapter 70.105 RCW, Hazardous Waste Management, as now or hereafter amended, but may not be covered in the critical materials use activity list, shall also be

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~~considered to be a critical material or critical material use activity with a high contaminant loading potential and rating, unless the proponent provides assurance otherwise.~~

~~Those uses or activities not determined to have a high contaminant loading rating are considered to have a low contaminant loading potential and rating.~~

~~(C) The following process shall be used to determine whether or not critical materials are involved:~~

~~(i) An initial screening will be performed by the department by comparing the proposed use, and upon request by said department, other pertinent information as provided by the proponent at his/her expense with the critical materials use activity list. The department will exercise any discretion in judgment in the favor of aquifer protection.~~

~~(a) If the proposed use is judged to be on the critical materials use activity list, the department shall require the applicant to provide the department with a list of materials, including quantities, to be used, stored or transported as associated with the proposed activity. Additional information shall also be provided by the proponent at his or her expense if requested by the department.~~

~~(b) After the review of the information supplied by the applicant, the department may confirm the designation as a critical materials use activity or nullify the tentative designation.~~

~~(c) The applicant may respond by accepting the designation as a critical materials use activity or may appeal to the board of adjustment, in writing, within twenty calendar days.~~

~~(l) The DOE, DOH, and the Chelan County health district shall be notified of all hearing proceedings and legal advertising consistent with that for appeals to the hearing examiner.~~

~~(H) The hearing examiner shall have authority to request additional information from either the appellant or the applicant, as appropriate, and at their expense.~~

~~(d) If the proposed use is not on the list, the department may designate the activity as not involving critical materials or may exercise subsection (4)(C)(i)(e) of this section.~~

~~(e) If a proposed use or contaminant, which the department believes will be present on the site, is not located on the critical materials use activity list but meets the criteria under subsection (4)(B) or (C) of this section, the department shall act to designate the proposed use as a critical materials use activity and proceed as in subsection (4)(C)(i)(a) of this section. The department may consult with such persons as may be appropriate to assist in the determination. The department may eventually designate the~~

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~~activity as a critical materials use activity. The process would then proceed as in subsection (4)(C)(i)(b) of this section, and the applicant may respond as in subsection (4)(C)(i)(c) of this section.~~

~~(5) Vulnerability Matrix.~~

~~(A) A determination of a high, medium, or low vulnerability rating is determined from the vulnerability matrix by identifying susceptibility and contaminant loading ratings.~~

Susceptibility		
High susceptibility rating =		
Total range from	8—12	High
Medium susceptibility rating =		
Total range from	4—7	Medium
Low susceptibility rating =		
Total range from	0—3	Low

Contaminant Loading	
High Contaminant Loading Rating =	High
Low Contaminant Loading Rating =	Low

~~(B) After determining the susceptibility and contaminant loading ratings for the proposed use and site, check the appropriate box on each axis of the vulnerability matrix located in Annex B to determine the vulnerability rating.~~

11.82.060 Performance standards for uses determined to have a medium or high aquifer vulnerability rating.

(1) General. All development regulated by this chapter which has a ~~high or~~ medium or high aquifer vulnerability rating, as determined by this chapter, shall be required to meet the requirements of this section. These are considered minimum requirements and additional requirements may be required by the Administrator based on review of the Tier-one~~1~~ or Tier-two~~2~~ Hydrogeologic Report or other available information.

(2) Application of Aquifer Recharge Area Performance Standards.

(A) ~~Certain R~~ residential dwelling units and their accessory uses are exempt under Section 11.82.030 (4) and (5). are exempt from the aquifer recharge area regulations under this chapter. New residential subdivisions are subject to the provisions of subsection (9) of this section.

(B) The standards for approval of development regulated by this chapter shall be defined in subsequent sections.

(C) The assurance that these standards are applied to development regulated by this chapter is the responsibility of the A administrator.

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(i) Appropriate standards for approval as applied to development regulated by this chapter shall be the responsibility of the Chelan County Community Development Department ~~of building, fire safety, and planning~~ and hearing examiner as otherwise described in agency rules.

(ii) Appropriate safeguards, to be included in the design of buildings newly constructed or remodeled, shall be the responsibility of the Chelan County Community Development Department ~~of building, fire safety and planning.~~

(iii) Site planning and other considerations for areas outside of buildings shall be the responsibility of the appropriate office or agency as may be elsewhere described in agency rules.

(iv) Appropriate sanitary, industrial and solid waste disposal practices employed shall be the responsibility of the Chelan-Douglas health district or other appropriate agency (e.g., Washington State Departments of Health or Ecology ~~OH, DOE~~).

(v) When the occupancy of a building changes, any new commercial or industrial occupant shall not operate without a certificate of occupancy as issued by the Chelan County Community Development Department ~~of building, fire safety and planning~~; such certificate of occupancy is subject to review pursuant to subsection (2)(C) of this section.

(D) If the applicant does not have a specific proposal, the department shall recommend that the action be conditioned, or shall so condition a license/permit, with the performance criteria of subsections (3) through (11) of this section.

(E) Even though an activity is permitted in the underlying zone classification, any activity which, following review in accordance with this chapter, is determined to have a medium or high vulnerability rating shall be required to conform to the conditions set forth in subsections (3) through (11) of this section.

(3) Agricultural Activities. Agricultural activities shall incorporate best management practices concerning waste disposal, fertilizer use, pesticide use, and stream corridor management. ~~If necessary, farmers shall seek technical assistance from the Chelan County Conservation District, WSU cooperative extension agent and local fieldmen.~~

(4) Landfills. Landfills, junkyards, salvage yards and auto wrecking yards are prohibited within designated critical aquifer recharge areas. Landfills are subject to Chapter 173-351 WAC. Landfills, junkyards, salvage yards and auto wrecking yards which are proposed to be located outside of designated critical aquifer recharge areas and which have a high or medium or high vulnerability rating must satisfactorily demonstrate that potential negative impacts to the groundwater would be overcome in such a manner as to prevent adverse impacts to groundwater.

(5) Parks, Schools and Recreation Facilities. Fertilizer, herbicide and pesticide management practices of schools, parks, golf courses and other nonresidential facilities that maintain large landscaped areas shall be evaluated in relation to best management practices as recommended by the cooperative extension service.

(6) Commercial, Industrial and Mining Uses.

(A) For the purposes of this section, all forms of mining activities shall be considered an industrial use.

Commented [HCM(16)]: Are there any of these in existence?

Commented [CW17R16]: No changes

Commented [BS18R16]: Noted.

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(B) Contingency Plans.

(i) All commercial and industrial uses that are rated as having a medium or high vulnerability shall submit a contingency plan that identifies:

(a) Types of hazardous ~~wastes~~ substances (defined in Chapters 70.105 RCW) and contaminants listed in U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index that would be stored or used for the proposed land use;

(b) On-site containment facilities designed to handle accidental releases of materials identified in 11.82.060 (6)(B)(i)(a) ~~critical materials~~;

(c) Spill response and notification procedures.

(C) Changes in occupancy of an existing site and/or expansions of existing activities are subject to complete evaluation by the county under the provisions of this chapter.

(D) All activities ~~designated as critical materials use activities~~ listed in U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index shall only be approved as conditioned so that:

(i) Facilities will be designed and built so that any spilled or leaked materials are contained on-site; and

(ii) Facilities will be designed and built so that any spilled or leaked materials cannot infiltrate into the ground; and

(iii) No permanent disposal of any waste containing critical materials shall be allowed on-site.

(E) Commercial or industrial activities listed in U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index ~~designated as critical materials use activities~~ shall have specially designed and installed storm runoff drainage facilities in areas where spills might occur. Such facilities shall be designed and installed to:

(i) Prevent the comingling of storm runoff and critical materials spills; and

(ii) Enhance spill cleanup procedures.

(F) ~~All mining activities shall comply with current Washington Department of Natural Resources requirements for surface mining and Washington Department of Ecology's Sand and Gravel General Permit. Mining activities in areas determined to have a medium or high vulnerability shall comply with the following conditions: shall submit a study completed by a qualified groundwater professional demonstrating that the proposed activity will not cause contaminants to enter the aquifer and that the proposed activity will not adversely affect the recharging of the aquifer. The Administrator shall determine whether these conditions are adequately addressed in the Tier-two hydrogeologic evaluation and require additional reporting as needed.~~

(i) ~~Six foot fencing shall be provided and maintained in good condition at all times in the following locations:~~

(a) ~~Exterior boundary of any portion of any site on which active operations exist; and~~

Commented [HCM(19): Check this reference because the tables identifying critical materials were removed.

Commented [CW20R19]: Will update

Commented [BS21R19]: Addressed.

Commented [HCM(22): There are some conditions within this section that don't seem to relate to CARAs

Commented [BS23R22]: Good point. We took a second look and recommend removing nearly all the existing text to avoid duplication and potential disconnection with existing laws addressing mining (this was legacy text).

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~~(b) Exterior boundary of any portion of the site which has been mined and not yet rehabilitated;~~

~~_(ii) No excavation within one hundred feet of a well or surface water used for potable drinking water;~~

Commented [HCM(24)]: This distance should be greater.

Commented [CW25R24]: Will double check

~~(iii) No excavation into an aquifer used for potable drinking water is allowed;~~

~~(iv) The operators shall comply with all existing water quality monitoring regulations of Department of Ecology WSDOE and the Chelan Douglas health district;~~

~~(v) A drainage channel shall be constructed around active gravel pit areas to keep surface runoff from outside the pit excavation from entering the pit areas;~~

~~(vi) Fuel storage areas and service facilities shall incorporate provisions to prevent lubricants and petroleum products from contaminating either pit areas or drainage channels;~~

~~(vii) No liquid, asphalt, cement, or water used in a mining operation shall be disposed of in the bottom of a pit;~~

~~(viii) A protective eight foot high berm or retaining wall shall be required adjacent to property lines where the edge of a pit is within one hundred feet of a street or railroad right of way;~~

~~(ix) The use of fertilizers, pesticides, herbicides, and critical materials shall not be allowed within fifty feet of an active pit;~~

~~(x) A sufficient amount of topsoil or suitable material shall be retained on site for re-vegetation/rehabilitation purposes;~~

~~(xi) Reclamation plans for these sites shall include:~~

~~(a) A specification of the amount of materials to be left between the aquifer high water mark (or elevation) and the final grade of the reclaimed site;~~

~~(b) Physical barriers, as required in subsection (6)(F)(viii) of this section, shall remain unless they are specifically permitted to be removed in a subsequent land use decision by the hearing body; and~~

~~(c) Provisions shall be made for limitations of access to, and activities within, the rehabilitated site until the use of the land is changed;~~

~~(xii) In rehabilitated gravel pits over an aquifer used for a potable water source, new uses requested for the property may be limited or specifically conditioned as determined by the appropriate hearing body;~~

~~(xiii) All mining activities shall be reclaimed per a reclamation plan approved by the Washington State Department of Natural Resources.~~

(7) Utilities. Utility facilities shall be reviewed and approved consistent with the requirements of subsection (6) of this section.

(8) Aboveground Application of Sewage or Sludge. Projects which involve application of sewage or sludge in areas determined to have a medium or high susceptibility to groundwater contamination shall

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provide hydrologic information and a management plan that identifies measures that effectively mitigate the threat to contamination; and shall conform to all other applicable state regulations.

(9) Residential Land Subdivisions. Residential land subdivisions regulated by this section shall be evaluated for their impact on groundwater quality. One or more of the following measures shall be required upon recommendation of the Chelan-Douglas health district:

(A) An analysis of the potential nitrate loading to the groundwater may be required to assess the impact on groundwater quality;

(B) Alternative site designs, phased development and/or groundwater quality monitoring will be required to reduce contaminant loading where site conditions indicate that the proposed action will measurably degrade groundwater quality;

(C) Open spaces may be required on development proposals overlying areas highly susceptible for contamination of groundwater resources;

(D) Community/public water systems, community drainfields, and hookup to public sewer systems (in conformance with the [Washington State Department of Health and](#) Chelan-Douglas health district requirements, the provisions of the sewer purveyor, and Chapter 36.70A RCW) are encouraged and may be required where site conditions indicate a high degree of potential contamination to individual wells from on-site or off-site sources. Where required, community systems shall be placed in the most favorable location for the prevention of groundwater contamination;

(E) Where wells are required to be abandoned, the applicant shall ensure that they are abandoned according to state guidelines;

(F) Known contaminants shall be removed from stormwater runoff prior to their point of entry into surface or groundwater resources using available and reasonable best management practices consistent with the Stormwater Management Manual for Eastern Washington.

(10) Wood Treatment Facilities. Wood treatment facilities shall conform to the provisions of subsection (6) of this section. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces, both natural and manmade, are prohibited.

(11) Underground Injection Wells. Class I, III and IV injection wells are prohibited. Class II injection wells are permitted under Chapter 173-218 WAC by the Washington State Department of Ecology in conjunction with the Washington State Department of Natural Resources. Class V injection wells, involving the injection of critical materials, may be prohibited by the Washington State Department of Ecology or a permit may be required by said agency. In addition, commercial or industrial uses proposing the injection of critical materials are subject to the provisions of subsection (6) of this section.

~~11.82.070—Subdivision notation.~~

~~In the event the applicant is dividing property through the short subdivision, major subdivision, binding site plan, plat alteration or amendment process, a notation shall appear on the face of the final plat mylar referencing the requirements of this chapter, as amended. (Res. 2007-97 (part), 7/2/07).~~

~~11.82.080—Reasonable use exemption.~~

Commented [HCM(26): This type of activity should be required to complete a Tier 2 evaluation if they meet the criteria 1-5

Commented [CW27R26]: agrees

Commented [BS28R26]: Addressed in 11.82.040(11). Added this as an evaluation criteria.

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~~Nothing in this chapter is intended to preclude reasonable use of property, or to effect a taking in violation of the U.S. Constitution, the State of Washington Constitution and substantive due process. Any landowner requesting relief from the performance standards in this chapter has the option to apply for a variance. The hearing examiner may grant variances as set out in Chapter 11.95 of this title. (Res. 2007-97 (part), 7/2/07; Res. 2000-129 (part), 10/17/00).~~

~~Annex A Critical materials use activity list.~~

~~Updated: June 15, 1999.~~

Type of Business	SIC Codes	Possible Critical Materials
Agricultural chemicals warehousing and distribution	2879	Ammonium
		Nitrate
		Sulfate
		Chloride
		Pesticides and herbicides
Aluminum manufacturing	3334 3341	Acetylene
		Alumina
		Aluminum fluoride
		Aluminum skim/dross
		Anthracite coal
		Asbestos
		Boiler additives
		Calcium carbonate
		Calcium fluoride

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		Cast iron
		Chlorine
		Coal tar pitch
		Copper
		Diethylene glycol
		Ethylene glycol
		Ferro-phosphorous
		Ferro-silicon
		Gasoline and diesel-fuels
		Hall-cell bath
		Hydrocarbon-solvents
		Kerosene
		Magnesium
		Mapp gas
		Methyl naphthalene
		Miscellaneous-cement constables,-refractor
		Miscellaneous oils-and waste oils
		Molten aluminum
		Paint thinners

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		PCB-oils
		Petroleum-coke
		Potlining-carbon-w/- eryolite
		Reacted-alumina
		Silicon
		Sodium
		Sodium-carbonate
		Sodium-hydroxide
		Spent-potlining
Aluminum-manufacturin g (Continued)	-	Stoddard-solvents
		Strontium
		Zinc
Asphalt-paving-companies	9999	Waste-neugenic-solvent-water-and-asphalt
Auto-and-home-supply-stores	5531	Evaporating-wastewater
Chemical-manufacturer s	2813 2899	Chlorine
		Calcium-oxychloride
		Sodium-dichloroisocyanurat e
		Trichloroisocyanuric acid

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Concrete- batch-plants	3273	-
Crop- preparation- services	0723	Liquid nitrogen
Deciduous- tree fruit- packing and- storage	0175	Lab pack
		Liquid nitrogen
Dehydrated- fruits,- vegetables,- soups- processing	0715	Liquid nitrogen
Drycleaning- and laundry- establishment s	7215	Drycleaning filters
	7216	Drycleaning perc.
	7217	Trichloroethene
		Tetrachloroethene
		Hydrocarbon- solvents
Educational- institutions	8221	All chemicals that- may be present in- laboratory- quantities
	8222	
		Contaminated- debris
		Cleaning solvents
		Lab pack
	Maintenance shop- waste	

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		Mineral spirits
		Mixed lab bulk wastes
		Pesticide waste
		Shop bulks
Electrical and electronic industries and businesses	3612	Metal salts
	4911	3D supreme, breakthrough, sodium hydroxide
		Floor stripper
		Lead
		Mercury
		Mixed solvent/paint
		Solvent/paint waste
Electronic components and accessories companies	3677	Acetone
	3679	Contaminated solvent
	3825	
	3993	Dehydrated rinse water and fire water
	3678	Lead powder and ceramic manufacturing debris
		Residual liquids from solvent distillation

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Farm supply– distributors	5191	Farm chemicals and minerals used in the soil and on trees
		Gasoline and diesel– fuel
		Petroleum– distillates
		Kerosene
Forestry– sciences lab	0811	Ammonium– hydroxide
	0831	Formaldehyde
	0851	Hydrochloric acid
		Nitric acid
		Perchlone acid
		Sodium hydroxide
Furniture– reupholstery– and repair– businesses	7641	Methylene chloride
		Acetone
		Hydrocarbon– solvents
		Paint related– products
Gasoline– distribution	5541	Gasoline
		Diesel fuel
		Lubricating oils
		Ethylene glycol

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		Methyl alcohol
General government, NEC	9199	Chlorine
	9121	Lab pack
	9111	
Gold and silver ore mining operations	1041	Dilute picric acid
		Hydrofluoric acid
		Monethanel amine
		Petroleum grease, 1,1,1-trichloroethane
		Petroleum naphtha
		Tetrabromoethane, arsenic solution
		Thiourea, lead acetate
		Waste bromine
		Waste corrosive solid
		Waste cyanides
		Waste flammable liquid
		Waste oxidizing substance
		Waste perchloric acid
Waste substance which in contact		

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		with water emits flammable gases
Hardwood-dimension-and flooring-mills-industries	2646	NALKAT-7607
		NALSIZE-7542
		NOLCO-625
		NALSIZE-7541
		BUSPERSE-2168
		BL-2066
		BASF-BASAZOL-VIOLET-49L
		CASCAMID-C-20
Hot-mix-asphalt-plants	2951	-
Industrial-gases-industries	2813	Chlorine
Land,mineral,wildlife-conservation-agencies	9512	Formaldehyde
Logging-commercial	2411	Spent parts-washing solvent
		Spent Safety-Kleen-Stoddard solvent
Machinery-equipment-and supplies-sales and-repair	5082	Mineral spirits-parts cleaning-solvent
	5084	
	7699	

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Manufacturing industries, - NEC	3999	Paint-related material, stains, lacquers, latex coatings
		Paint sweepings
		Still bottoms
		Waste solvent from Safety-Kleen and painting operations
Medical and veterinary facilities	0742	Mono and polycyclic
	8062	-
	8069	Prescription drugs
	8071	Biological contaminants
Metal fabrication	3441	Metal salts (Cr, Cu, Ni and Zn)
	3442	-
	3444	Hydrochloric acid
		Sulfuric acid
		Hydrocarbon solvents
		Xylene
		Caustic soda
		Sodium phosphate
		Sodium hydroxide
2992	Benzene	

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New and used car sales and repair shops	5511 753	Evaporating waste-water
		Lead
		Oil
		Paint booth filters
		Paint materials and waste bottoms
		Paint waste and bottoms
		Solvent mineral spirits
		Solvent tank cleaner Parts washer
		Tetrachloroethylene
		Xylene
Paint distributors	2851	Phthalate esters
		Methylene chloride
		Methyl ethyl ketone
		Hydrocarbon solvents
Petroleum products production and storage bulk distribution of petroleum products	5171 5172	Diesel fuel and heating oil
		Lubricating oils
		Ethylene glycol
		Methyl alcohol

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Photo-copying and duplicating services	7333	Silver salts
	7334	Phenols
	7335	Cyanide
		Aromatic hydrocarbons
Plastics foam products packaging	3086	Absorbent for ink
		Acetone
		Aqueous cleaner
		Electrical transformer waste
		Lead
		Lighting ballasts (non-PCBs)
		Mercury
		Paint related material
		Petroleum naphtha
		Polypropylene absorbent for oil and paint
		Toluene
		Waste ink
		Waste oils and solvents
Waste pentane		

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		Xylene
Printing establishments	2711	Silver salts
	2752	Phenols
	2761	Cyanides
		Tetrachloroethene
Research and testing services	8734	Inorganic waste—leaf, soil, and water analysis
		Lab solvents, pesticide residue analysis
		Sample vials, pesticide residue analysis
		Solvent wastes from glassware prep and pesticide residue analysis
		Soil and sludge—sample retains pesticide residue and metals analysis
Sand and gravel mines	1442	—
Saw mills and planing mills	242	Spent parts washing solvent
		Spent Safety-Kleen-Stoddard solvent
	3341	Metal salts (Al, Cr, Zn)

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Secondary metals refining		Chloride
		Sulfate
Solvent recycling	2911	1,1,1-Trichloroethane
		Trichloroethene
		Tetrachloroethene
Trucking companies and bus terminal and service facilities	4171 4172 4231	Gasoline and diesel
		Hydrocarbon solvents
		Ethylene glycol
		Caustic soda cleaning solution
		Hydrocarbon solvents
Quarries	1429	-

Source: WSDOE Tier 2, RCRC and Hazardous Waste Handlers Lists for Chelan County. Lists transmitted by WSDOE May-June, 1998.

(Res. 2007-97 (part), 7/2/07; Res. 2000-129 (part), 10/17/00).

Annex B Vulnerability matrix:

Table 1

-
 [/var/www/prod/WA/ChelanCounty/html/html/html/html/html/html/html/html/html/html/html/images/chelco11.11.33.1.jpg not found]
 -

The susceptibility and contaminant loading ratings for the proposed use and site should be marked at each axis. The vulnerability of the site is then determined by the intersection of the susceptibility rating and the contaminant loading rating to be either low, medium, or high. For example, the project site has a susceptibility rating-

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of six and the proposed use has a high contaminant loading rating. The intersection of those two factors shows that the proposed project would have a medium vulnerability rating. See Table II for a graphic display of the example.

Vulnerability Matrix Example

Table II

—

`{/var/www/prod/WA/ChelanCounty/html/html/html/html/html/html/html/html/html/html/html/html/images/chelco11.11.33.2.jpg not found}`

—

`{Res. 2007-97 (part), 7/2/07; Res. 2000-129 (part), 10/17/00}`

Chapter 11.84

FREQUENTLY FLOODED AREAS OVERLAY DISTRICT (FFOD)

Sections:

- 11.84.010 Classification.
- 11.84.020 Designation.
- 11.84.030 Protection measures.

11.84.010 Classification.

Those areas located within the one percent chance floodplain, also known as the one-hundred-year floodplain and the special flood hazard area, as defined by the Federal Emergency Management Agency and adopted by the board of county commissioners are classified as frequently flooded areas. These areas are specified in Section 3.20.080 Flood hazard areas established.

11.84.020 Designation.

When base flood elevation data is not available from the above information to designate frequently flooded areas, the Administrator shall review and reasonably utilize any base flood elevation data and floodway data available from federal and state governmental agencies or other sources including but not limited to historical data, high water marks or photographs of past flooding to make the appropriate designations.

If any question exists regarding whether a development is within the frequently flooded area, the applicant shall have the floodplain delineated by a licensed professional land surveyor and the delineation and ground elevations shall be shown on the site plan.

11.84.030 Protection measures.

All development standards within Chapter 3.20 Flood Hazard Development, as amended, shall be complied with.

Chapter 11.86
GEOLOGICALLY HAZARDOUS AREAS OVERLAY DISTRICT (GHOD)

Sections:

- 11.86.005 Purpose.
- 11.86.010 Applicability.
- 11.86.020 Classification.
- 11.86.030 Classification challenge.
- 11.86.035 Administrative review.
- 11.86.040 Designation.
- 11.86.060 Performance standards.
- 11.86.065 Report preparer qualifications and criteria.
- 11.86.070 ~~Site~~ Geologic site assessment and geotechnical report requirements.
- ~~11.86.080~~ ~~Subdivision notation.~~
- ~~11.86.080~~ ~~11.86.090~~ ~~Whispering Pines geologically hazardous areas overlay district.~~

11.86.005 Purpose.

The purpose of the geologically hazardous overlay district is to reduce the risk to the health and safety of citizens by designating and regulating geologically hazardous critical areas consistent with the Growth Management Act and Chapter 395-190 WAC, Minimum Guidelines to Classify Agricultural, Forest, Mineral Lands and Critical Areas.

11.86.010 Applicability.

The provisions of this chapter shall apply to any land use or development under county jurisdiction that is proposed to be located within designated geologically hazardous areas with the exception of residential footprint expansions less than fifty percent. Designated geologically hazardous areas include all areas classified as geologically hazardous areas under Section 11.86.020.

11.86.020 Classification.

Classification of each geologically hazardous area will be based upon the risk to development. The following categories shall be used:

(1) Known or Suspected Risk. Areas that are susceptible to one or more of the following types of hazards shall be classified as a geologically hazardous area with a known or suspected risk and shall require a geologic site assessment as described in Section 11.86.070.

(A) Erosion hazard areas identified by the U.S. Department of Agriculture Soil Conservation Service Chelan County Soil Survey Manual as having a ~~“severe” erosion hazard~~ “very severe” erosion hazard ~~or where slopes are fifteen percent or steeper and a “severe” erosion hazard.~~

(B) Landslide hazard areas shall include areas potentially subject to ~~landslides~~ mass wasting based on a combination of geologic, topographic and hydrologic factors. They include any areas susceptible to mass movement because of any combination of bedrock or soil characteristics, slope (gradient), slope aspect, rock or soil bedding and inclination or fractures or other geologic structure, hydrology, damage or removal of vegetative cover, or other factors. Examples of these may include, but are not limited to, the following:

(i) Sites that are located on or within two hundred fifty feet of areas of documented or historic

Commented [EP1]: Do we need both if it is very severe it is an erosion hazard area regardless of slope? Also, where do you find this? The tables have been removed from the report and it is not apparent in the web soil survey site.

Commented [CW2R1]: This is less strict than current code.

Commented [CW3R1]: Remove second “very severe”

Commented [BS4R1]: Addressed.

~~failures~~landslides, including areas identified in geotechnical/geological reports, such as:

(a) Those areas delineated by the United States Department of ~~Agriculture~~ Natural ResourceResources Conservation Service as having a "severe" limitation for building site development.

(b) Areas designated as ~~quaternary slumps, earthflows, mudflows, or~~ landslides or mass wasting deposits on maps published by the United States Geological Survey or the ~~Washington~~ Department of Natural Resources Division of Geology and Earth Resources.

(c) Areas located on a landslide feature which has shown movement during the past ten thousand years or which is underlain or covered by mass wastage debris of that period.

~~(d) Slopes that are adjacent to existing fault planes or similar geologic formations.~~

(ii) Sites that are located on or within two hundred fifty feet from areas with all three of the following characteristics:

(a) Slopes steeper than fifteen percent; and

(b) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

(c) Springs or groundwater seepage.

(iii) Areas potentially unstable as a result of rapid stream incision, stream ~~or channel migration,~~ stream bank erosion, ~~and/or~~ undercutting by wave action.

(iv) Areas located ~~in bottoms of narrow drainages and other confined channels including canyons, ravines, and gullies, and areas located on or within two hundred fifty feet from~~ an alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding.

(v) Steep Slopes. ~~Any~~ Areas located within two hundred and fifty feet from the base of any slope of forty percent or steeper with ten feet of relief or ~~areas adjacent to these slopes, of which shall cover a talus slope or~~ a distance equal to the vertical height of the slope ~~or two hundred fifty feet, whichever is less-greater.~~

Commented [EP5]: Where is this located? The Web soil survey only goes up to very limited? Change in terminology? How will the permit techs know?

Commented [BS6R5]: Primarily through geologic mapping layer already used by the County. Recommend County develops a spatially references database of existing geological hazard and geotechnical reports.

Commented [EP7]: Makes sense. Will be large area for mass wasting deposits but is a better way to define rather than erosion. DNR has a nice GIS portal with info. Looking at USGS this starts looking quite large. Just a comment

Commented [BS8R7]: Notes.

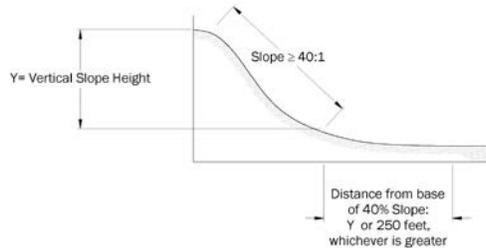
Commented [EP9]: How will the techs know?

Commented [BS10R9]: They will not. This will need to be brought to their attention through an existing report, concerned citizen etc. But we recommend keeping it as a criteria would not want to ignore it.

Commented [EP11]: It's good but technically all of Wenatchee is on an alluvial fan. I know the intent but if there is a way to define it better it would be good.

Commented [CW12R11]: Active or potentially active alluvial fan, not historic.

Commented [CW13R11]: Kirsten ok with language.



(vi)

Figure 1. Steep slope classification.

(vi) Areas that have slopes of 15 percent or steeper and are located within two hundred fifty feet from areas affected by wildfire within the past 10 years, or areas within confined drainage channels downstream of recent wildfire areas.

Commented [EP14]: good

(vii) Areas that show evidence of, or are at risk from, sliding that may pose a threat to the public health and safety.

~~(C)~~ Seismic hazards. Sites that are located within areas mapped by Washington Department of Natural Resources as having liquefaction susceptibility of "moderate" or higher, and sites located within two hundred and fifty feet from a mapped or inferred fault.

~~(D)~~ Sites that are located on or within five hundred feet from snow avalanche areas. Snow avalanche areas include areas that show evidence of, or are at risk from, snow avalanches.

~~(E)~~ Upon examination of the subject property by a qualified professional pursuant to Section 11.86.065, if a determination is made that none of the foregoing conditions are present on or adjacent to the property, the qualified professional may state in letter form the circumstances under which the site assessment or report may be waived.

(2) No Risk. Areas classified initially as geologically hazardous areas with a known or suspected risk or unknown risk may, upon further study, actually pose no risk to development or to the public health and safety. Where the administrator can determine that no risk from the geologically hazardous area is present, based upon geotechnical reports or best available science, these areas shall be classified as geologically hazardous areas determined to be of no risk.

Commented [EP15]: Do we want to own this decision?

(3) Unknown Risk. Geologically hazardous areas may be present in the county that cannot readily be identified based upon the criteria of subsection (1) of this section. Geologically hazardous areas of unknown risk include areas where data ~~is~~ are not available to determine the presence or absence of a geological hazard. The administrator may require a geologic site assessment and/or geotechnical report to determine the actual presence or absence of a geologically hazardous area.

Commented [CW16R15]: This is current code, based on the determination of a qualified professional.

11.86.030 Classification challenge.

An applicant may challenge the geologically hazardous area classification determination made by the

~~administrator~~Administrator. Said challenge shall be in the form of a geologic site assessment or a geotechnical report under the provisions of Section 11.86.070. If the geologic site assessment or geotechnical report indicates that the geologically hazardous area does not exist or should be classified as no risk or low risk, the administrator may find that the performance standards outlined in this chapter do not apply to the site or project.

11.86.035 Administrative review.

The ~~administrator~~Administrator may modify the requirements of this chapter when existing or intervening natural or manmade features would preclude the development proposal from geologic risk. An applicant may request such review from the department of community development as part of the permit application process.

11.86.040 Designation.

Areas classified as geologically hazardous areas pursuant to Section 11.86.020 are designated as geologically hazardous areas.

11.86.060 Performance standards.

(1) Upon completion of a geotechnical report, the following performance standards shall be applied during county review of proposed development projects that are the subject of the geotechnical report. Additional mitigation measures may be required pursuant to the findings of a geotechnical report. The administrator may agree to alternative mitigation measures set forth by the geotechnical report, if such alternative measures provide greater or equal protection than the application of the performance standards below. Development proposals may be approved pursuant to the performance standards of this section and/or mitigation measures of a geotechnical report, if they are determined to satisfy the purposes of this chapter. A development permit may be denied based upon the administrator's evaluation of the inability of said measures to reduce risks associated with the geologically hazardous area. Performance standards to be utilized include:

- (A) Construction methods should be used which minimize risks to structures and do not increase the risk to the site, or to adjacent properties and their structures, from the geologic hazard. Development shall not increase instability or create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion.
- (B) Site planning should minimize disruption of existing topography and vegetation, and should incorporate opportunities for phased clearing.
- (C) Disturbed areas shall be replanted within one year of project completion, in accordance with an approved revegetation plan, and be appropriately bonded for.
- (D) Impervious surface coverage shall be minimized.
- (E) Excavation and grading shall be minimized. A clearing and grading schedule shall consider limitations based upon seasonal weather conditions.
- (F) Detailed drainage plans may be required for projects affecting areas of geologic hazard. These plans shall indicate the effect the project may have on the hazard areas and adjacent properties and mitigating measures, with stormwater detention standards based upon the technical studies required under this document.
- (G) Any limitations to site disturbance, such as clearing restrictions, imposed as a condition of

Commented [CW17]: Can this be removed? Is it specific to Chelan County?

Commented [BS18R17]: Recommend consider keeping it. For example, to Eric P.'s point, all of Wenatchee lies on an alluvial fan. Yet, this code may not be applicable to all sites in/around Wenatchee. This would allow the Administrator to make some judgement without having to rely on a qualified professional. Or, am I missing something?

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development approval should be marked in the field and approved by the county prior to undertaking the project.

(H) A monitoring program should be prepared for construction activities occurring in geologic hazard areas and be marked on the face of the building permit.

(I) All authorized clearing for roads, utilities, etc., should be limited to the minimum necessary to accomplish engineering design. Alternatives should meet the following requirements:

(i) Clearing, grading, or filling of sloped sites containing erosion hazard areas shall be limited by weather conditions and an approved erosion control plan.

(ii) The face of cut and fill on slopes shall be prepared and maintained to control against erosion.

~~(J) An erosion control plan shall be submitted by the applicant for a development, prior to approval of the proposal. Temporary erosion and sedimentation controls shall be utilized during construction and until a permanent control measure is achieved. Further, to minimize blowing soil during development, appropriate water and/or mulch material should be applied to any areas without a vegetative cover.~~

(J) Unless otherwise directed by the administrator or recommended in the site assessment or geotechnical report pursuant to Section 11.86.070, temporary erosion and sedimentation control shall be consistent with requirements in the Construction Stormwater General Permit and best management practices (BMPs) in the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chapter 13.16.

(K) To maintain the natural integrity of landslide hazard areas and to protect the environment, and the public health and safety, adequate vegetation shall be maintained around all sides of the landslide hazard area.

(L) Development proposals that involve altering land upon areas identified as landslide or avalanche hazard areas must demonstrate the following for approval:

(i) There is no evidence of recent landslides or avalanches in the vicinity of the proposed development and quantitative analysis of slope stability and/or other pertinent factors indicate no significant risk to the proposed development or ~~other properties nearby areas.~~

(ii) The landslide or avalanche hazard areas can be modified or the project can be designed so that the landslide or avalanche hazard to the project is eliminated.

~~(iii) The development proposal would cause no increase in surface water discharge, sedimentation, or avalanche hazard to other properties, and will not decrease slope stability on other properties.~~

(iii) Unless otherwise directed by the administrator or recommended in the geotechnical report pursuant to Section 11.86.070, surface water discharge from the site shall comply with requirements in the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chapter 13.16 and natural surface water drainages including water discharging from springs or seeps and shall be maintained.

Commented [EP19]: Would this cover us for spring water? What about protection of natural drainages?

Commented [BS20R19]: Addressed

(iv) Disturbance of trees and vegetation shall be the minimum necessary in order to prevent erosion and/or an increase in avalanche hazard, to stabilize slopes, and preserve the natural character of the area.

(v) Structures and improvements shall be located to preserve the most sensitive portion of the site and its natural landforms and vegetation.

(M) Projects in snow avalanche hazard areas shall provide technical studies, which identify the location and extent of the potential avalanche area and include mitigation measures, which ensure that the proposed activity will not increase the potential for an avalanche on the subject property and adjacent properties.

(2) Performance standards or mitigation measures outlined in a geologic site assessment or geotechnical report shall be implemented and incorporated into conditions of approval, if applicable.

(3) If performance standards or mitigation measures are outlined in a geologic site assessment or geotechnical report, an engineer or geologist shall verify that said measures/standards have been adequately completed and provide written notification of completion to the department.

11.86.065 Report preparer qualifications and criteria.

(1) A geologic site assessment, when required, shall be prepared by either a ~~professional civil engineer with geologic expertise licensed by the state of Washington; a geologist licensed by the state of Washington; an engineering geologist licensed by the state of Washington; or a professional civil engineer with geologic expertise licensed by the state of Washington.~~ or a person with applicable qualifications as determined by the administrator.

(2) A geotechnical report, when required, shall be prepared by either an engineering geologist licensed by the state of Washington or a professional civil engineer with geologic expertise licensed by the state of Washington. A civil engineer must also have the following experience and background.

(A) Five years of geotechnical experience evaluating geologically hazardous conditions and site development activities, such as landform recognition; unstable geologic units; roads; structural footings, foundations and retaining walls; swimming pools and sport courts; and other activities such as timber removal, site disturbance, and mining.

11.86.070 SiteGeologic site assessment and geotechnical report requirements.

Geologic site assessments and geotechnical reports shall be prepared in compliance with the following provisions. A geotechnical report contains all of the provisions of a geologic site assessment and shall be considered to meet the requirements of a geologic site assessment.

(1) The geologic site assessment shall include the following:

(A) Evaluate the actual presence of geologically hazardous areas within or in the vicinity of the site and the need for a geotechnical report. Specifically mention the circumstances or conditions which require the report to be prepared (steep slopes, erodible soils, suspected landslide or avalanche hazard, adverse hydrologic or flood risk, etc.).

(B) Evaluate safety issues related to proposed activities. Address issues that could involve personal injury, worksite safety, or property damage.

Commented [EP21]: who else would have applicable qualifications that are not included in the previous three? Recommend removing so the Administer is not put into a hard spot that may be political in nature.

Commented [CW22]: Remove this?

Commented [CW23R22]: Yes

(C) Address existing geologic, topographic, and hydrologic conditions on the site, including an evaluation of the ability of the site to accommodate the proposed activity. Describe the proposed development, including property size and location, nature and extent of the planned development (i.e., house, garage, shop, swimming pool, etc.), and its specific location on the property. Include evidence of prior grading, excavation, cut banks, fill areas, or mining activity, and their potential impact on the project. Note and evaluate any features that could adversely affect development such as drainage gullies, erosion channeling, alluvial fans, evidence for debris flow or avalanche, surface creep and ~~slope failure, landslides~~ observed or suspected spring activity and flood risk potential.

(D) A discussion of the surface and subsurface geological and engineering properties of the soils, sediments, and/or rocks on the subject property and adjacent properties and their effect on the stability of the slope. Note any areas of modified ground or fill. Where known from field inspection or reference maps and literature, include bedrock identification and age, ~~structural bedding and joint~~ attitude with respect to slope inclination, fracturing, faults and shear zones, hydrothermal alteration, weathering characteristics, presence of landslide ~~diamictite deposits~~ and its age and consolidation, etc. Use cross-sections, if necessary for better representation of subsurface character.

(E) A description of the soils in accordance with the Unified Soil Classification System. Give general soil characteristics that could affect site development (i.e., frost action and shrink/swell potential, permeability, compressibility, density or consistency, plasticity and wet/dry behavior, erodibility, etc.). Especially note the presence or suspected presence of clay-rich horizons and their position/location in the soil profile, and any indication that a building site could be subjected to ~~differential~~ soil compression or settlement differential settling.

(F) Evidence and history of avalanches, faults, significant geologic contacts, springs or seeps, ~~landslides,~~ or other downslope soil movement, or sedimentation and alluviation, stream or channel or shoreline incision, migration, or erosion, on the subject property and adjacent properties not detailed in subsection (1)(C) of this section.

(G) A discussion of seismic hazards including seismic class, liquefaction susceptibility including probable depth to groundwater, fault rupture, ground shaking, slope failure, and settlement or subsidence.

~~(H)~~ A summary of the site assessment and its conclusions, mentioning the presence or absence of geohazards/geological hazards and site suitability. Determine the appropriate hazard category according to the classification of the geologically hazardous area consistent with Section 11.86.020. Include any recommendations for mitigation of potential hazards that can be dealt with without requiring a complete geotechnical report (control measures such as footing or intercept drainage systems, ~~retaining walls,~~ erosion control, debris catchment, vegetative management and restoration, and the probable need for engineering consultation and design). Include a recommendation whether additional study, including a geotechnical report pursuant to Section 11.86.070, is required.

~~(H)~~ A topographic map showing the proposed development site location and approximate parcel shape location and boundaries.

~~(H)~~ Provide a summary of readily available existing information for the site vicinity, including geological/geotechnical reports. Cite all references and information used in the assessment preparation, such as United States Geologic Survey (USGS) and Department of Natural Resources

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Geologic Maps and Bulletins, soil studies, surveys and previous reports.

(2) The geotechnical report determined to be required by the geologic site assessment shall include the following: All of the information required for a geologic site assessment as well as the following:

(A) Determine the appropriate hazard category according to the classification of the geologically hazardous area consistent with Section 11.86.020.

~~(B)~~ Evaluation of seismic hazards considering the proposed development.

(C) Determine the appropriate application of the performance standards of Section 11.86.060 and/or alternative mitigation measures that provide an equal or greater level of protection.

~~(D)~~ Include a contour map of the proposed site, at a scale of one inch equals twenty feet or as deemed appropriate by the administrator. Slopes shall be clearly delineated for the ranges between fifteen and twenty-nine percent, and thirty percent or greater, including figures for a real coverage of each slope category on the site. When site-specific conditions indicate the necessity, the administrator may require the topographic data to be field surveyed.

~~(E)~~ A site development plan drawn to scale which shows the boundary lines and dimensions of the subject property, the location, size and type of any existing or proposed structures, offsite structures or facilities that could be impacted, impervious surfaces, wells, drainfields, drainfield-reserve areas, roads, easements, and utilities proposed or located on site.

~~(F)~~ The location of springs, seeps, or other surface expressions of groundwater. The location of surface water or evidence of seasonal surface water runoff or groundwater.

~~(G)~~ The extent and type of vegetative cover prior to development activity or site disturbance.

~~(H)~~ The proposed method of drainage and locations of all existing and proposed surface and subsurface drainage facilities and patterns, and the locations and methods for erosion control.

~~(I)~~ An identification of all-existing any modified ground including fill areas and assessment of potential hazards or recommendations for mitigation.

~~(J)~~ Information demonstrating compliance with all applicable codes and ordinances for the proposed development permit.

~~(K)~~ Recommendations for vegetation management and/or restoration or whether a vegetation specialist is required for a management plan or other means for maintaining long term stability of slopes.

(3) Geologic site assessments ~~and geotechnical~~, when completed in accordance with this chapter, shall be valid for a period of five years. Geotechnical reports, when completed in accordance with this chapter, shall be valid for a period of ~~five~~three years. A qualified professional, as outlined in Section 11.86.065(2), may extend the applicability of a valid report by five years for a geologic site assessment report or by three years for a geotechnical report by ~~five years by~~ submittal of a letter stating the validity of the existing document and its application for the ~~five-year~~ extension; provided, that such letter must address any changes in surrounding land use activity or site conditions.

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~~11.86.080—Subdivision notation.~~

~~In the event the applicant is dividing property through the short subdivision, major subdivision, binding site plan, or plat alteration process, and all or a portion of the property division is located within a geologically hazardous area, a notation shall appear on the face of the final plat mylar that states the following:—~~

~~All or part of this area may be located within a suspected or known geologically hazardous area, and development proposals proposed within this area will be subject to the requirements of Chapter 11.86: Geologically Hazardous Areas Overlay District (GHOD). Geologic site assessments and technical reports completed for subdivision approval may not be adequate for site development and additional assessment may be necessary.~~

~~11.86.090~~**11.86.080** **Whispering Pines geologically hazardous areas overlay district.**

The following review criteria and standards shall apply to the Whispering Pines I subdivision, the area commonly known as Whispering Pines II and areas of influence as depicted and described on the Historical Debris Torrents Map, Figure #3 in the Whispering Pines Debris Torrent Hazard Study, Lake Wenatchee, Chelan County, Washington, submitted to Chelan County January 15, 2001, by Shannon and Wilson, Inc., Geotechnical and Environmental Consultants, excluding Sections 13 and 19. These requirements apply only to Sections 17 and 18 as depicted on Map Figure #3, Historical Debris Torrents. On-site evidence as entered into the record by property owners questions the accuracy of the Shannon and Wilson study as it pertains to actual property lines, debris/torrent path(s) and associated channel(s). If an applicant's site plan is inconsistent with the Map Figure #3, Chelan County staff will conduct an ~~on-~~**onsite** visit to field confirm the dimensional accuracy of site plan. The subject area is designated as a geologically hazardous area pursuant to the provisions of the Chelan County Code. Building and/or development permits may be issued in conformance with ~~the then~~ following requirements:

- (1) No building or development permits shall be issued for structures, development, activity or uses within the scoured channel(s) and cobble/boulder deposit as delineated on Map Figure #3, Historical Debris Torrents.
- (2) The area designated as the flood zone on the Historical Debris Torrent Hazard Map, Figure #3, shall be referred to herein as "areas of potential geologic hazard." Building or development permits may be issued in the "areas of potential geologic hazard" in conformance with the findings, recommendations, mitigations and requirements of a geologic site assessment pursuant to the requirements of this chapter.
- (3) A hold harmless agreement (notice, acknowledgement, waiver, release and indemnification) on forms provided by the Chelan County department of building/fire safety and planning shall be required prior to the issuance of a building/development permit located within the "areas of potential geologic hazard." The hold harmless agreement shall be recorded with the Chelan County auditor to run with the title to the land and shall also serve as a notice to title.
- (4) A geologic site assessment will not be required for real property located within one thousand feet of the scoured channel(s), cobble/boulder deposits and "areas of potential geologic hazard" as delineated on Map Figure #3, except as may be required by subsection (5) of this section.
- (5) A setback less than fifty feet from the top of the scoured channel will require a geologic site assessment in conformance with the requirements of this chapter.

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(6) Geologic site assessments shall be prepared in conformance with this chapter and shall be signed and stamped by an engineering geologist or geotechnical engineer licensed by the state of Washington.

Chelan County CAO Update Definitions

FISH AND WILDLIFE HABITAT CONSERVATION AREAS

14.98.485 Critical areas

“Critical areas” include the following ~~areas and ecosystems~~:

- (1) Wetlands; ~~and~~
- (2) Areas with a critical recharging effect on aquifers used for potable water; ~~and~~
- (3) Fish and wildlife habitat conservation areas; ~~and~~
- (4) Frequently flooded areas; and
- (5) Geologically hazardous areas.

~~“Fish and wildlife habitat conservation areas” do not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company.~~

14.98.655 Endangered species (state)

“Endangered species (state)” means those species listed by Washington State agencies as endangered species pursuant to WAC ~~220-610-010232-12-014~~, as amended.

Fish and Wildlife Habitat Conservation Area

“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 habitats or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness.

Fish and wildlife habitat conservation areas 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, except where irrigation water is conveyed through a natural channel feature as part of its delivery.

Habitats of local importance

“Habitats of local importance” designated as fish and wildlife habitat conservation areas include those areas found to be locally important by counties and cities.

Qualified professional biologist

“Qualified professional biologist” means the holder of at least a four-year degree in science with specific or related fields with course work in wildlife, streams, wetlands, or fisheries, with at least two years of relevant professional experience in assessment and mitigation.

14.98.1580 Restoration

“Restoration” means to revitalize or reestablish characteristics and processes of a ~~wetland or fish and wildlife habitat critical~~ area which have been diminished or lost by past alterations, activities, or catastrophic events.

14.98.1660 Sensitive species (state)

“Sensitive species (state)” means those species listed by state agencies as sensitive species pursuant to WAC ~~220-200-100232-12-011~~, as amended.

Species of local importance

“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.

14.98.1865 Threatened species (state)

“Threatened species (state)” means those species listed by state agencies as threatened species pursuant to WAC ~~220-200-100232-12-011~~, or as amended.

14.98.1965 Waters of the state

“Waters of the state” are defined in RCW 90.48.020 and include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses in Washington. ~~means Type 1 through 5 Waters as classified by WAC 222-16-030, Water Typing System.~~

Water type or water typing system

“Water type or water typing system” means the system used to classify freshwater surface water systems per WAC 22-16-030 and 031. Current regulations establish interim water typing (1-5) until fish habitat water type maps are available for permanent water typing (S, F, Np, Ns) (WAC 222-16-031).

WETLANDS

14.98.1990 Wetland delineation manual

“Wetland delineation manual” ~~means the adopted State manual identified in RCW 36.70A.175 which cites the approved federal wetland delineation manual and applicable regional supplements. the Washington State Wetlands Identification and Delineation Manual, (DOE Publication No. 96-94, March 1997), as amended.~~

14.98.1995 Wetland ~~four-tiered~~ rating system

“Wetland ~~four-tiered~~ rating system” means the system established in the Washington State Wetland Rating System for Eastern Washington: 2014 Update (~~DOE Ecology~~ Publication No. 04-06-01591-58, October 1991), or as amended.

AQUIFERS RECHARGE AREAS

14.98.230 Aquifer recharge area

“Aquifer recharge area” means an area with a recharging effect on aquifers used for potable water or having recharging effects on surface water bodies providing habitat.

14.98.1515 Qualified ground water ~~professional~~ scientist

“Qualified ground water ~~professional~~ scientist” means a person who is qualified to engage in the practice of hydrogeology and has met the qualifications in geology under Chapter 18.220 RCW, and has been issued a license to practice hydrogeology in the State of Washington or is a professional engineer in the State of Washington.

~~a hydrogeologist, geologist, engineer or other scientist who meets all of the following criteria:~~

~~(1) Has received a baccalaureate or post-graduate degree in the natural sciences or engineering; and~~

~~(2) Has sufficient training and experience in ground water hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgments regarding ground water vulnerability.~~

14.98.1970 Wellhead Protection Area

“Wellhead protection area” means the surface and subsurface area surrounding a well or well field ~~for a distance of one hundred feet,~~ supplying a public water system within the six month, one, five, and ten year time of travel boundaries or determined by other means approved by department of health, through which contaminants are reasonably likely to move toward and reach such water well or well field.

FLOOD HAZARD AREAS

14.98.815 Floodplain

“Floodplain” means any land area susceptible to being inundated by water from any source. includes all lands subject to flooding as depicted on the flood insurance rate maps (FIRM) and the floodway maps as published and from time to time amended by the Federal Emergency Management Agency (FEMA).

14.98.825 Floodway fringe

“Floodway fringe” means the portion of a riverine floodplain beyond the limits of the floodway. Here, flood waters are generally shallow and slow moving.

14.98.855 Frequently flooded area

“Frequently flooded area” are lands in the flood plain subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater. These areas include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and areas where high groundwater forms ponds on the ground surface. means an area subject to flooding, as defined by FIRM, once every one hundred years.

GEOLOGIC HAZARD AREAS

Erosion Hazard Area

“Erosion hazard areas” are those areas containing soils which, according to the United States Department of Agriculture Natural Resources Conservation Service Soil Survey Program, may experience significant erosion. Erosion hazard areas also include coastal erosion-prone areas and channel migration zones.

14.98.865 Geologically Hazardous Areas

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

14.98.870 Geologist

“Geologist” means a person who is qualified to engage in the practice of geology, has met the qualifications in under Chapter 18.220 RCW, and has been issued a license to practice geology in the State of Washington. means a person who has a bachelor of science degree in geologic sciences or a related field from an accredited college or university and has a minimum of five years of related experience.

14.98.875 Geologist, Engineering

“Geologist, engineering” means a person who is qualified to engage in the practice of engineering geology, has met the qualifications under Chapter 18.220 RCW, and has been issued a license to practice engineering geology in the State of Washington. means a geologist who, by

~~reason of his or her knowledge of engineering geology, acquired by education and practical experience, is qualified to engage in the practice of engineering geology, has met the qualifications in engineering geology under Chapter 18.220 RCW, and has been issued a license in engineering geology.~~

14.98.880 Geo-technical Engineer

“Geo-technical engineer” means a practicing professional/civil engineer licensed as a professional civil engineer with the state of Washington, with professional training and experience in geo-technical engineering, including at least five years’ professional experience in evaluating geologically hazardous areas.

Landslide Hazard Area

"Landslide hazard areas" are areas at risk of mass movement due to a combination of geologic, topographic, and hydrologic factors.

Seismic Hazard Area

"Seismic hazard areas" are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, debris flows, lahars, or tsunamis.