

Article 6: Critical Areas

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15.600 General Provisions

15.600.010 Purpose.

- A. The purpose of this chapter is to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property.
- B. This chapter is to implement the goals, policies, guidelines, and requirements of the Ellensburg comprehensive plan and the Growth Management Act.
- C. The city finds that critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the city and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and values provided by critical areas include, but are not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation of floodwaters, ground water recharge and discharge, erosion control, protection from hazards, historical, archaeological, and aesthetic value protection, and recreation. These beneficial functions are not listed in order of priority.
- D. Goals. By limiting development and alteration of critical areas, this chapter seeks to:
 - 1. Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, or flooding;
 - 2. Maintain healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats, and to conserve the biodiversity of plant and animal species;
 - 3. Direct activities not dependent on critical areas resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas; and
 - 4. Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, and habitat conservation areas.
- E. The regulations of this chapter are intended to protect critical areas in accordance with the Growth Management Act and through the application of the best available science, as determined according to WAC [365-195-900](#) through [365-195-925](#), and in consultation with state and federal agencies and other qualified professionals.
- F. This chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards.

- G. The city's enactment or enforcement of this chapter shall not be construed for the benefit of any individual person or group of persons other than the general public.

15.600.020 Authority.

- A. As provided herein, the director is given the authority to interpret and apply, and the responsibility to enforce, this chapter to accomplish the stated purpose.
- B. The city may withhold, condition, or deny development permits or activity approvals to ensure that the proposed action is consistent with this chapter.

15.600.030 Relationship to other regulations.

- A. These critical areas regulations shall apply as an overlay and in addition to zoning and other regulations adopted by the city.
- B. Any individual critical area adjoined by another type of critical area shall have the buffer and meet the requirements that provide the most protection to the critical areas involved. When any provision of this chapter or any existing regulation, easement, covenant, or deed restriction conflicts with this chapter, that which provides more protection to the critical areas shall apply.
- C. These critical areas regulations shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA), as locally adopted. Any conditions required pursuant to this chapter shall be included in the SEPA review and threshold determination.
- D. Compliance with the provisions of this 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, Hydraulic Permit Act (HPA) permits, Section 106 of the National Historic Preservation Act, U.S. Army Corps of Engineers Section 404 permits, National Pollution Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this chapter.

15.600.040 Administrative procedures.

The following procedures are intended to provide efficient and accurate review of all permits which include actions or development in the city, or requests made under the provisions of this chapter. The review is intended to determine if the proposed permit application or action is located within or potentially affects a critical area and, if so, the necessary level and scope of the critical area review.

- A. Combined permit application. When there is a specific underlying permit application required for the proposed activity, the decision procedures required under this chapter, except for exemption decisions made pursuant to ECC 15.610.020, shall be combined with the decision procedures for that underlying permit. When there is a specific underlying permit application required for the proposed activity the applicant shall:

1. Submit an application meeting the complete application requirements for the underlying permit;
2. Submit all information required for critical areas review under this chapter;
3. Submit a complete SEPA checklist and appropriate SEPA checklist fee if SEPA is required for the underlying permit.

The decision procedure for the combined permits shall be subject to the 120-day time procedures outlined in ECC 15.230.070; however, any required SEPA threshold determination shall be issued and any required SEPA public comment period shall be completed prior to a public hearing on the combined permits.

Except as identified below, the combined permit decision procedures, including any public notice and public hearing requirements, shall follow the permit decision procedures which apply to the underlying permit. In the event that there are multiple underlying permits with conflicting permit decision procedures, the combined permit decision procedures shall follow the underlying permit application and notice procedures which require the most extensive decision process.

In the event that there is no underlying permit application or approval required for the proposed activity, the procedures for critical area application review shall be as set forth in B, C, D, E and F below.

- B. Exemption decision (a Type II review process). The review process for an exemption request made pursuant to ECC 16.610.020 is a Type II review process as set forth in Chapter 15.210 thru 15.230 ECC.
- C. Exception decision (a Type III permit review process). Exception requests made pursuant to ECC 15.610.030 and 15.610.040 are a Type III permit review process as set forth in Chapters 15.210 thru 15.230 ECC.
- D. Initial determination decision (a Type II permit review process). Initial determinations made pursuant to Chapter ECC 15.610.080 are a Type II permit review process as set forth in Chapters 15.210 thru 15.230 ECC.
- E. Final determination decision (a Type I permit review process). Final determinations made pursuant to Chapters 15.610.160, 15.610.180 and 15.610.190 shall be are a Type I permit review process as set forth in Chapters 15.210 thru 15.230 ECC.
- F. Variances (a Type III permit review process). Variance requests made pursuant to ECC 15.610.220 shall be reviewed and are Type III permit review processes as set forth in Chapters 15.210 thru 15.230 ECC and Chapter 15.250.050 ECC.

15.600.050 Fees.

- A. The city council shall establish fees for filing of a critical area information form, critical area review processing, and other services provided by the city as required by this chapter. These fees shall be based on the anticipated sum of direct costs incurred by the city for any individual development or action and may be established as a sliding scale that will recover all of the city costs including the enforcement of these code provisions. The bases for these fees shall include, but not be limited to, the cost of engineering and planning review time, cost of inspection time, costs for administration, and any other special costs attributable to the critical area review process.
- B. Unless otherwise indicated in this chapter, the applicant shall be responsible for the initiation, preparation, submission, and expense of all required reports, assessment(s), studies, plans, reconnaissance(s), peer review(s) by qualified consultants, and other work prepared in support of or necessary to review the application.

15.600.060 Severability.

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

15.600.070 Interpretation.

In the interpretation and application of this chapter, the provisions of this chapter shall be considered to be the minimum requirements necessary, shall be liberally construed to serve the purpose of this chapter, and shall be deemed to neither limit nor repeal any other provisions under state statute.

15.600.080 Jurisdiction – Critical areas.

- A. The city shall regulate all uses, activities, and developments within, adjacent to, or likely to affect, one or more critical areas, consistent with the best available science and the provisions herein.
- B. Critical areas regulated by this chapter include:
 - 1. Wetlands;
 - 2. Frequently flooded areas;
 - 3. Critical aquifer recharge areas;
 - 4. Geologically hazardous areas; and
 - 5. Fish and wildlife habitat conservation areas.

- C. All areas within the city meeting the definition of one or more critical areas, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.

15.600.090 Protection of critical areas.

- A. Any action taken pursuant to this chapter shall result in at least equivalent functions and values of the critical areas associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with ECC 15.610.240 mitigation sequencing. Applicants must first demonstrate an inability to avoid impacts before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas.
- B. This chapter shall be interpreted to ensure, among other things, that no harm shall occur in critical areas as a result of activities and developments, but it shall not require enhancement of critical areas where such critical areas were degraded prior to the proposed land use activity or development, or where previously existing critical areas no longer exist.

15.600.100 Best available science.

- A. **Protect functions and values of critical areas with special consideration to anadromous fish.** Critical area reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat.
- B. **Best available science to be consistent with criteria in WACs.** The best available science is that scientific information applicable to the critical area prepared by local, state, or federal natural resource agencies, a qualified scientific professional, or team of qualified scientific professionals, that is consistent with criteria established in WAC [365-195-900](#) through [365-195-925](#).
- C. **Characteristics of a valid scientific process.** In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions, and in developing critical areas policies and development regulations that will be effective in protecting the functions and values of critical areas. To determine whether information received during the permit review process is reliable scientific information, the director shall determine whether the source of the information displays the characteristics of a valid scientific process. Such characteristics are as follows:
 - 1. Peer review. The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed;

2. **Methods.** The methods used to obtain the information are clearly stated and reproducible. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to ensure their reliability and validity;
3. **Logical conclusions and reasonable inferences.** The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained;
4. **Quantitative analysis.** The data have been analyzed using appropriate statistical or quantitative methods;
5. **Context.** The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge; and
6. **References.** The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and other pertinent existing information.

D. Nonscientific information. Nonscientific information may supplement scientific information, but it is not an adequate substitute for valid and available scientific information. Common sources of nonscientific information include the following:

1. **Anecdotal information.** One or more observations that are not part of an organized scientific effort (for example, “I saw a grizzly bear in that area while I was hiking”);
2. **Nonexpert opinion.** Opinion of a person who is not a qualified scientific expert in a pertinent scientific discipline (for example, “I do not believe there are grizzly bears in that area”); and
3. **Hearsay.** Information repeated from communication with others (for example, “At a lecture last week, Dr. Smith said there were no grizzly bears in that area”).

E. Absence of valid scientific information. Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the director shall:

1. Take a precautionary or a no-risk approach, that strictly limits development and land use activities until the uncertainty is sufficiently resolved; and
2. Require application of an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and nonregulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. An adaptive management program shall:

- a. Address funding for the research component of the adaptive management program;
- b. Change course based on the results and interpretation of new information that resolves uncertainties; and
- c. Commit to the appropriate timeframe and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting protection of critical areas and anadromous fisheries.

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15.610 Applicability, Exemptions and Exceptions

15.610.010 Applicability.

- A. The provisions of this chapter shall apply to all lands, all land uses and development activity, and all structures and facilities in the city, whether or not a permit or authorization is required, and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns, leases, or administers land within the city. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the purposes and requirements of this chapter.
- B. The city shall not approve any permit or otherwise issue any authorization to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first ensuring compliance with the requirements of this chapter, including, but not limited to, the following (as applicable):
 - 1. Building permit;
 - 2. Site development permit;
 - 3. Conditional use permit;
 - 4. Short plat;
 - 5. Subdivision;
 - 6. Master site plan;
 - 7. Zoning variance;
 - 8. Zoning code amendment; or
 - 9. Any other adopted permit or required approval not expressly exempted by this chapter.
- C. Approval of a permit or development proposal pursuant to the provisions of this chapter does not discharge the obligation of the applicant to comply with the provisions of this chapter.

15.610.020 Exemptions.

- A. Exemption request and review process. The proponent of the activity may submit a written request for exemption to the director that describes the activity and states the exemption listed in this section that applies. The director shall review the exemption request as a Type II permit review process as set forth in Chapter 15.210 thru 15.230. If the exemption is approved, it shall be placed on file with the community development department and the proponent may continue thru the review process for any underlying permit. If the exemption is denied, the proponent may continue in the critical area review process and shall be subject to the requirements of this chapter.

- B. Exempt activities and impacts to critical areas. All exempted activities shall use reasonable methods to avoid potential impacts to critical areas. To be exempt from this chapter does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's sole expense.
- C. Exempt activities. The following developments, activities, and associated uses shall be exempt from the provisions of this chapter; provided, that they are otherwise consistent with the provisions of other local, state, and federal laws and requirements:
1. Emergencies. Those activities necessary to prevent an immediate threat to public health, safety, or welfare, or which pose an immediate risk of damage to private property and which require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this chapter. Emergency actions which create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the city within one working day following commencement of the emergency activity. Within 30 days, the director shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement provisions of ECC 15.610.230, unauthorized alterations and enforcement, shall apply.

After the emergency, the person or agency undertaking the action shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical area report and mitigation plan. The person or agency undertaking the action shall apply for review, and the alteration, critical area report, and mitigation plan shall be reviewed by the city in accordance with the review procedures contained herein. Restoration and/or mitigation activities must be initiated within one year of the date of the emergency, and completed in a timely manner; provided, however, the restoration, mitigation, planning and financial requirements set forth in this subsection shall not apply to public safety or volunteer emergency services providers who, in good faith, render emergency response services, and while in the course and scope of such services determine it necessary to damage, destroy or alter property falling under the jurisdiction of this chapter; provided further, this exception from responsibility shall not extend to the landowner or to any persons other than such public safety or volunteer emergency services providers;
 2. Operation, maintenance, or repair. Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems, that do not require construction permits, if the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed

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

3. Passive outdoor activities. Recreation, education, and scientific research activities that do not degrade the critical area, including fishing, hiking, and bird watching. Trails must be constructed pursuant to ECC 15.610.050(C)(5), Public and Private Pedestrian Trails.

15.610.030 Exception – Public agency and utility.

- A. If the application of this chapter would prohibit a development proposal by a public agency or public utility, the agency or utility may apply for an exception pursuant to this section.
- B. Exception request and review process (a Type III permit review process). An application for a public agency and utility exception shall be made to the city and shall include a critical area information form; critical area report (ECC 15.620.210 and 15.610.220), including mitigation plan (ECC 15.610.140), if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter [43.21C](#) RCW). The director shall process the exception request as a Type III permit review process as set forth in Chapter 15.210 thru 15.230 ECC. As part of that review process the director shall prepare a recommendation to the city council based on review of the submitted information, a site inspection, and the proposal's ability to comply with public agency and utility exception review criteria in subsection (D) of this section.
- C. Public agency and utility review criteria. The criteria for review and approval of public agency and utility exceptions are as follows:
 1. There is no other practical alternative to the proposed development with less impact on the critical areas;
 2. The application of this chapter would unreasonably restrict the ability to provide utility services to the public;
 3. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
 4. The proposal attempts to protect and mitigate impacts to the critical area functions and values consistent with the best available science; and
 5. The proposal is consistent with other applicable regulations and standards.
- D. Burden of proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.

15.610.040 Exception – Reasonable use.

- A. If the application of this chapter would deny all reasonable economic use of the subject property, the city shall determine if compensation is an appropriate action, or the property owner may apply for an exception pursuant to this section.
- B. Exception request and review process (a Type III permit review process). An application for a reasonable use exception shall be made to the city and shall include a critical area information form; critical area report (ECC 15.610.100 and 15.610.110), including mitigation plan (ECC 15.610.140), if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter [43.21C](#) RCW and WAC [197-11-158](#)). The director shall process the exception request as a Type III permit review process as set forth in Chapter 15.210 thru 15.230 ECC. As part of that review process the director shall prepare a recommendation to the city council based on review of the submitted information, a site inspection, and the proposal's ability to comply with reasonable use exception criteria in subsection (D) of this section.
- C. Reasonable use review criteria. Criteria for review and approval of reasonable use exceptions follow; one or more may apply:
 - 1. The application of this chapter would deny all reasonable economic use of the property;
 - 2. No other reasonable economic use of the property has less impact on the critical area;
 - 3. The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;
 - 4. 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 the ordinance codified in this chapter, or its predecessor;
 - 5. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
 - 6. The proposal will result in no net loss of critical area functions and values consistent with the best available science; and
 - 7. The proposal is consistent with other applicable regulations and standards.
- D. Burden of proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made.

15.610.050 Allowed activities. (a Type I permit review process).

Certain activities as set forth below are allowed activities that do not require submittal of a separate critical area information form or critical area report. In making the decision whether a proposed activity is an allowed activity for purposes of this chapter, the director shall follow the permit review process set forth for Type I permit in Chapters 15.210 thru 15.230 ECC.

- A. Critical area report (ECC 15.610.100 and 15.610.110).** Activities allowed under this chapter shall have been reviewed and permitted or approved by the city or other agency with jurisdiction, but do not require submittal of a separate critical area information form or critical area report, unless such submittal was required previously for the underlying permit. The director may apply conditions to the underlying permit or approval to ensure that the allowed activity is consistent with the provisions of this chapter to protect critical areas.
- B. Required use of best management practices.** All allowed activities shall be conducted using the best management practices, adopted pursuant to the city's public works development standards, ECC Titles [3](#), [4](#), [5](#) and [9](#), that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The city shall observe the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.
- C. Allowed activities.** The following activities are allowed:
1. Permit requests subsequent to previous critical area review. Development permits and approvals that involve both discretionary land use approvals (such as subdivisions, rezones, or conditional use permits), and construction approvals (such as building permits) if all of the following conditions have been met:
 - a. The provisions of this chapter have been previously addressed as part of another approval;
 - b. There have been no material changes in the potential impact to the critical area or buffer since the prior review;
 - c. There is no new information available that is applicable to any critical area review of the site or particular critical area;
 - d. The permit or approval has not expired or, if no expiration date, no more than 5 years has elapsed since the issuance of that permit or approval; and
 - e. Compliance with any standards or conditions placed upon the prior permit or approval has been achieved or secured;
 2. Modification to existing structures. Structural modification of, addition to, demolition of or replacement of, an existing legally constructed structure (undertaken pursuant to an issued permit, if required) that does not further alter or increase the impact to the critical area or buffer and there is no increased risk to life or property as a result of the proposed modification or replacement; provided, that restoration of structures or demolition pursuant to an approved demolition permit must be initiated within one

year of the date of such damage, as evidenced by the issuance of a valid building permit, and diligently pursued to completion;

3. Activities within the improved right-of-way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a city-authorized private roadway, except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater; subject to the following:
 - a. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the right-of-way improvement, including disturbed areas; and
 - b. Retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance;
4. Minor utility projects. Utility projects which have minor or short-duration impacts to critical areas, as determined by the director in accordance with the criteria below, and which do not significantly impact the function or values of a critical area(s); provided, that such projects are constructed with best management practices and additional restoration measures are provided. Minor activities shall not result in the transport of sediment or increased stormwater. Such allowed minor utility projects shall meet the following criteria:
 - a. There is no practical alternative to the proposed activity with less impact on critical areas;
 - b. The activity involves the placement of a utility pole, street signs, anchor, or vault or other small component of a utility facility; and
 - c. The activity involves disturbance of an area less than 75 square feet;
5. 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:
 - a. The trail surface shall meet all other requirements including applicable standards set forth in the city's public works development standards;
 - b. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and
 - c. Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report.
6. Select vegetation removal activities. The following vegetation removal activities; provided, that except for these activities no vegetation shall be removed from a critical area or its buffer without approval from the director:
 - a. The removal of invasive and noxious weeds and vegetation with hand labor and light equipment;
 - b. The removal of trees that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property; provided, that:

- i. The applicant submits a report from a certified arborist, registered landscape architect, or professional forester that documents the hazard and provides a replanting schedule for the replacement trees;
 - ii. 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;
 - iii. All vegetation cut (tree stems, branches, etc.) shall be left within the critical area or buffer unless removal is warranted due to the potential for disease or pest transmittal to other healthy vegetation;
 - iv. The landowner shall replace any trees that are removed with new trees at a ratio of 2 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 (dbh) for deciduous trees and a minimum of 6 feet in height for evergreen trees as measured from the top of the root ball;
 - v. 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 city; provided, that within 14 days following such action, the landowner shall submit a restoration plan that demonstrates compliance with the provisions of this chapter;
 - c. Measures to control a fire or halt the spread of disease or damaging insects consistent with the state Forest Practices Act, Chapter [76.09](#) RCW; provided, that the removed vegetation shall be replaced in-kind or with similar native species within one year in accordance with an approved restoration plan; and
 - d. Unless otherwise provided, or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited;
7. Chemical applications. The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, as approved by the city; provided, that their use shall be restricted in accordance with Washington State Department of Fish and Wildlife Management Recommendations and the regulations of the Washington State Department of Agriculture, Washington State Department of Ecology, and the U.S. Environmental Protection Agency;
8. Minor site investigative work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, archaeological shovel tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored; and
9. Navigational aids and boundary markers. Construction or modification of navigational aids and boundary markers.

15.610.060 General critical area review requirements.

- A. As part of this review, the city shall:
1. Verify the information submitted by the applicant;
 2. Evaluate the project area and vicinity for critical areas;
 3. Determine whether the proposed project is likely to impact the functions or values of critical areas; and
 4. Determine if the proposed project adequately addresses the impacts and avoids impacts to the critical area associated with the project.
- B. If the proposed project is within or is likely to impact a critical area, the city shall:
1. Require a critical area report from the applicant that has been prepared by a qualified professional;
 2. Review and evaluate the critical area report;
 3. Determine whether the development proposal conforms to the purposes and performance standards of this chapter, including the criteria in ECC 15.610.170, Review criteria;
 4. Assess the potential impacts to the critical area and determine if they can be avoided or minimized;
 5. Determine if any mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of this chapter; and
 6. Assess all residential and commercial redevelopment according to the following criteria and requirements. Standard buffer widths on legal lots or parcels recorded prior to the effective date of the ordinance codified in this chapter may be reduced by the director upon the receipt and consideration of a critical area report as required under ECC 15.610.100 and 15.610.110. In addition to the requirements of such critical area report, the report shall include recommendations for the buffer width and mitigation from the experienced, qualified professional who produced the critical area report, provided the applicant for a development permit or other city approval demonstrates:
 - a. The lot was improved with a legally constructed structure prior to the effective date of the ordinance codified in this chapter. Current or continued occupancy is not required to meet this standard.
 - b. The legally constructed structure is currently present on the lot or was removed pursuant to a demolition permit approved by the city prior to the effective date of the ordinance codified in this chapter.
 - c. The existing buffer or critical area has been degraded by past legal land uses and is currently in a degraded state.
 - d. The applicant mitigates for the proposed buffer to result in no net loss of buffer functions per best available science.

- e. The applicant provides in the critical areas report a discussion comparing the functions provided by the existing buffer and the functions provided by the proposed buffer with mitigation demonstrating no net loss of function.
- f. The applicant provides for the protection of the reestablished buffer and critical area in perpetuity through one or more of the following measures:
 - i. Major and minor subdivisions, commercial, and multifamily residential developments completed under this section shall dedicate all buffers and critical areas as a critical area tract recorded prior to the issuance of an occupancy permit or other final city approval.
 - ii. Single-family development and boundary line adjustments shall record a notice on the title of affected properties identifying the presence and location of buffer widths and adjoining critical areas. Recording the notice on title shall occur prior to occupancy permits or other final city approvals and follow the procedure and requirements contained in ECC 15.610.250.

15.610.070 Critical area preapplication consultation.

Any person preparing to submit an application for development or use of land that may be regulated by the provisions of this chapter shall comply with the preapplication process for the underlying permit as set forth in Chapter 15.230.010 ECC. At this meeting, the director shall discuss the requirements of this chapter; provide critical area maps, scientific information, and other source materials; outline the review process; and work with the activity proponent to identify any potential concerns that might arise during the review process, in addition to discussing other permit procedures and requirements.

15.610.080 Critical area information form.

- A. Submittal. Prior to the city's consideration of any proposed activity not found to be exempt under ECC 15.610.020, Exemptions, or allowed pursuant to ECC 15.610.050, Allowed activities, the applicant shall submit to the department complete information regarding the critical area on the application for the underlying development, on forms provided by the city.
- B. Site inspection. Upon receipt of a project application and the necessary information regarding the critical area, the director shall conduct a site inspection to review critical area conditions on site. The director shall notify the property owner of the inspection prior to the site visit. Reasonable access to the site shall be provided by the property owner for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.
- C. Critical area information review process. The director and/or his/her designee shall review the critical area information form, conduct a site inspection, and review other information available pertaining to the site and the proposal and make a determination as to whether any critical areas may be affected by the proposal and if a more detailed critical area report shall be submitted.

1. Decision indicators. The director may use the following indicators to assist in determining the need for a critical area report:
 - a. Indication of a critical area on the city critical areas maps that may be impacted by the proposed activity;
 - b. Information and scientific opinions from appropriate agencies, including but not limited to the Washington State Departments of Fish and Wildlife and Ecology;
 - c. Documentation, from a scientific or other reasonable source, of the possible presence of a critical area;
 - d. A finding by a qualified professional, or a reasonable belief by the director, that a critical area may exist on or adjacent to the site of the proposed activity; and
 - e. Critical areas map (once adopted).
- D. Decision on critical area.
 1. No critical areas present. If after a site visit the director's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed activity is unlikely to degrade the functions or values of a critical area, then the director shall rule that the critical area review is complete and note on the underlying application the reasons that no further review is required. A summary of this information shall be included in any staff report or decision on the underlying permit.
 2. Critical areas present, but no impact – Waiver. If the director determines there are critical areas within or adjacent to the project area, but that the best available science shows that the proposed activity is unlikely to degrade the functions or values of the critical area, the director may waive the requirement for a critical area report. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:
 - a. There will be no alteration of the critical area or buffer;
 - b. The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this chapter; and
 - c. The proposal is consistent with other applicable regulations and standards. A summary of this analysis and the findings shall be included in any staff report or decision on the underlying permit.
 3. Critical areas may be affected by proposal. If the director determines that a critical area or areas may be affected by the proposal, then the director shall notify the applicant that a critical area report must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report.
- E. Effect of director's determination. A determination regarding the apparent absence of one or more critical areas by the director is not an expert certification regarding the presence of critical areas and the determination is subject to possible reconsideration and reopening if new information is received. If the applicant wants greater assurance of the accuracy of the critical area review determination, the applicant may choose to hire a qualified professional to provide such assurances.

15.610.090 Public notice of initial determination.

The city shall notify the public of proposals in accordance with the procedure set forth in ECC 15.230.040 for the underlying permit type.

- A. If the director determines that no critical area report is necessary, the city shall state the reasons for this determination in the notice of application issued by the city for the proposal.
- B. If the director determines that there are critical areas on the site that the proposed project is unlikely to impact and the project meets the requirements for and has been granted a waiver from the requirement to complete a critical area report, a summary of the analysis and findings for this decision shall be stated in the notice of application for the proposal.
- C. If the director determines that critical areas may be affected by the proposal and a critical area report is required, public notice of the application shall include a description of the critical area that might be affected and state that a critical area report(s) is required.

15.61.100 Critical area report – Requirements.

- A. Preparation by qualified professional. If required by the director in accordance with ECC 15.610.080(D)(3), the applicant shall submit a critical area report prepared by a qualified professional as defined herein.
- B. Incorporation of best available science. The critical area report shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance and reference the source of science used. The critical area report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this chapter.
- C. Minimum report contents. At a minimum, the report shall contain the following:
 - 1. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;
 - 2. A copy of the site plan for the development proposal including:
 - a. A map to scale depicting critical areas, buffers, the development proposal, and any areas to be cleared; and
 - b. A description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations;
 - 3. The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;
 - 4. Identification and characterization of all critical areas, water bodies, and buffers adjacent to the proposed project area;
 - 5. A statement specifying the accuracy of the report, and all assumptions made and relied upon;
 - 6. An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;

7. A description of reasonable efforts made to apply mitigation sequencing pursuant to ECC 15.610.130, Mitigation sequencing, to avoid, minimize, and mitigate impacts to critical areas;
 8. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with ECC 15.610.140, Mitigation plan requirements, including, but not limited to:
 - a. The impacts of any proposed development within or adjacent to a critical area or buffer on the critical area; and
 - b. The impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment;
 9. A discussion of the performance standards applicable to the critical area and proposed activity;
 10. Financial guarantees to ensure compliance; and
 11. Any additional information required for the critical area as specified in the corresponding chapter.
- D. Unless otherwise provided, a critical area report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the director.

15.610.110 Critical area report – Modifications to requirements.

- A. Limitations to study area. The director may limit the required geographic area of the critical area report as appropriate if:
 1. The applicant, with assistance from the city, cannot obtain permission to access properties adjacent to the project area; or
 2. The proposed activity will affect only a limited part of the subject site.
- B. Modifications to required contents. The applicant may consult with the director prior to or during preparation of the critical area report to obtain city approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.
- C. Additional information requirements. The director may require additional information to be included in the critical area report when determined to be necessary to the review of the proposed activity in accordance with this chapter. Additional information that may be required, includes, but is not limited to:
 1. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;
 2. Grading and drainage plans; and

3. Information specific to the type, location, and nature of the critical area.

15.610.120 Mitigation requirements.

- A. The applicant shall avoid all impacts that degrade the functions and values of a critical area or areas when possible. Unless otherwise provided in this chapter, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical area report and SEPA documents, so as to result in no net loss of critical area functions and values.
- B. Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard posed by a critical area.
- C. Mitigation shall not be implemented until after the director's approval of a critical area report that includes a mitigation plan, and mitigation shall be in accordance with the provisions of the approved critical area report.

15.610.130 Mitigation sequencing.

Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas in the following order. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following sequential order of preference:

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

15.610.140 Mitigation plan requirements.

When mitigation is required, the applicant shall submit for approval by the city, a mitigation plan as part of the critical area report. The mitigation plan shall include:

- A. Environmental goals and objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:
 - 1. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;
 - 2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed; and
 - 3. An analysis of the likelihood of success of the compensation project.
- B. Performance standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this chapter have been met.
- C. Detailed construction plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:
 - 1. The proposed construction sequence, timing, and duration;
 - 2. Grading and excavation details;
 - 3. Erosion and sediment control features;
 - 4. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and
 - 5. Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

- D. Monitoring program. The mitigation plan shall include a program for monitoring construction of the compensation project and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring (for example, monitoring shall occur in years one, 3, 5, and 7 after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be

monitored for a period necessary to establish that performance standards have been met, but not for a period less than 5 years.

- E. Contingency plan. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.
- F. Estimates of cost. The mitigation plan shall include an estimate of the costs to implement the required activities under the proposed plan to include both labor and materials. Any required financial guarantees shall be posted in accordance with ECC 15.610.270, Bonds to ensure mitigation, maintenance, and monitoring.

15.610.150 Innovative mitigation.

- A. The city should encourage, facilitate, and approve innovative mitigation projects that are based on the best available science. Advance mitigation and mitigation banking are examples of alternative mitigation projects allowed under the provisions of this section wherein one or more applicants, or an organization with demonstrated capability, may undertake a mitigation project together if it is demonstrated that all of the following circumstances exist:
 - 1. Creation or enhancement of a larger system of critical areas and open space is preferable to the preservation of many individual habitat areas;
 - 2. The applicant(s) demonstrates the organizational and fiscal capability to act cooperatively;
 - 3. The applicant(s) demonstrates that long-term management of the habitat area will be provided; and
 - 4. There is a clear potential for success of the proposed mitigation at the identified mitigation site.
- B. Conducting mitigation as part of a cooperative process does not reduce or eliminate the required replacement ratios.

15.610.160 Determination.

The director shall make a determination as to whether the proposed activity and mitigation, if any, is consistent with the provisions of this chapter. The director's determination shall be based on the criteria of ECC 15.610.170, Review criteria.

15.610.170 Review criteria.

- A. Any alteration to a critical area, unless otherwise provided for in this chapter, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:
1. The proposal minimizes the impact on critical areas in accordance with ECC 15.610.130, Mitigation sequencing;
 2. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
 3. The proposal is consistent with the general purposes of this chapter and the public interest;
 4. Any alterations permitted to the critical area are mitigated in accordance with ECC 15.610.120, Mitigation requirements;
 5. The proposal protects the critical area functions and values consistent with the best available science and results in no net loss of critical area functions and values; and
 6. The proposal is consistent with other applicable regulations and standards.
- B. The city may condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by this chapter.
- C. Except as provided for by this chapter, any project that cannot adequately mitigate its impacts to critical areas in the sequencing order of preferences in ECC 15.610.130 shall be denied.

15.610.180 Report acceptance.

If the director determines that the proposed activity meets the criteria in ECC 15.610.150 (Review criteria) and complies with the applicable provisions of this chapter, the director shall prepare a written notice of determination and identify any required conditions of approval. The notice of determination and conditions of approval shall be included in the project file and be considered in the next phase of the city's review of the proposed activity in accordance with any other applicable codes or regulations. Any conditions of approval included in a notice of determination shall be attached to the underlying permit or approval. Any subsequent changes to the conditions of approval shall void the previous determination pending re-review of the proposal and conditions of approval by the director. A favorable determination should not be construed as endorsement or approval of any underlying permit or approval.

15.610.190 Report rejection.

If the director determines that a proposed activity does not adequately mitigate its impacts on the critical areas and/or does not comply with the criteria in ECC 15.610.170 (Review criteria) and the provisions of this chapter, the director shall prepare written notice of the determination that includes findings of noncompliance. No proposed activity or permit shall be approved or issued if it is determined that the proposed activity does not adequately mitigate its impacts on the critical areas and/or does not comply with the provisions of this chapter. Following notice of determination that the proposed activity does not meet the review criteria and/or does not comply with the applicable provisions of this chapter, the applicant may request consideration of a revised critical area report. If the revision is found to be substantial and relevant to the critical area review, the director may reopen the critical area review and make a new determination based on the revised report.

15.610.200 Completion of the critical area review.

The city's determination regarding critical areas pursuant to this chapter shall be final concurrent with the final decision to approve, condition, or deny the development proposal or other activity involved.

15.610.210 Appeals.

Any decision to approve, condition, or deny a development proposal or other activity based on the requirements of this chapter may be appealed according to, and as part of, the appeal procedure for the permit or approval involved.

15.610.220 Variances. (a Type III permit review process)

- A. Variances from the standards of this chapter may be authorized by the city in accordance with the procedures set forth in ECC 15.610.040 and ECC 15.210 thru 15.230. The hearing examiner shall review the request and make a written finding that the request meets or fails to meet the variance criteria.
- B. Variance criteria. A variance may be granted only if the applicant demonstrates that the requested action conforms to all of the criteria set forth as follows:
 - 1. Special conditions and circumstances exist that are peculiar to the land, the lot, or something inherent in the land, and that are not applicable to other lands in the same district;
 - 2. The special conditions and circumstances do not result from the actions of the applicant;
 - 3. A literal interpretation of the provisions of this chapter would deprive the applicant of all reasonable economic uses and privileges permitted to other properties in the vicinity and zone of the subject property under the terms of this chapter, and the variance requested is the minimum necessary to provide the applicant with such rights;

4. Granting the variance requested will not confer on the applicant any special privilege that is denied by this chapter to other lands, structures, or buildings under similar circumstances;
 5. The granting of the variance is consistent with the general purpose and intent of this chapter, and will not further degrade the functions or values of the associated critical areas or otherwise be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity of the subject property;
 6. The decision to grant the variance includes the best available science and gives special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish habitat; and
 7. The granting of the variance is consistent with the general purpose and intent of the city's comprehensive plan and adopted development regulations.
- C. Conditions may be required. In granting any variance, the city may prescribe such conditions and safeguards as are necessary to secure adequate protection of critical areas from adverse impacts, and to ensure conformity with this chapter.
- D. Time limit. The city shall prescribe a time limit within which the action for which the variance is required shall be begun, completed, or both. Failure to begin or complete such action within the established time limit shall void the variance.
- E. Burden of proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and upon which any decision has to be made on the application.

15.610.230 Unauthorized critical area alterations and enforcement.

- A. When a critical area or its buffer has been altered in violation of this chapter, all ongoing development work shall stop and the critical area shall be restored. The city shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this chapter.
- B. Requirement for restoration plan. All development work shall remain stopped until a restoration plan is prepared. The plan is subject to approval by the city. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum requirements described in subsection (C) of this section. The director shall, at the violator's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.
- C. Minimum performance standards for restoration.
1. For alterations to frequently flooded areas, wetlands, and habitat conservation areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:

- a. The structural and functional values that existed prior to the unauthorized alteration shall be restored, including water quality and habitat functions;
 - b. The soil types and configuration that existed prior to the unauthorized alteration shall be replicated;
 - c. The disturbed critical area and buffers shall be replanted with vegetation in species types, sizes, and densities chosen from an approved restoration plant list. The functions and values that existed prior to the unauthorized alteration should be replicated at the location of the alteration; and
 - d. Information demonstrating compliance with the requirements in ECC 15.610.140 (Mitigation plan requirements) shall be submitted to the director.
2. For alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified:
- a. The hazard shall be reduced to a level equal to, or less than, the pre-development hazard;
 - b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and
 - c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.
- D. Site investigations. The director is authorized to make site inspections and take such actions as are necessary to enforce this chapter. The director shall present proper credentials and make a reasonable effort to contact any property owner before entering onto any property which may be subject to an investigation that could potentially lead to a critical area enforcement action.

15.610.240 Critical area markers and signs.

- A. The boundary at the outer edge of critical area tracts and easements shall be delineated with permanent survey stakes, using iron or concrete markers as established by local survey standards.
- B. The boundary at the outer edge of the critical area or buffer shall be identified with temporary signs prior to any site alteration. Such temporary signs shall be replaced with permanent signs prior to occupancy or use of the site.
- C. These provisions may be modified by the director as necessary to ensure protection of sensitive features or wildlife needs.

15.610.250 Notice on title.

- A. In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any property containing a critical area or buffer on which a development proposal is submitted shall record a notice with the county auditor. The notice shall state the presence of the critical area or buffer on the property, the application of this chapter to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist. The notice shall “run with the land.”
- B. The applicant shall submit proof that the notice has been filed for public record before the city approves any site development or construction for the property or, in the case of subdivisions, short subdivisions, planned unit developments, and binding site plans, at or before recording.

15.610.260 Critical area tracts.

- A. Critical area tracts shall be used in development proposals for subdivisions, short subdivisions, planned unit developments, and binding site plans to delineate and protect those contiguous critical areas and buffers listed below that total 5,000 or more square feet:
 - 1. All landslide hazard areas and buffers;
 - 2. All wetlands and buffers;
 - 3. All habitat conservation areas; and
 - 4. All other lands to be protected from alterations as conditioned by project approval.
- B. Critical area tracts shall be recorded on all documents of title of record for all affected lots.
- C. Critical area tracts shall be designated on the face of the plat or recorded drawing in a format approved by the city attorney. The designation shall include the following restriction:
 - 1. An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
 - 2. The right of the city to enforce the terms of the restriction.
- D. The city may require that any required critical area tract be dedicated to the city, held in an undivided interest by each owner of a building lot within the development with the ownership interest passing with the ownership of the lot, or held by an incorporated homeowner’s association or other legal entity (such as a land trust, which ensures the ownership, maintenance, and protection of the tract).

15.610.270 Bonds to ensure mitigation, maintenance, and monitoring.

- A. When mitigation required pursuant to a development proposal is not completed prior to the city final permit approval, such as final plat approval or final building inspection, the city shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the city. If the development proposal is subject to mitigation, the applicant shall post a mitigation bond or other security in a form and amount deemed acceptable by the city to ensure mitigation is fully functional.
- B. The bond shall be in the amount of 125 percent of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater.
- C. The bond shall be in the form of a surety bond, performance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution, with terms and conditions acceptable to the city attorney and with a company authorized to do business in the state of Washington.
- D. Bonds or other security authorized by this section shall remain in effect until the city determines, in writing, that the standards bonded for have been met. Bonds or other security shall be held by the city for a minimum of 5 years to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.
- E. Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.
- F. Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.
- G. Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the city may demand payment of any financial guarantees or require other action authorized by the city code or any other law.
- H. Any funds recovered pursuant to this section shall be used to complete the required mitigation and reimburse the city for its costs relating to the enforcement action.

15.610.280 Critical area inspections.

Reasonable access to the site shall be provided to the city, state, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.

15.610.290 Enforcement and penalties.

A. Rights of entry.

1. For permitting or inspection of work conducted under permit. Whenever a person applies for a permit or approval under any section of this chapter, the director shall have a limited right of entry to conduct studies necessary to determine whether to approve the proposal or to inspect work being conducted under the permit or approval. The property owner's failure to grant permission for the director to enter the property shall be grounds for denial of the permit or issuance of a stop work order.
2. To investigate violations and corrections. The director is authorized to enter upon property to determine whether the provisions of this chapter are being obeyed and to make any examinations, surveys, and studies as may be necessary in the performance of his or her duties. The director shall obtain the property owner's permission prior to entry. If the property owner declines to give permission or cannot be located, the director shall enter upon the property only in a manner consistent with the constitutions and laws of the United States and the state of Washington. If so required by the constitutions and laws of the United States and the state of Washington, the director shall apply to a court of competent jurisdiction for a search warrant authorizing access to such property for such purpose.

B. Civil violations and penalties.

1. Any person who violates any provision of this chapter shall be subject to a civil infraction not to exceed \$300.00 for each violation. The minimum civil penalty shall be \$50.00.
2. Each violation of this chapter shall be a separate offense, and in the case of a continuing violation, each day's continuance shall be deemed to be a separate and distinct violation.
3. Civil infractions under this chapter shall be issued and processed in accordance with Chapter [7.80](#) RCW.

C. Criminal violations and penalties.

1. Any person who intentionally, knowingly, recklessly, or criminally negligently violates any provision of this chapter and who has had a judgment entered against him or her pursuant to subsection (B) of this section within the immediately preceding 5 years shall be subject to criminal prosecution and upon conviction shall be guilty of a misdemeanor.
2. Any person convicted of a crime under subsection (C)(1) of this section shall be punished by imprisonment in jail for a maximum term fixed by the court of not more than 90 days, or by a fine in an amount fixed by the court of not more than \$1,000, or by both such imprisonment and fine. Each day or part thereof during which any violation is committed shall constitute a separate offense.

D. Stop work orders.

1. Whenever any work or development is being done or use is being conducted contrary to the provisions of this chapter, the director may issue a stop work order requiring that all work on the project be stopped or that the use be discontinued.
2. Issuance of a stop work order shall not bar the imposition of a civil or criminal penalty under this chapter or the use of any other provision of this chapter.
3. It is unlawful for any person with actual or constructive knowledge of the issuance of a stop work order pursuant to this chapter to do work or an activity prohibited by the order until the director has removed or lifted the order and issued written authorization for the work or activity to be continued. Violation of a stop work order shall be a misdemeanor and, upon conviction thereof, shall be punished by imprisonment in jail for a maximum term fixed by the court of not more than 90 days in jail or by a fine in an amount fixed by the court of not more than \$1,000, or by both such imprisonment and fine. Each day or part thereof during which any violation is committed shall constitute a separate offense.
4. Any person issued a stop work order who believes the issuance of such order was the result of a mistaken determination may appeal its issuance at an informal hearing before the director or his designee. To be timely, such appeal shall be filed in writing at the community development department within 5 business days of the date of issuance of the stop work order. The hearing will be conducted within 3 business days of the director's receipt of the written appeal, unless the appellant requests additional time not to exceed 10 business days following receipt of the appeal. At the hearing, the appellant will be provided: (a) an explanation of, and opportunity to ask questions about, the reasons for and evidence supporting issuance of the stop work order; (b) an opportunity to give any statements, reasons or documentation, personally or through others, explaining why the order was wrongfully or mistakenly issued; (c) an opportunity to identify any mitigating circumstances the appellant believes would justify withdrawal of the order; and (d) the right to have legal counsel present. The director shall issue a written decision within 5 days following the conclusion of the hearing.

- E. Nuisance. Any development carried out contrary to the provisions of this chapter shall constitute a public nuisance and may be enjoined as provided by the statutes of the state of Washington.

15.620 Wetlands

15.620.010 Designation, rating, and mapping wetlands.

- A. Designating wetlands. Wetlands are those areas, designated in accordance with the Washington State Wetland Identification and Delineation Manual (1997), that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. All areas within the city meeting the wetland designation criteria in the Identification and Delineation Manual, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.
- B. Wetland ratings. Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system found in the Washington State Wetland Rating System documents Washington State Wetland Rating System for Eastern Washington – Revised (Publication No. 04-06-015, Hruby, T., 2004). These documents contain the definitions and methods for determining if the criteria below are met.
1. Wetland rating categories.
 - a. Category I. Category I wetlands are those that meet one or more of the following criteria:
 - i. Documented habitat for federal or state listed endangered or threatened fish, animal, or plant species;
 - ii. High-quality native wetland communities, including documented Category I or II quality Natural Heritage wetland sites and sites which qualify as a Category I or II quality Natural Heritage wetland (defined in the rating system documents);
 - iii. High-quality, regionally rare wetland communities with irreplaceable ecological functions, including sphagnum bogs and fens, estuarine, wetlands, or mature forested swamps (defined in the rating system documents); or wetlands of exceptional local significance.
 - b. Category II. Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Services, and National Marine Fisheries Services documented habitats for state listed sensitive plant, fish, or animal species:
 - i. Wetlands that contain fish or animal species listed as priority species by the Washington Department of Fish and Wildlife, or plant species listed as rare by the Washington State Department of Natural Resources;
 - ii. Wetland types with significant ecological functions as determined by an agency approved functional evaluation methodology that may not be adequately replicated through creation or restoration;
 - iii. Wetlands possessing significant habitat value based on a score of 22 or more points in the state Department of Ecology habitat rating system; or
 - iv. Documented wetlands of local significance.

- c. Category III. Category III wetlands are those that do not satisfy Category I, II, or IV criteria, and with a habitat value rating of 21 points or less.
 - d. Category IV. Category IV wetlands are those that meet one or more of the following criteria:
 - i. Hydrologically isolated wetlands, as determined by the U.S. Army Corps of Engineers Regulatory Branch that are less than or equal to one acre in size, have only one wetland class, and are dominated (greater than 80 percent area cover) by a single, nonnative plant species (monotypic vegetation); or
 - ii. Hydrologically isolated wetlands that are less than or equal to 2 acres in size, and have only one wetland class and greater than 90 percent area cover of nonnative plant species.
2. Date of Wetland Rating. Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the local government, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities. Wetland rating categories shall not change due to illegal modifications.
- C. Mapping. The approximate location and extent of potential wetlands are shown on the critical area maps adopted with this ordinance and listed below. Other maps may also be used as they are developed and subsequently adopted by the city. Soil maps produced by U.S. Department of Agriculture National Resources Conservation Service may be useful in helping to identify potential wetland areas. These maps are to be used as a guide for the city, project applicants, and/or property owners, and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation:
- 1. Ellensburg UGA Wetland Inventory Maps – Figure 2 (Sheets 1 through 6); contained in the city of Ellensburg: Best Available Science Review for Wetlands and Fish and Wildlife Habitat; November 2008; ESA Adolfson.

The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional wetland scientist applying the Washington State Wetlands Identification and Delineation Manual as required by RCW [36.70A.175](#) (Ecology Publication No. 96-94, 1997).

15.620.020 Critical area report – Additional requirements for wetlands.

- A. All critical areas located within 300 feet of the project area that have been designated by the city and are shown on city, state, or federal government agency maps and/or reports shall be addressed in a critical area report for wetlands.
- B. Wetland analysis. A written assessment of the wetland, the appropriate wetland type, and required buffer under the provisions of this chapter.
- C. As provided for under ECC 15.610.110, the director may require additional information to be included in the critical area report when determined to be necessary for the review of the proposed activity. Additional information for wetlands that may be required includes, but is not limited to, the following:
 - 1. Vegetative, faunal, and hydrologic characteristics;
 - 2. Soil and substrate characteristics;
 - 3. Topographic elevations;
 - 4. A discussion of water sources supplying the wetland and documentation of the hydrologic regime. Such discussion shall include an analysis of existing and future hydrologic regimes and proposed hydrologic regime for enhanced, created, or restored mitigation areas, if provided for in the project.

15.620.030 Performance standards – General requirements.

- A. Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and functional performance of the wetland and other critical areas.
- B. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this chapter.
- C. Category I wetlands. Activities and uses shall be prohibited from Category I, except as provided for in the public agency and utility exception, reasonable use exception, and variance sections of this chapter.
- D. Category II and III wetlands. With respect to activities proposed in Category II and III wetlands, the following standards shall apply:
 - 1. Water-dependent activities may be allowed where there are no practicable alternatives that would have a less adverse impact on the wetland, its buffers and other critical areas.
 - 2. Where non-water-dependent activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited, unless the applicant demonstrates that:
 - a. The basic project purpose cannot reasonably be accomplished and successfully avoid, or result in less adverse impact on, a wetland on another site or sites in the general region; and

- b. All alternative designs of the project as proposed, that would avoid or result in less of an adverse impact on a wetland or its buffer, such as a reduction in the size, scope, configuration, or density of the project, are not feasible.
- E. Category IV wetlands. Activities and uses that result in unavoidable and necessary impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical area report and mitigation plan, but only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the acreage and loss functions will be provided under the terms established under ECC 15.620.040(F) and (G).
- F. Wetland buffers.
 - 1. Standard buffer widths. Required standard wetland buffers, based on wetland category and land use intensity, are as follows:

Wetland Type	Wetland Buffer Width
Category I	150 feet
Category II	100 feet
Category III	50 feet
Category IV	25 feet

- 2. Measurement of wetland buffers. All buffers shall be measured from the wetland boundary as surveyed in the field. The width of the wetland buffer shall be determined according to the wetland category and the proposed land use. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland. Only fully vegetated buffers will be considered. Lawns, walkways, driveways, and other mowed or paved areas will not be considered buffers.
- 3. Increased wetland buffer widths. In those situations in which a SEPA checklist discloses that the above buffer widths may not be sufficient to mitigate the significant adverse environmental impacts of the proposal on the wetland, the director may invoke the procedures in Chapter 15.27 (SEPA) ECC and WAC [197-11-158](#). The director may require increased buffer widths in accordance with the recommendations of the experienced, qualified professional wetland scientist who produced the required critical areas report and best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. The increased buffer width shall not exceed a maximum of 100 percent increase over the buffer width that would otherwise be required by subsection (F)(1) of this section. This determination shall be based on one or more of the following criteria:

- a. A larger buffer is needed to protect other critical areas;
 - b. The buffer or adjacent uplands has a slope greater than 15 percent or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the wetland;
 - c. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, implementation of a buffer planting plan may substitute. Where a buffer planting plan is proposed, it shall include densities that are not less than 3 feet on center for shrubs and 8 feet on center for trees and require monitoring and maintenance to ensure success. Existing buffer vegetation is considered inadequate and will need to be enhanced through additional native plantings and (if appropriate) removal of nonnative plants when: (i) nonnative or invasive plant species provide the dominant cover, (ii) vegetation is lacking due to disturbance and wetland resources could be adversely affected, or (iii) enhancement plantings in the buffer could significantly improve buffer functions;
 - d. The standard buffer is less than that which is necessary to protect documented endangered, threatened, or sensitive wildlife species which have a primary association with the wetland;
 - e. The wetland contains plants listed as sensitive, threatened, or endangered;
 - f. The proposed development density is greater than 2 or more residential units per acre and abuts a Category I or II wetland with high habitat value of 29 to 36 points obtained in the wetland critical areas report; or
 - g. The wetland is associated with a stream segment on the 303d list for pollutants, or has a total daily maximum load for sediment or temperature and the proposal includes removal of trees and shrubs or untreated stormwater runoff.
4. Wetland buffer width averaging. The director may allow modification of the standard wetland buffer width in accordance with an approved critical area report and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified professional wetland scientist demonstrates that:
- a. It will not reduce wetland functions or functional performance;
 - b. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
 - c. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
 - d. The buffer width is not reduced to less than 75 percent of the standard width or 35 feet.

5. Interrupted buffer.
 - a. Where a legally established, pre-existing use of the buffer exists, those proposed activities that are within the wetland or stream buffer, but are separated from the critical area by an existing permanent substantial improvement, which serves to eliminate or greatly reduce the impact of the proposed activity upon the critical area, are exempt; provided, that the detrimental impact to the critical area does not increase. However, if the impacts do increase, the city shall determine if additional buffer may be required along the impact area of the interruption. Substantial improvements may include developed public infrastructure such as roads and railroads. Substantial improvements may not include paved trails, sidewalks, or parking areas. An allowance for activity in an interrupted buffer may require a critical areas report for the type of critical areas buffer that is affected. In determining whether a critical areas report is necessary, the city shall consider the hydrologic, geologic and/or biological habitat connection potential and the extent and permanence of the interruption.
 - b. Where a legally established, pre-existing structure or use is located within a regulated wetland or stream buffer and where the regulated buffer is fully paved and does not conform to the interrupted buffer provision above, the buffer will end at the edge of the pavement, adjacent to the wetland or stream.
6. Buffer consistency. All mitigation sites shall have buffers consistent with the buffer requirements of this chapter.
7. Buffer maintenance. Except as otherwise specified or allowed in accordance with this chapter, wetland buffers and buffers of mitigation sites shall be retained in an undisturbed condition, or shall be maintained as enhanced pursuant to any required permit or approval. Removal of invasive nonnative weeds is required for the duration of the mitigation bond.
8. Buffer uses. The following uses may be permitted 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 in accordance with an approved critical area report, including:
 - i. Walkways and trails; provided, that those pathways which are generally parallel to the perimeter of the wetland shall be located in the outer 25 percent of the buffer area, and constructed with a surface that does not interfere with the permeability. Raised boardwalks utilizing nontreated pilings area may be acceptable;
 - ii. Wildlife viewing structures; and
 - iii. Fishing access areas down to the water's edge that shall be no larger than 6 feet.

- c. Stormwater management facilities. Stormwater management facilities, limited to stormwater dispersion outfalls and bioswales, may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only; provided, that:
 - i. No other location is feasible; and
 - ii. The location of such facilities will not degrade the functions or values of the wetland. Stormwater management facilities are not allowed in buffers of Category I or II wetlands.

G. Signs and fencing of wetlands.

- 1. Temporary markers. The outer perimeter of the wetland and buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and is subject to inspection by the director prior to the commencement of permitted activities. The director shall have the authority to require that temporary fencing be placed on site to mark the outer perimeter of the wetland and its associated buffer area. This temporary marking, and any required temporary fencing, shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.
- 2. Permanent signs. As a condition of any permit or authorization issued pursuant to this chapter, the director may require the applicant to install permanent signs along the boundary of a wetland or buffer.
 - a. Permanent signs shall be made of a metal face with a green color background and white letters; attached to a metal post, or another nontreated material of equal durability; made with a sign face no smaller than one foot by one foot square and no larger than 2 feet by 2 feet square; and mounted with the bottom of the sign face no less than 3 feet above and no more than 5 feet above adjacent grade. Signs must be posted at a minimum of one per lot of record, or on large parcels every 300 feet, or additional signs as required by the director and must remain unobstructed and be maintained by the property owner in perpetuity. The sign(s) shall be worded as follows or with alternative language approved by the director:
 - Protected Critical Area
 - Do Not Disturb
 - Contact the city of Ellensburg
 - Regarding Uses and Restriction
 - b. The provisions of subsection (G)(2)(a) of this section may be modified by the director as necessary to assure protection of sensitive features or wildlife.

15.620.040 Performance standards – Compensatory mitigation requirements.

Compensatory mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with the state Department of Ecology Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals, 1994, as revised.

- A. Mitigation shall be required in the following order of preference:
1. Avoiding the impact altogether by not taking a certain action or parts of an action.
 2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
 3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
 4. Reducing or eliminating the impact over time by preservation and maintenance operations.
 5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.
- B. Mitigation for affected functions or functions lost as a result of the proposed activity. Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide similar wetland functions as those lost by the proposed activity, except when:
1. The lost wetland provides minimal functions as determined by a site-specific function assessment, 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
 2. Out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.
- C. Preference of mitigation actions. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:
1. Restoring wetlands on upland sites that were formerly wetlands.
 2. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.
 3. Enhancing significantly degraded wetlands in combination with restoration or creation. Such enhancement should be part of a mitigation package that includes replacing the impacted area meeting appropriate ratio requirements.

- D. Type and location of mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternate approach, compensatory mitigation for ecological functions shall be either in-kind and on-site, or in-kind and within the same stream reach, subbasin, or drift cell. Mitigation actions shall be conducted within the same subdrainage basin and on the site as the alteration except when all of the following apply:
1. There are no reasonable on-site or in-subdrainage basin opportunities or on-site and in-subdrainage basin opportunities do not have a high likelihood of success, after a determination of the natural capacity of the site to mitigate for the impacts. Consideration should include: anticipated wetland mitigation replacement ratios, buffer conditions and proposed widths, hydrogeomorphic classes of on-site wetlands when restored, proposed flood storage capacity, potential to mitigate riparian fish and wildlife impacts (such as connectivity);
 2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and
 3. Off-site locations shall be in the same subdrainage basin unless:
 - a. Established watershed goals for water quality, flood or conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation at another site; or
 - b. Credits from a state certified wetland mitigation bank are used as mitigation and the use of credits is consistent with the terms of the bank's certification.
- E. Mitigation timing. Mitigation projects shall be completed with an approved monitoring plan prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

The director may authorize a one-time temporary delay, up to 120 days, in completing minor construction and landscaping when environmental conditions could produce a high probability of failure or significant construction difficulties. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, and general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints which preclude implementation of the mitigation plan. The justification must be verified and approved by the city and include a financial guarantee.

F. Mitigation ratios.

1. Acreage replacement ratios. The following ratios shall apply to creation or restoration that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a state certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.
 - a. Category I: 6 to 1;
 - b. Category II: 3 to 1;
 - c. Category III: 2 to 1;
 - d. Category IV: 1½ to 1.
2. Increased replacement ratio. The director may increase the ratios under the following circumstances:
 - a. Uncertainty exists as to the probable success of the proposed restoration or creation;
 - b. A significant period of time will elapse between impact and replication of wetland functions;
 - c. Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or
 - d. The impact was an unauthorized impact.

G. Wetlands enhancement as mitigation.

1. Impacts to wetland functions may be mitigated by enhancement of existing significantly degraded wetlands, but must be used in conjunction with restoration and/or creation. Applicants proposing to enhance wetlands must produce a critical area report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show whether existing wetland functions will be reduced by the enhancement actions.
2. At a minimum, enhancement acreage shall be double the acreage required for creation or restoration under subsection (F) of this section. The ratios shall be greater than double the required acreage where the enhancement proposal would result in minimal gain in the performance of wetland functions and/or result in the reduction of other wetland functions currently being provided in the wetland.
3. Mitigation ratios for enhancement in combination with other forms of mitigation shall range from 6:1 to 3:1 and be limited to Class III and Class IV wetlands.

H. Wetland mitigation banks.

1. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:
 - a. The bank is certified under Chapter [173-700](#) WAC;
 - b. The director determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and
 - c. The proposed use of credits is consistent with the terms and conditions of the bank's certification.
2. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.
3. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions.

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15.630 Frequently Flooded Areas

15.630.010 Designation of frequently flooded areas.

- A. Frequently flooded areas. Frequently flooded areas shall include:
1. Areas identified on the flood insurance map(s). Those areas of special flood hazard within the incorporated city limits of Ellensburg identified as being within the 100-year floodplain by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Ellensburg, Dated November 5, 1980," with accompanying flood insurance rate and floodway maps (FIRM Community Panel Number 530234 0001C; Community Panel Number 530234 0002C; Floodway Community Panel Number 530095 0552C; all maps effective May 5, 1981). The above study and maps are hereby adopted by reference and declared to be a part of this chapter. The flood insurance study and maps are on file with the Ellensburg community development department, located at 501 N. Anderson Street in Ellensburg, Washington.
- B. Use of additional information. The director may use additional flood information that is more restrictive or detailed than that provided in the flood insurance study conducted by the Federal Emergency Management Agency (FEMA) to designate frequently flooded areas, including data on channel migration, historical data, high water marks, photographs of past flooding, location of restrictive floodways, maps showing future build-out conditions, maps that show riparian habitat areas, or similar information.
- C. Flood elevation data. When base flood elevation data is not available (A and V zones designated under subsection (A) of this section), the director shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, county or other source, in order to administer this section.
- D. Designation made by director. The flood insurance maps are to be used as a guide for the city, project applicants and/or property owners and the public, and should be considered a minimum designation of frequently flooded areas. Because flood insurance maps may be continuously updated as areas are reexamined or new areas are identified, the best available information for flood hazard area identification shall be the basis for regulation.
- E. Supplemental documentation. Any areas identified by the director in this section shall be supported by professional scientific information.
- F. Maintenance of records. The director shall maintain for public inspection all records of floodplain hazards, certificates of floodproofing, and flood elevation data.
- G. Mapping. The location and extent of frequently flooded areas are shown on the critical area maps adopted with the ordinance codified in this chapter by the city. The following maps and data are hereby adopted and are available from the city and/or the listed governmental agency: Federal Emergency Management Administration Flood Insurance Rate Maps; Community Panels: 530234 0001C; 530234 0002C; 530095 0439B; 530095 0552C; 530095 0443B; 530095 0556B; 530095 0554C.

15.630.020 Critical area report requirements – Frequently flooded areas.

- A. Prepared by a qualified professional. A frequently flooded areas report shall be prepared for development within floodplains. Such report shall be required to be prepared by a qualified professional who is a hydrologist or engineer, and who is licensed in the state of Washington with experience in preparing flood hazard assessments.
- B. Areas addressed in critical area report. The following areas shall be addressed in a critical area report for frequently flooded areas:
 1. The location of the proposed activity;
 2. All areas of a special flood hazard area, as indicated on the flood insurance map(s) within 200 feet of the project area; and
 3. All other flood areas indicated on the flood insurance map(s) within 200 feet of the project area.
- C. Flood hazard assessment required. A critical area report for a proposed activity within a frequently flooded area shall contain a flood hazard assessment including the following site- and proposal-related information at a minimum:
 1. Site and construction plans. A copy of the site and construction plans for the development proposal showing:
 - a. Floodplain (100-year flood elevation); 10-year and 50-year flood elevations and floodway, if required by the director and, in addition, other critical areas, buffers, and shoreline areas;
 - b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain;
 - c. Extent and location of proposed clearing and grading activity; and
 - d. Elevation of the lowest floor (including basement) of all structures, and the level to which any structure has been floodproofed;
 2. Floodproofing certificate. When floodproofing is proposed, a certification by a registered professional engineer or architect that the floodproofing methods meet the requirements of ECC 15.630.040(G), Floodproofing;
 3. Watercourse alteration. When watercourse alteration is proposed, the critical area report shall include:
 - a. Extent of watercourse alteration. A description of and plan showing the extent to which a watercourse will be altered or relocated as a result of the proposal; and
 - b. Maintenance program required for watercourse alterations. A maintenance program that provides maintenance practices for the altered or relocated portion of the watercourse to ensure that the flood-carrying capacity is not diminished;
 4. Information regarding other critical areas. Potential impacts to wetlands, fish and wildlife habitat and other critical areas shall be addressed in accordance with the applicable sections of this chapter.

15.630.030 Warning and disclaimer of liability. (13.39.490)

The degree of flood protection required by this chapter poses and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside frequently flooded areas or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city, any officer or employee thereof, or the Federal Insurance Administration, for any flood damage that results from reliance on this chapter or any administrative decision lawfully made hereunder.

15.630.040 Performance standards – General requirements.

- A. Permit(s) required. The permit required by this section shall be incorporated into the basic underlying permits necessary for the project or activity to proceed within a frequently flooded area, e.g., building permit, short plat, public works permits, State Environmental Policy Act and city critical areas reviews, and similar permits and development reviews. Completion of and compliance with the necessary review processes and permits listed above shall satisfy the requirement of issuance of a development permit for any activity that would alter land or commence a new use within a frequently flooded area.
- B. All necessary permits shall be obtained. The director shall verify that all necessary permits have been obtained from those governmental agencies from which prior approval is required by federal, state, or local law, including but not limited to Section 404 of the Federal Water Pollution Control Act Amendment of 1972 and the Endangered Species Act of 1973.
- C. Development proposals must not reduce the effective base flood storage volume of a floodplain. Grading or other activity that would reduce the effective storage volume must be mitigated by creating compensatory storage on the site. The compensatory storage must provide equivalent volume at equivalent elevations to that being displaced, be hydraulically connected to the source of the flooding, be provided in the same construction season, and occur on site or off site, if legal arrangements can be made to assure that the effective compensatory storage will be preserved over time.
- D. Areas without base flood elevation data. Where base flood elevation data is not available [A and V zones designated under ECC 15.630.010(A)], and there is insufficient data available from federal, state, county, or other sources, the director shall determine the base flood elevation using historical data, high water marks, photographs of past flooding, and other available information. If there is insufficient data available for the director to make a determination of the base flood elevation, and standards requiring a base flood elevation cannot be implemented, the director shall require measures that assure the proposed structures will be reasonably safe from flooding. At a minimum, the base flood elevation shall be set at least 2 feet above the highest adjacent grade. The director shall have the authority to set an average base flood elevation if there are sufficient grade deficiencies in elevation around the development area.

E. Construction materials and methods.

1. Methods that minimize flood damage. All new construction and substantial improvements shall be constructed using flood-resistant materials and utility equipment, and with methods and practices that minimize flood damage.
2. Structures shall be located outside the floodplain. All structures shall be located on the buildable portion of the site out of the floodplain unless there is no buildable site area out of the floodplain. For sites with no buildable area out of the floodplain, structures shall be placed on the highest land on the site, oriented parallel to the anticipated flow of water rather than perpendicular, and sited as far from the watercourse and other critical areas as possible. If the director finds any evidence of active hyporheic exchange on a site, the development shall be located to minimize disruption of such exchange.
3. Utilities shall be protected. All utilities shall be located on the buildable portion of the site out of the floodplain unless there is no buildable site area out of the floodplain. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within their components during conditions of flooding.

F. Elevation certificate required following construction. Following construction of a structure within the floodplain where the base flood elevation is provided, the applicant shall be required to submit to the director an as-built elevation certificate from a licensed professional land surveyor that records the elevation of the lowest floor. The director shall obtain said as-built elevation certificate and maintain said certificates in its official records.

G. Floodproofing.

1. When a structure is to be floodproofed, it shall be designed and constructed using methods that meet the following requirements:
 - a. Watertight structure. The structure shall be watertight with walls substantially impermeable to the passage of water below one foot above the base flood level;
 - b. Hydrostatic resistance. Structural components shall be capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
 - c. Certified by a registered professional engineer or architect. The structure shall be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans.
2. Floodproofing certificate required following construction. Following construction of the structure, the applicant shall obtain a floodproofing certificate from a registered professional engineer or architect that records the actual (as-built) elevation to which the structure was floodproofed.
3. Floodproofing nonresidential buildings. Applicants floodproofing nonresidential buildings shall be notified by the director that flood insurance premiums will be based

on rates that are one foot below the floodproofed level (for example, a building floodproofed to the base flood level will be rated as one foot below).

H. Anchoring.

1. Anchoring required. All new construction and substantial improvements within the floodplain shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
2. Manufactured homes shall be anchored. All manufactured homes placed within the floodplain must be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

- I. Fill and grading. Fill and grading within the floodplain shall only occur after the review and approval by the city of the clearing, grading, and fill proposal. Such proposal shall require a determination from a licensed professional engineer that the fill or grading will not block side channels, inhibit channel migration, increase flood hazards to others, or be placed within a channel migration zone, whether or not the city delineated such zones as of the time of the application.

15.630.050 Performance standards – Specific uses.

In all frequently flooded areas the following standards are required:

A. Residential construction.

1. Must be no lower than one foot above the base flood elevation. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to one foot above the base flood elevation for the area; and
2. Areas below the lowest floor must meet requirements for crawlspaces as set forth hereinabove in this chapter.

- B. Manufactured homes must be elevated. All manufactured homes to be placed or substantially improved shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated one foot or more above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

- C. Recreational vehicles. Recreational vehicles are required to either:
1. Be on the site for fewer than 180 consecutive days;
 2. Be fully licensed and ready for highway use, on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
 3. Must obtain a development permit and meet the requirements of this section, including elevation and anchoring, for manufactured homes.
- D. Nonresidential construction.
1. Must be no lower than one foot above the base flood elevation. Construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to one foot above the base flood elevation for the area or, together with attendant utility and sanitary facilities, shall be floodproofed in accordance with ECC 15.630.040(G), Floodproofing. Unavoidable impacts to flooded areas (from fill) need to be mitigated; and
 2. Areas below the lowest floor must meet the requirements for crawlspaces set forth hereinabove in this chapter.
- E. Utilities.
1. Shall be designed to minimize infiltration of floodwaters. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems.
 2. Sanitary sewage systems. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
- F. Subdivision proposals.
1. All subdivisions and short subdivisions shall:
 - a. Minimize flood damage. Subdivisions and short subdivisions shall be designed to minimize or eliminate flood damage to proposed structures; and public utilities and facilities that are installed as part of such subdivisions, such as sewer, gas, electrical, and water systems, shall be located and constructed to minimize flood damage. Subdivisions should be designed using natural features of the landscape, and should not incorporate flood protection changes;
 - b. Have adequate drainage. Subdivisions and short subdivisions shall have adequate natural surface water drainage in accordance with city of Ellensburg public works development standards to reduce exposure to flood hazards; and
 - c. Show flood areas on plat maps. Subdivisions and short subdivisions shall show the 100-year floodplain, floodway, and channel migration zone where designated by the city on the preliminary and final plat and short plat maps.

2. Detailed base flood elevation data shall be generated for subdivisions of at least 50 lots or 5 acres. Where detailed base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres.

G. Alteration of watercourses.

1. Shall require the submission of a critical area report by the applicant and be in accordance with the habitat regulations set forth in ECC 15.650.020 and 15.650.030, et seq. Watercourse alterations shall only be allowed when no negative impacts occur to critical areas.
2. Shall not result in blockage. Watercourse alteration projects shall not result in blockage of side channels.
3. Notification required. The city shall notify adjacent communities, the Washington State Department of Ecology, the Washington Department of Fish and Wildlife, and the Federal Insurance Administration of the proposed watercourse alteration at least 30 days prior to permit issuance.
4. Maintenance of alterations. The applicant shall maintain the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished. The applicant shall furnish the city with a surety bond for maintenance, which bond shall remain in effect for a period of 5 years after completion of the alterations and be in accordance with a maintenance program approved by the director for the alteration project. The bond shall be in an amount to be determined by the director as sufficient to ensure that the flood carrying capacity of the watercourse is not diminished and complies with the terms of the maintenance program. The surety and the form of the bond shall be subject to the approval of the city attorney.

H. Crawlspace. Crawlspace are commonly used as a method of elevating buildings to or above the base flood elevation or providing area for easier access to utilities and other building facilities. The following requirements apply to all crawlspace that have enclosed areas or floors below the base flood elevation:

1. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effect of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required opening standards set forth below in this section. If crawlspace construction is proposed for areas in which the flood velocities exceed 5 feet per second, the design must be reviewed and approved by a registered architect or engineer.

2. The crawlspace is an enclosed area below the base flood elevation, and as such, must have openings that equalize hydrostatic pressures by allowing for the automatic entry and exit of floodwaters. Openings or vents must meet the following criteria:
 - a. A minimum of 2 openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
 - b. The bottom of all openings shall be no higher than one foot above grade; and
 - c. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.
3. All portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. The recommended construction practice is to elevate the bottom of the joists and all insulation above the base flood elevation.
4. Any building utility systems within the crawlspace must be elevated above the base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components. Duct work must either be placed above the base flood elevation or sealed from floodwaters.
5. In addition to the above requirements, the following specific provisions also apply to below grade crawlspaces:
 - a. The interior grade of a crawlspace below the base flood elevation must not be more than 2 feet below the lowest adjacent exterior grade;
 - b. The height of the below grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall, must not exceed 4 feet at any point;
 - c. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. Possible options include natural drainage through porous, well-drained soils or drainage systems such as perforated pipes, tiles, gravel or other means; and
 - d. Below grade crawlspace construction in accordance with the requirements listed above will not be considered basements.

15.630.060 Performance standards – Areas of shallow flooding.

- A. Residential structures. New construction and substantial improvements of residential structures and manufactured homes within AO zones identified in the flood insurance study and maps referenced in ECC 15.630.010(A) shall have the lowest floor (including basement) elevated above the highest adjacent grade of the building site to one foot above the depth number specified in feet on the flood insurance map or at least 2 feet if no depth number is specified.
- B. Nonresidential structures. New construction and substantial improvements of nonresidential structures within such AO zones shall either:
 - 1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site to an height totaling one foot higher than the depth number specified in feet on the flood insurance map or at least 2 feet if no depth number is specified; or
 - 2. Together with attendant utility and sanitary facilities, be completely floodproofed one foot above the depth number specified in the flood insurance map(s) referenced in ECC 15.630.010(A) so that any space below that depth number is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in ECC 15.630.040(G), Floodproofing.
- C. Drainage paths. All development shall include adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
- D. Recreational vehicles. Recreational vehicles placed on sites within AO zones on the flood insurance map(s) shall either:
 - 1. Be on the site for fewer than 180 consecutive days;
 - 2. Be fully licensed and ready for highway use, on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
 - 3. Must meet the requirements of this section and the anchoring requirements for manufactured homes.

15.630.070 Prohibited uses and activities.

- A. Critical facilities. Construction of new critical facilities shall be permissible within frequently flooded areas if no feasible alternative site is available. Critical facilities constructed within frequently flooded areas shall have the lowest floor elevated 3 feet or more above the level of the base flood elevation (100-year flood). Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

If not otherwise required by the city, locating of critical facilities within a frequently flooded area shall be subject to SEPA review and action.

- B. Construction in floodways.

1. New construction requires certification by a licensed professional engineer. Encroachments, including new construction, substantial improvements, fill, and other development, are prohibited within designated floodways unless certified by a registered professional engineer. Such certification shall demonstrate through hydrologic and hydraulic analyses, performed in accordance with standard engineering practice, that the proposed encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge. Small projects that are solely to protect or create fish habitat and designed by a qualified professional may be allowed without certification if the director determines that the project will not obstruct flood flows. Fish protection projects shall be reviewed on behalf of the city by a qualified professional in the field of hydraulics.
2. Residential construction and reconstruction prohibited. Construction and reconstruction of residential structures is prohibited within designated floodways, except for:
 - a. Repairs, reconstruction, or improvements to a structure that do not increase the ground floor area; and
 - b. Repairs, reconstruction or improvements to a structure, for which the cost does not exceed 50 percent of the market value of the structure either:
 - i. Before the repair or reconstruction is started; or
 - ii. If the structure has been damaged, and is being restored, before the damage occurred.

Improvement to a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions or to structures identified as historic places may be excluded from the calculation of the 50 percent.
3. If the provisions of subsection (B)(2) of this section are satisfied, all new construction and substantial improvements shall comply with all applicable requirements of ECC 15.630.040 and 15.630.050.

15.640 Geologically Hazardous Areas

15.640.010 Designation of geologically hazardous areas

Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and use. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

- A. Erosion hazard;
- B. Landslide hazard;
- C. Seismic hazard;
- D. Other geological events including mass wasting, debris flows, rock falls, and differential settlement.

15.640.020 Designation of specific hazard areas

- A. Erosion hazard areas. Erosion hazard areas include those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a moderate to severe, severe, or very severe rill and interrill erosion hazard. Erosion hazard also includes those areas impacted by shore land and/or stream bank erosion and those areas within a river's channel migration zone.
- B. Landslide hazard areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include but are not limited to the following:
 - 1. Areas of historic failures, such as:
 - a. Those areas delineated by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a severe limitation for building site development;
 - b. Those areas mapped by the Washington State Department of Natural Resources (slope stability mapping) as unstable (U or Class 3), unstable old slides (UOS or Class 4), or unstable recent slides (URS or Class 5); and
 - c. Areas designated as quaternary slumps, earthflows, mudflows, or landslides on maps published by the U.S. Geological Survey or Washington State Department of Natural Resources;

2. Areas with all 3 of the following characteristics:
 - a. Slopes steeper than 15 percent;
 - b. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
 - c. Springs or ground water seepage;
 3. Areas that have shown movement during the Holocene epoch (from 10,000 years ago to the present) or that are underlain or covered by mass wastage debris of that epoch;
 4. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
 5. Slopes having gradients steeper than 80 percent subject to rock fall during seismic shaking;
 6. Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action;
 7. Areas that show evidence of or are at risk from snow avalanches;
 8. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and
 9. Any area with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and is measured by averaging the inclination over at least 10 feet of vertical relief.
- C. Seismic hazard areas. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington. The strength of ground shaking is primarily affected by:
1. The magnitude of an earthquake;
 2. The distance from the source of an earthquake;
 3. The type of thickness of geologic materials at the surface; and
 4. The type of subsurface geologic structure.
- Settlement and soil liquefaction conditions occur in areas underlain by cohesionless, loose, or soft-saturated soils of low density, typically in association with a shallow ground water table.
- D. Other hazard areas. Geologically hazardous areas shall also include areas determined by the director to be susceptible to other geological events including mass wasting, debris flows, rock falls, and differential settlement.

15.640.030 Mapping of geologically hazardous areas.

- A. The approximate location and extent of geologically hazardous areas are shown on the critical area maps adopted with the ordinance codified in this chapter and listed below. The critical area maps listed below are available from the city and/or the listed governmental agency and include:
1. U.S. Geological Survey topographical maps;
 2. Washington State Department of Natural Resources seismic hazard maps for Eastern Washington;
 3. Washington State Department of Natural Resources slope stability maps;
 4. Federal Emergency Management Administration flood insurance maps; and
 5. Locally adopted maps.
- B. These maps are to be used as a guide for the city, project applicants and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

15.640.040 Critical area report – Additional requirements for geologically hazardous areas.

The following requirements for geologically hazardous area critical area reports are in addition to the requirements for critical area reports set forth in ECC 15.610.100:

- A. Area addressed in critical area report. The following areas shall be addressed in a critical area report for geologically hazardous areas:
1. The project area of the proposed activity; and
 2. All geologically hazardous areas previously identified by the city within 200 feet of the project area or that have potential to affect or be affected by the proposal.
- B. Geological hazards assessment. A critical area report for a geologically hazardous area shall contain an assessment of geological hazards including the following site- and proposal-related information at a minimum:
1. Site and construction plans. The report shall include a copy of the site plans for the proposal showing:
 - a. The type of impacts, if any, that the project will either experience or cause in relation to any other critical area so identified under this section;
 - b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities;
 - c. The topography of the project site, of the project area, and all hazard areas addressed in the report; and
 - d. Clearing limits;

2. Assessment of geological characteristics. The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region. The assessment shall include, but not be limited to:
 - a. A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;
 - b. A detailed overview of the field investigations, published data, and references; data and conclusions from past assessments of the site; and site specific measurements, tests, investigations, or studies that support the identification of geologically hazardous areas; and
 - c. A description of the vulnerability of the site to seismic and other geologic events;
 3. Analysis of proposal. The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties; and
 4. Minimum buffer and building setback. The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.
- C. Incorporation of previous study. Where a valid critical areas report has been prepared within the last 5 years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical area report. The applicant shall submit a hazards assessment detailing any changed environmental conditions associated with the site.
- D. Mitigation of long-term impacts. When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the pre-existing level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the pre-existing conditions following abandonment of the activity.
- E. Additional analysis to be included in a critical area report for geologically hazardous areas. Parameters for design of site improvements, including appropriate foundations and retaining structures, should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, slope stability and estimates of settlement performance, vegetation management, erosion control, and damage control.

15.640.050 Performance standards – General requirements.

- A. Alterations of geologically hazardous areas or associated buffers may only occur for activities that:
 - 1. Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;
 - 2. Will not adversely impact other critical areas;
 - 3. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than pre-development conditions; and
 - 4. Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington.
- B. Critical facilities prohibited. Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative.

15.640.060 Performance standards – Specific hazards.

- A. Erosion and landslide hazard areas. Activities on sites containing erosion or landslide hazards shall meet the standards of ECC 15.640.050, Performance standards – General requirements, and the specific following requirements:
 - 1. Buffer requirement. A buffer shall be established from all edges of landslide hazard areas. The size of the buffer shall be determined by the director to eliminate or minimize the risk of property damage, death, or injury resulting from landslides caused in whole or part by the development, based upon review of, and concurrence with, a critical area report prepared by a qualified professional;
 - a. Minimum buffer. The minimum buffer shall be equal to the height of the slope or 50 feet, whichever is greater;
 - b. Buffer reduction. The buffer may be reduced to a minimum of 10 feet when a qualified professional demonstrates to the director's satisfaction that the reduction will adequately protect the proposed development, adjacent developments, and uses and the subject critical area;
 - c. Increased buffer. The buffer may be increased where the director determines a larger buffer is necessary to prevent risk of damage to proposed and existing development;
 - 2. Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a hazards analysis is submitted and certifies that:
 - a. The development will not increase surface water discharge or sedimentation to adjacent properties beyond pre-development conditions;
 - b. The development will not decrease slope stability on adjacent properties; and
 - c. Such alterations will not adversely impact other critical areas;

3. Design provisions. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this chapter. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design provisions are:
 - a. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the International Building Code;
 - b. Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;
 - c. Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;
 - d. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
 - e. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;
 - f. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and
 - g. Development shall be designed to minimize impervious lot coverage;
4. Vegetation retention. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited;
5. Utility lines and pipes. Utility lines and pipes shall be permitted in erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be located above ground and properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Stormwater conveyance shall be allowed only through a high-density polyethylene pipe with fuse-welded joints, or similar product that is technically equal or superior;
6. Point discharges. Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:
 - a. Conveyed via continuous storm pipe downslope to a point where there are no erosion hazard areas downstream from the discharge;
 - b. Discharged at flow durations consistent with the city's public works standards for stormwater runoff control, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predeveloped state; or

- c. Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope;
7. Subdivisions. The division of land in landslide hazard areas and associated buffers is subject to the following:
- a. Land that is located wholly within a landslide hazard area or its buffer may not be subdivided. Land that is located partially within a landslide hazard area or its buffer may be divided; provided, that each resulting lot has sufficient buildable area outside of, and will not affect, the landslide hazard or its buffer.
 - b. Access roads and utilities may be permitted within the landslide hazard area and associated buffers if the city determines that no other feasible alternative exists; and
8. Prohibited development. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.
- B. Seismic hazard areas. Activities proposed to be located in seismic hazard areas shall meet the standards of ECC 15.640.050 (Performance standards – General requirements).

15.650 Fish and Wildlife Habitat Conservation Area

15.650.010 Designation of fish and wildlife habitat conservation areas.

A. Fish and wildlife habitat conservation areas include:

1. Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association.
 - a. Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current listing status.
 - b. State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the state of Washington and identified by the Washington Department of Fish and Wildlife, which are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC [232-12-014](#) (state endangered species) and WAC [232-12-011](#) (state threatened and sensitive species). The state Department of Fish and Wildlife maintains the most current listing and should be consulted for current listing status.
2. State priority habitats and areas associated with state priority species. Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the state Department of Fish and Wildlife.
3. Naturally occurring ponds under 20 acres. Naturally occurring ponds are those ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.
4. Waters of the state. Waters of the state include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC [222-16-031](#) (or WAC 222-16-030 depending on classification used).
5. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.

6. State natural area preserves and natural resource conservation areas. Natural area preserves and natural resource conservation areas are defined, established, and managed by the Washington State Department of Natural Resources.
 7. Areas of rare plant species and high-quality ecosystems. Areas of rare plant species and high-quality ecosystems are identified by the Washington State Department of Natural Resources through the Natural Heritage Program.
- B. All areas within the city meeting one or more of these criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter and shall be managed consistent with the best available science, such as the Washington Department of Fish and Wildlife's Management Recommendations for Priority Habitat and Species.
- C. Mapping. The approximate location and extent of habitat conservation areas are shown on the critical area maps adopted with the ordinance codified in this chapter by the city, as most recently updated. The following maps and data are hereby adopted and are available from the city and/or the listed governmental agency:
1. Washington Department of Fish and Wildlife Priority Habitat and Species Maps;
 2. Washington State Department of Natural Resources, Official Water Type Reference Maps, as amended; and
 3. Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors Reports published by the Washington Conservation Commission.

The above maps are to be used as a guide for the city, project applicants, and/or property owners and should be continuously updated as new critical areas are identified. The above maps are a reference and do not provide a final critical area designation.

15.650.020 Critical area report – Additional requirements for habitat conservation areas.

- A. All critical areas located within 300 feet of the project area that have been designated by the city and are shown on city, state, or federal government agency maps and/or reports shall be addressed in a critical area report for habitat conservation areas.
- B. Habitat analysis. A habitat assessment to include at a minimum the following:
 1. Detailed description of vegetation on the project area and its associated buffer.
 2. Identification of any endangered, threatened, or candidate species that have a primary association with habitat on the project area, and assessment of potential project impacts to use of the buffer and critical area on the site by the species.
 3. A detailed discussion of the direct and indirect potential impacts on habitat by the project. Such discussion shall include a discussion of the ongoing management practices that will protect habitat after the project site has been developed.

15.650.030 Performance standards – General requirements.

- A. Nonindigenous species. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat conservation area unless authorized by a state or federal permit or approval.
- B. Mitigation and contiguous corridors. Mitigation sites shall be located to preserve or achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.
- C. Approvals of activities. The director shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on the best available science and may include, but are not limited to, the following:
 - 1. Establishment of buffer zones;
 - 2. Preservation of critically important vegetation and/or habitat features such as snags and downed wood;
 - 3. Limitation of access to the habitat area, including fencing to deter unauthorized access;
 - 4. Seasonal restriction of construction activities;
 - 5. Establishment of a duration and timetable for periodic review of mitigation activities; and
 - 6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.
- D. Mitigation to at least biological functions. Mitigation of alterations to habitat conservation areas shall achieve at least equivalent biologic and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.
- E. Approvals and the best available science. Any approval of alterations or impacts to a habitat conservation area shall be supported by the best available science.

F. Buffers.

1. Establishment of buffers. The director shall require the establishment of buffer areas for activities adjacent to habitat conservation areas when needed to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall be designed to address the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall consider the management recommendations issued by the Washington Department of Fish and Wildlife. Habitat conservation areas and their buffers shall be preserved in perpetuity through the use of critical area tracts in accordance with ECC 15.610.260.
2. Seasonal restrictions. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply.
3. Habitat buffer averaging. The director may allow the recommended habitat area buffer width to be reduced in accordance with a critical area report, the best available science, and the management recommendations issued by the Washington Department of Fish and Wildlife, only if:
 - a. It will not reduce stream or habitat functions;
 - b. It will not adversely affect salmonid habitat;
 - c. It will provide additional natural resource protection, such as buffer enhancement;
 - d. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
 - e. The buffer area width is not reduced by more than 25 percent in any location.

G. Signs and fencing of habitat conservation areas.

1. Temporary markers. The outer perimeter of the habitat conservation area or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and verified by the director prior to the commencement of permitted activities. The director shall have the authority to require that temporary fencing be placed on site to mark the outer perimeter of the habitat conservation area and its associated buffer area. This temporary marking, and any required temporary fencing, shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. Permanent signs. As a condition of any permit or authorization issued pursuant to this chapter, the director may require that applicant to install permanent signs along the boundary of a habitat conservation area or buffer.
 - a. Permanent signs shall be made of a metal face with a green color background and white letters; attached to a metal post or another nontreated material of equal durability; made with a sign face no smaller than one foot by one foot and no larger than 2 feet by 2 feet; and mounted with the bottom of the sign face no less than 3 feet above and no more than 5 feet above adjacent grade. Signs must be posted at a minimum of one per lot of record, or on large parcels every 300 feet, or additional signs as required by the director and must remain unobstructed and be maintained by the property owner in perpetuity. The sign(s) shall be worded as follows or with alternative language approved by the director:

Protected Critical Area

Do Not Disturb

Contact the city of Ellensburg

Regarding Uses and Restriction
 - b. The provisions of subsection (G)(2)(a) of this section may be modified by the director as necessary to assure protection of sensitive features or wildlife.

15.650.040 Performance standards – Specific habitats.

- A. Endangered, threatened, and sensitive species.
 1. No development shall be allowed within a habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by the Washington Department of Fish and Wildlife or applicable state or federal agency.
 2. Whenever activities are proposed adjacent to a habitat conservation area within which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and approved by the city. All applications for activities proposed adjacent to a habitat conservation area or buffer addressed in this subsection shall be sent for review and comment to the Department of Fish and Wildlife for animal species, the Washington State Department of Natural Resources for plant species, and other appropriate federal or state agencies.
 3. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC [232-12-292](#)). Whenever activities are proposed adjacent to a verified nest territory or communal roost, a habitat management plan shall be developed by a qualified professional. Activities are adjacent to bald eagle sites when they are within 800 feet, or within one-half mile (2,640 feet) and in a shoreline foraging area. The city shall verify the location of eagle management areas for each proposed activity. Approval of the activity shall not occur prior to approval of the habitat management plan by the Washington Department of Fish and Wildlife.

B. Anadromous fish.

1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or where such fish have a primary association shall give special consideration to the preservation of anadromous fish habitat, including, but not limited to, adhering to the following standards:
 - a. Activities shall be timed to occur only during the allowable work window as designated by the Washington Department of Fish and Wildlife for the applicable species;
 - b. An alternative alignment or location for the activity is not feasible;
 - c. The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;
 - d. Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to an approved critical area report; and
 - e. Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved critical area report.
2. Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.

C. Wetland habitats. All proposed activities within or adjacent to habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in ECC 15.620.030, wetlands. If nonwetlands habitat and wetlands are present at the same location, the provisions of this chapter or ECC Chapter 15.62, Wetlands, whichever provides greater protection to the habitat, apply.

D. Riparian habitat areas. Unless otherwise allowed in this chapter, all structures and activities shall be located outside of the stream buffers.

1. Establishment of stream buffer areas. Stream buffers shall be established for habitats that include aquatic and terrestrial ecosystems that mutually benefit each other and that are located adjacent to rivers, perennial or intermittent streams, seeps, and springs.
2. Stream buffer widths. Required stream buffer widths are shown in the table below. A stream buffer shall have the width required, unless a greater width is required pursuant to subsection (D)(3) of this section, or a lesser width is allowed pursuant to subsection (D)(4) of this section. Widths shall be measured outward in each direction, on the horizontal plane from the ordinary high water mark, or from the top of bank if the ordinary high water mark cannot be identified. Stream buffers should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions, which include but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian wildlife habitat to other habitats.

Type 1 Streams: Yakima River	250 feet
Type 2 Streams: Reecer Creek; Currier Creek; Whiskey Creek; Wilson Creek (including West and East Branches); Mercer Creek.	85 feet
Type 3 and 4 Streams and Ponds: Englehorn Pond; West Interchange Ponds; Lyle Creek.	50 feet

3. Increased stream buffer widths. The director may require increased buffer widths in accordance with the recommendations of an experienced, qualified professional, and the best available science on a case-by-case basis when a large buffer is necessary to maintain the structure and functions of the habitat area, based on site-specific characteristics. When the SEPA checklist discloses the possibility that the buffers may be increased, the procedures in WAC [197-11-158](#) shall be invoked. The criteria to be used to analyze the issue whether the buffers should be increased are as follows:
 - a. When the director determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;
 - b. When a channel migration zone is present, the stream buffer width shall be measured from the outer edge of the channel migration zone; or
 - c. When the habitat area is within an erosion or landslide hazard area, or buffer, the stream buffer width shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.
4. Stream buffer width averaging. The director may allow the recommended stream buffer width to be reduced in accordance with a critical area report only if:
 - a. The width reduction will not reduce stream or habitat functions, including those of nonfish habitat;
 - b. The width reduction will not degrade the habitat, including habitat for anadromous fish;
 - c. The proposal will provide additional habitat protection;
 - d. The total area contained in the riparian habitat area of each stream on the development proposal site is not decreased;
 - e. The recommended stream buffer width is not reduced by more than 25 percent in any one location;
 - f. The width reduction will not be located within another critical area or associated buffer; and
 - g. The reduced stream buffer width is supported by the best available science.

5. Interrupted buffer.
 - a. Where a legally established, pre-existing use of the buffer exists, those proposed activities that are within the wetland or stream buffer, but are separated from the critical area by an existing permanent substantial improvement, which serves to eliminate or greatly reduce the impact of the proposed activity upon the critical area, are exempt; provided, that the detrimental impact to the critical area does not increase. However, if the impacts do increase, the city shall determine if additional buffer may be required along the impact area of the interruption. Substantial improvements may include developed public infrastructure such as roads and railroads. Substantial improvements may not include paved trails, sidewalks, or parking areas. An allowance for activity in an interrupted buffer may require a critical areas report for the type of critical areas buffer that is affected. In determining whether a critical areas report is necessary, the city shall consider the hydrologic, geologic and/or biological habitat connection potential and the extent and permanence of the interruption.
 - b. Where a legally established, pre-existing structure or use is located within a regulated wetland or stream buffer and where the regulated buffer is fully paved and does not conform to the interrupted buffer provision above, the buffer will end at the edge of the pavement, adjacent to the wetland or stream.
6. Riparian habitat mitigation. Mitigation of adverse impacts to stream buffers shall result in equivalent functions and values on a per function basis, be located as near the alteration as feasible, and be located in the same subdrainage basin as the habitat impacted.
7. Alternative mitigation for stream buffers. The performance standards set forth in this subsection may be modified at the city's discretion if the applicant demonstrates that greater habitat functions, on a per function basis, can be obtained in the affected subdrainage basin as a result of alternative mitigation measures.
- E. Aquatic habitat. The following specific activities may be permitted within a stream buffer, pond, lake, water of the state, and associated buffer when the activity complies with the provisions set forth in the applicable shoreline management program and subject to the standards of this subsection. The standards that provide the most protection to protected habitat and species shall apply.
 1. Streambank stabilization. Streambank stabilization to protect new structures from future channel migration is not permitted except when such stabilization is achieved through bioengineering or soft armoring techniques in accordance with an approved critical area report.

2. Launching ramps – public or private. Launching ramps may be permitted in accordance with an approved critical area report that has demonstrated the following:
 - a. The project will not result in alterations to, or loss of, shoreline substrate within one-quarter mile of the site;
 - b. The ramp will not adversely impact critical fish or wildlife habitat areas or associated wetlands; and
 - c. Adequate mitigation measures ensure that there is no net loss of the functions or values of riparian habitat as a result of the ramp.
3. Docks. Repair and maintenance of an existing dock or pier may be permitted in accordance with an approved critical area report subject to the following:
 - a. There is no increase in the use of materials creating shade for predator species or eelgrass;
 - b. There is no expansion in overwater coverage;
 - c. There is no new spanning of waters between 3 and 13 feet deep;
 - d. There is no increase in the size and number of pilings; and
 - e. There is no use of toxic materials (such as creosote) that come in contact with the water.
4. Roads, trails, bridges, and rights-of-way. Construction of trails, roadways, and minor road bridging, less than or equal to 30 feet wide, may be permitted in accordance with an approved critical area report subject to the following standards:
 - a. There is no other feasible alternative route with less impact on the environment;
 - b. The crossing minimizes interruption of downstream movement of wood and gravel;
 - c. Roads in stream buffers shall not run parallel to the water body;
 - d. Trails shall be located on the outer edge of the buffer, except for limited viewing platforms, crossings and limited trails;
 - e. Crossings, where necessary, shall only occur as near to perpendicular with the water body as possible;
 - f. Mitigation for impacts is provided pursuant to a mitigation plan of an approved critical area report;
 - g. Road bridges are designed according to the Washington Department of Fish and Wildlife Fish Passage Design at Road Culverts, 1999, and the National Marine Fisheries Service Guidelines for Salmonid Passage at Stream Crossings, 2000; and
 - h. Trails and associated viewing platforms shall not be made of continuous impervious materials.
5. Utility facilities. New utility lines and facilities may be permitted to cross watercourses in accordance with an approved critical area report, if they comply with the following standards:
 - a. Fish and wildlife habitat areas shall be avoided to the maximum extent possible;

- b. Installation shall be accomplished by boring beneath the scour depth and hyporheic zone of the water body and channel migration zone, where feasible;
 - c. The utilities shall cross at an angle greater than 60 degrees to the centerline of the channel in streams or perpendicular to the channel centerline whenever boring under the channel is not feasible;
 - d. Crossings shall be contained within the footprint of an existing road or utility crossing where possible;
 - e. The utility route shall avoid paralleling the stream or following a down-valley course near the channel; and
 - f. The utility installation shall not increase or decrease the natural rate of shore migration or channel migration.
6. Public flood protection measures. New public flood protection measures and expansion of existing ones may be permitted, subject to the city's review and approval of a critical area report and the approval of a federal biological assessment by the federal agency responsible for reviewing actions related to a federally listed species.
 7. Instream structures. Instream structures, such as, but not limited to, high flow bypasses, sediment ponds, instream ponds, retention and detention facilities, dams, and weirs, shall be allowed only as part of an approved watershed basin restoration project approved by the agency with jurisdiction and upon acquisition of any required state or federal permits. The structure shall be designed to avoid modifying flows and water quality in ways that may adversely affect habitat conservation areas.
 8. Stormwater conveyance facilities. Conveyance structures may be permitted in accordance with an approved critical area report subject to the following standards:
 - a. No other feasible alternatives with less impact exist;
 - b. Mitigation for impacts is provided;
 - c. Stormwater conveyance facilities shall incorporate fish habitat features; and
 - d. Vegetation shall be maintained and, if necessary, added adjacent to all open channels and ponds in order to retard erosion, filter out sediments, and shade the water.

15.660 Aquifer Recharge Areas

15.660.010 Critical aquifer recharge areas designation.

Critical aquifer recharge areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC [365-190-030\(2\)](#). CARAs have prevailing geographic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water.

- A. Wellhead protection areas. Wellhead protection areas may be defined by the boundaries of the 10-year time of ground water travel or boundaries established using alternate criteria approved by the Washington State Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC [246-290-135](#).
- B. Sole source aquifers. Sole source aquifers are areas that have been designated by the U.S. Environmental Protection Agency pursuant to the Federal Safe Water Drinking Act.
- C. Susceptible ground water management areas. Susceptible ground water management areas are areas that have been designated as moderately or highly vulnerable or susceptible in an adopted ground water management program developed pursuant to Chapter [173-100](#) WAC.
- D. Moderately or highly vulnerable aquifer recharge areas. Aquifer recharge areas that are moderately or highly vulnerable to degradation or depletion because of hydrogeologic characteristics are those areas delineated by a hydrogeologic study prepared in accordance with the State Department of Ecology guidelines.
- E. Moderately or highly susceptible aquifer recharge areas. Aquifer recharge areas moderately or highly susceptible to degradation or depletion because of hydrogeologic characteristics are those areas meeting the criteria established by the State Department of Ecology.

15.660.020 Aquifer recharge areas susceptibility ratings.

Aquifer recharge areas shall be rated as having high, moderate, or low susceptibility based on soil permeability, geologic matrix, infiltration and depth to water as determined by the criteria established by the State Department of Ecology.

15.660.030 Mapping of critical aquifer recharge areas.

As of the time of adoption of the ordinance codified in this chapter, the city does not believe there are any critical aquifer recharge areas within city limits relating to public drinking supplies. If this situation changes, the city will show the approximate location and extent of critical aquifer recharge areas on the adopted critical areas map.

15.660.040 Activities allowed in critical aquifer recharge areas.

The following activities are allowed in critical aquifer recharge areas pursuant to ECC 15.610.050, Allowed activities, and do not require submission of a critical areas report.

- A. Construction of structures and improvements, including additions, resulting in less than 5 percent or 2,500 square feet (whichever is greater) total site impervious surface area that does not result in a change of use or increase the use of a hazardous substance.
- B. Development and improvement of parks, recreation facilities, open space or conservation areas resulting in less than 5 percent total site impervious surface area that do not increase the use of a hazardous substance.
- C. On-site domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per one acre.

15.660.050 Critical area report – Additional requirements for critical aquifer recharge areas.

In addition to the general critical area report requirements of ECC 15.610.100, critical area reports for critical aquifer recharge areas must meet the requirements of this section. Critical area reports for 2 or more types of critical areas must meet the report requirements for each relevant type of critical area.

- A. Hydrogeologic assessment. For all proposed activities to be located in a critical aquifer recharge area, a critical area report shall contain a level one hydrogeological assessment. A level 2 hydrogeologic assessment shall be required for any of the following proposed activities:
 - 1. Activities that result in 5 percent or more impervious site area;
 - 2. Activities that divert, alter, or reduce the flow of surface or ground waters, or otherwise reduce the recharging of the aquifer;
 - 3. The use of hazardous substances, other than household chemicals used according to the directions specified on the packaging for domestic applications;
 - 4. The use of injection wells, including on-site septic systems, except those domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per one acre; or
 - 5. Any other activity determined by the director likely to have an adverse impact on ground water quality or quantity or in the recharge of an aquifer.
- B. Level 1 hydrogeologic assessment. A level 1 hydrogeologic assessment shall include the following site and proposal-related information at a minimum:
 - 1. Available information regarding geologic or hydrogeologic characteristics of the site including the surface location of all critical aquifer recharge areas located on site or immediately adjacent to the site, and permeability of the unsaturated zone;
 - 2. Ground water depth, flow direction and gradient based on available information;

3. Currently available data on wells and springs within 1,300 feet of the project area;
 4. Location of other critical areas, including surface waters, within 1,300 feet of the project area;
 5. Available historic water quality data for the area to be affected by the proposed activity; and
 6. Best management practices proposed to be utilized.
- C. Level 2 hydrogeologic assessment. A level 2 hydrogeologic assessment shall include the following site- and proposal-related information at a minimum, in addition to the requirements for a level one hydrogeological assessment:
1. Historic water quality data for the area to be affected by the proposed activity compiled for at least the previous 5-year period;
 2. Ground water monitoring plan provisions;
 3. Discussion of the effects of the proposed project on the ground water quality and quantity, including:
 - a. Predictive evaluation of ground water withdrawal effects on nearby surface wells and surface water features; and
 - b. Predictive evaluation of contaminant transport based on potential releases to ground water; and
 4. A spill plan that identifies equipment and/or structures that could fail, resulting in an impact. Spill plans shall include provisions for regular inspection, repair and replacement of structures and equipment that could fail.

15.660.060 Performance standards – General requirements.

- A. Activities may only be permitted in a critical aquifer recharge area if the applicant can show that the proposed activity will not cause contaminants to enter the aquifer and that the proposed activity will not adversely affect the recharging of the aquifer.
- B. The proposed activity must comply with the water source protection requirements and recommendations of the U.S. Environmental Protection Agency, Washington State Department of Health and the city of Ellensburg Wellhead Protection Plan.
- C. The proposed activity must be designed and constructed in accordance with the locally adopted surface water management or water quality regulations.

15.660.070 Performance standards – Specific uses.

- A. Storage tanks. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:
1. Underground tanks. All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
 - a. Prevent releases due to corrosion or structural failure for the operational life of the tank;
 - b. Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and
 - c. Use material in the construction or lining of the tank that is compatible with the substance to be stored.
 2. Aboveground tanks. All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
 - a. Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;
 - b. Have a primary containment area enclosing or underlying the tank or part thereof; and
 - c. A secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.
- B. Vehicle repair and servicing.
1. Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.
 2. No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the State Department of Ecology prior to commencement of the proposed activity.
- C. Residential use of pesticides and nutrients. Application of household pesticides, herbicides and fertilizers shall not exceed times and rates specified in the packaging.

- D. Use of reclaimed water for surface percolation or direct recharge. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the state Departments of Ecology or Health.
1. Use of reclaimed water for surface percolation must meet the ground water recharge criteria given in RCW [90.46.080](#)(1) and RCW [90.46.010](#)(10). The state Department of Ecology may establish additional discharge limits in accordance with RCW [90.48.080](#)(2).
 2. Direct injection must be in accordance with the standards developed by authority of RCW [90.46.042](#).
- E. State and federal regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

Activity	Statute – Regulation – Guidance
Aboveground Storage Tanks	WAC 173-303-640
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (Washington Department of Ecology WQ-R-95-96)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and Disposal Facilities	WAC 173-303-182
Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)	Chapter 173-303 WAC
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (Washington State Department of Ecology 94-146)
Oil and Gas Drilling	WAC 332-12-450 , Chapter 173-218 WAC

Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

Activity	Statute – Regulation – Guidance
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (Washington State Department of Ecology, 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	WAC 332-18-015
Wastewater Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, Washington State Department of Ecology Land Application Guidelines, Best Management Practices for Irrigated Agriculture