



CASTLE ROCK PLANNING COMMISSION

Regular Meeting and Continued Public Hearing: Tuesday, December
17, 2024
6:00 PM

Location

Castle Rock Senior Center
222 Second Ave SW
Castle Rock, WA 98611

AGENDA

To join this meeting from your computer, tablet or smartphone: <https://meet.goto.com/216918261>
To join this meeting using your phone: +1 (224) 501-3412 Access Code: 216-918-261 (Press *6 to speak)
New to GoToMeeting? Get the app now and be ready: <https://global.gotomeeting.com/install/216918261>

1. CALL TO ORDER

- a. Roll Call

2. INTRODUCTIONS

- a. Introduce Incoming Planning Commissioner Robert Frazier
- b. Introduce Planner Kirsten Peterson

3. APPROVAL OF MINUTES

- a. October 15, 2024 Planning Commission Regular Meeting Minutes
- b. November 19, 2024 Planning Commission Regular Meeting and Public Hearing Minutes

4. CITIZEN COMMENTS

5. REPORTS

6. CONTINUED PUBLIC HEARING - CRITICAL AREAS ORDINANCE (CAO)

- a. Reopen the Public Hearing on the Draft CAO and the Draft CAO Manual
- b. Agenda Report
- c. Public Comment

7. OLD BUSINESS

- a. Discuss the Draft CAO and the Draft CAO Manual

8. NEW BUSINESS

9. ADJOURNMENT

UPCOMING MEETINGS:

January 21, 2025

February 18, 2025

March 18, 2025

Non-Discrimination Statement: This institution is an equal opportunity provider and employer. If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at https://www.ascr.usda.gov/sites/default/files/Complain_combined_6_8_12_508_0.pdf or at any USDA office, or call 866.632.9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter by mail to USDA, Office of the Assistant Secretary for Civil Rights, 1400 Independence Ave, SW, Stop 9410, Washington, DC 20250-9410 or email to program.intake@usda.gov or by fax (202) 690-7442.

Title VI: The City of Castle Rock ensures compliance with Title VI of the Civil Rights Act of 1964 and American Disabilities Act of 1990 by prohibiting discrimination against any person on the basis of race, color, national origin, sex or disabilities in the provision of benefits and services from its federal assisted programs and activities. If you need special accommodations to participate in this meeting, please contact Karlene Akesson at 360.274.8181 by 9:00 a.m. three days prior to the meeting.

Planning Commission may add and take action on other items not listed on this Agenda.

1. CALL TO ORDER

Chairperson Rick Sullivan called the regular meeting to order at 6:00 pm.

a. Roll Call

Members present: Chairperson Rick Sullivan, Vice-Chair Matt Rasmussen, Commissioners Richard Skreen, Ryane Olin, and David VanCamp.

Staff present: Contracted Planner Mike Manning and Secretary Karlene Akesson. Mayor Paul Helenberg joined the meeting at 6:06 pm.

2. APPROVAL OF MINUTES

a. September 17, 2024 Planning Commission Regular Meeting Minutes

Commissioner Matt Rasmussen motioned, seconded by Ryane Olin, to approve the September 17, 2024 minutes as presented. Motion carried by roll call vote. Commissioners Rick Sullivan, Matt Rasmussen, Richard Skreen, Ryane Olin, and David VanCamp voted 'Aye'.

3. PUBLIC COMMENT

4. REPORTS

5. OLD BUSINESS

a. Progress Update - Regulating Food Trucks/Food Carts and Other Temporary Food Vendors

Planner Mike Manning presented.

Commissioners Matt Rasmussen, Rick Sullivan, Mayor Paul Helenberg, Commissioners Ryan Olin and Richard Skreen provided comment.

b. Review the Draft Critical Areas Ordinance (CAO)

Planner Mike Manning presented. Chairperson Rick Sullivan, Commissioners David VanCamp and Richard Skreen provided comments; it was clarified that the current Critical Areas Ordinance would not be amended, but it would be replaced with the new Critical Areas Ordinance if it is adopted. Commissioners David VanCamp, Matt Rasmussen, Planner Mike Manning, Commissioner Ryane Olin, Rick Sullivan, and Richard Skreen provided comment. The Commissioners had no objections to the draft Critical Areas Ordinance. The Commissioners were in agreement that the Critical Areas Ordinance could move forward to the SEPA checklist. Planner Mike Manning stated the Public Hearing could take place in early November.

6. NEW BUSINESS

Chairperson Rick Sullivan asked, because of the upcoming holidays, if there were going to be any issues with the Commissioners' ability to attend the November and December regularly scheduled Planning Commission meetings. Commissioners Matt Rasmussen, Ryane Olin, Richard Skreen, and David VanCamp provided comment. The Commissioners did not identify any issues with their ability to attend

the upcoming regularly scheduled Planning Commission meetings.

Commissioner Matt Rasmussen inquired about the progress of the Larsen Lane Project (Landing on the Cowlitz). Mayor Paul Helenberg provided comment. Commissioners Matt Rasmussen, Rick Sullivan, and David VanCamp provided additional comment.

7. ADJOURNMENT

Commissioner David VanCamp motioned, seconded by Commissioner Ryane Olin, to adjourn the regular meeting. All were in favor.

At 6:16 pm, Chairperson Sullivan adjourned the regular meeting.

Karlene Akesson, Secretary

1. CALL TO ORDER

Chairperson Sullivan called the regular meeting to order at 6:05 pm.

a. Roll Call

Members present: Chairperson Rick Sullivan, Commissioners Ryane Olin and Robert Frazier.

Members not present: Commissioners Matt Rasmussen-excused, Richard Skreen and David VanCamp.

Staff present: Contracted Planner Kirsten Peterson, Mayor Paul Helenberg, and Secretary Karlene Akesson

Due to lack of a quorum, Chairperson Rick Sullivan closed the Regular Planning Commission Meeting and opened the Public Hearing for the Critical Areas Ordinance (CAO) at 6:07 pm.

2. INTRODUCTIONS

a. Introduce Incoming Planning Commissioner Robert Frazier

b. Introduce Planner Kirsten Peterson

3. CITIZEN COMMENTS

4. REPORTS

5. PUBLIC HEARING - CRITICAL AREAS ORDINANCE (CAO) - No Action to be taken

Chairperson Rick Sullivan closed the Regular Planning Commission Meeting and opened the Public Hearing for the Critical Areas Ordinance (CAO) at 6:07 pm.

Due to lack of a quorum, Chairperson Rick Sullivan adjourned the public hearing at 6:08 pm until the next regularly scheduled Planning Commission Meeting, to be held at 6:00 pm on December 17, 2024.

a. Open Public Hearing

b. Staff Report

c. Public Comment

6. OLD BUSINESS

a. Discuss Draft Critical Areas Ordinance and Draft Critical Areas Manual

7. NEW BUSINESS

8. ADJOURNMENT

Karlene Akesson, Secretary

City of Castle Rock

PO Box 370
Castle Rock, WA 98611
(360) 274-7478



Agenda Report

Date: December 17, 2024

Prepared By: Kirsten Peterson, *Planner (SCJ Alliance)*

Meeting Date: December 17, 2024

Subject: Continued Public Hearing regarding Text Amendments to the Castle Rock Critical Areas Ordinance (CAO), CRMC Title 18.10,

Summary:

A public hearing was previously scheduled before the Planning Commission on November 19, 2024 to consider text amendments to the Castle Rock Critical Area Ordinance, located within Castle Rock Municipal Code Title 18.10. Updates to the ordinance are required in order to maintain compliance with the State Growth Management Act.

Due to lack of quorum at the November 19, 2024 meeting, the public hearing was postponed to the December 17, 2024 regularly-scheduled meeting of the Planning Commission.

Background:

The agenda report provided for the previous meeting included an overview of the Critical Areas Ordinance and why its adoption is crucial for ensuring the long-term environmental health, safety, and resilience of our community. The information found within that previous report is provided again within this report for ease of reference.

The Critical Areas Ordinance (CAO) is designed to protect critical environmental areas such as wetlands, floodplains, fish and wildlife habitats, geologically hazardous areas, and aquifer recharge areas. These critical areas are vital for maintaining ecological balance, safeguarding public safety, and ensuring sustainable growth within our jurisdiction.

The adoption of a CAO is not only in compliance with state and federal regulations but also serves as a proactive approach to mitigating environmental risks, enhancing resilience to climate change, and promoting sound land-use practices that benefit both current and future generations.

Key Areas Covered by the CAO:

The Critical Areas Ordinance typically focuses on the following areas:

1. **Wetlands:** Protection of wetlands is critical to maintaining biodiversity, improving water quality, and providing flood control.
2. **Floodplains:** Preventing development in flood-prone areas reduces the risk of property damage, loss of life, and infrastructure costs.
3. **Fish and Wildlife Habitat Conservation Areas:** These areas support the health of species and ecosystems, particularly for endangered or threatened species.
4. **Geologically Hazardous Areas:** Protecting areas vulnerable to landslides, seismic activity, and erosion to minimize disaster-related risks.
5. **Aquifer Recharge Areas:** Safeguarding these areas ensures the sustainability of groundwater supplies for public and private use.

Rationale for Adoption:

1. **Environmental Protection and Preservation:** The CAO helps ensure that sensitive environmental areas are identified, protected, and preserved, thereby reducing the impact of human activities on natural resources. This protection is essential to maintaining the ecological functions of wetlands, watersheds, and habitats that are crucial to the health of local ecosystems.
2. **Compliance with State and Federal Law:** The Washington State Growth Management Act (GMA) requires that local governments adopt regulations to protect critical areas. Failing to comply with these state mandates could result in legal challenges, loss of funding, and negative impacts on community planning and development.
3. **Climate Change Resilience:** The ordinance provides a framework for addressing the impacts of climate change, such as increased flooding, sea level rise, and habitat loss. By protecting critical areas, the CAO helps to reduce the vulnerability of the community to these changes.
4. **Public Safety and Risk Reduction:** The CAO reduces the risks associated with development in areas prone to natural hazards such as flooding, landslides, and erosion. This helps mitigate property damage, personal injury, and financial losses while enhancing community safety.
5. **Sustainable Land Use and Growth Management:** By directing development away from environmentally sensitive areas, the CAO promotes more responsible and sustainable land-use practices. This allows for managed growth that minimizes environmental degradation and supports the health and well-being of the community.

Comments Received:

In response to the public noticing, the City received written comments from the following:

-
- Washington State Department of Fish and Wildlife, dated November 15, 2024
 - Ecological Land Services, dated November 15, 2024
-

The Planning Commission will have an opportunity to hear from City Staff and to take public comment as part of the public hearing process.

Recommendation:

Staff recommends that the Planning Commission conduct the public hearing on the Critical Area Ordinance in order to take oral and/or written testimony from the public. Staff further recommends that the Planning Commission then postpone the public hearing until such time that the appropriate updates can be made that will satisfy the recommendations and requirements of the Washington State Department of Fish and Wildlife. The Planning Commission can also make any additional recommendations for the updated ordinance that may result from feedback at the public hearing.

At such time that the updates are made to the CAO, a SEPA addendum will be issued in order to allow for a new comment period for the SEPA checklist and associated updated ordinance. The Final SEPA Determination will not be issued until such time that the SEPA Addendum comment period has been completed.

Concurrent with the SEPA comment period, a new public notice will also be published, advertising the date and time of the new public hearing. When the next public hearing is held, the Planning Commission will be advised to forward a formal recommendation to City Council regarding adoption of the CAO.

EXHIBIT A
Chapter 18.10 Critical Areas

Sections:

18.10.010	Introduction.
18.10.020	General Provisions.
18.10.030	Definitions
18.10.040	Critical Aquifer Recharge Areas.
18.10.050	Special Flood Hazard Areas.
18.10.060	Geologic Hazard Areas.
18.10.070	Wetlands.
18.10.080	Fish and Wildlife Habitat Conservation Areas.
18.10.090	Enforcement.

18.10.010 Introduction. The purpose of this Chapter is to identify critical areas to help preserve the natural environment, maintain fish and wildlife habitat, and protect drinking water, and to supplement the City's development regulations governing land use.

- A. All development activities including new uses of land and buildings, changes of use, as well as new construction and the modification of existing buildings, structures, and infrastructure must comply with all provisions of this Chapter, Title, and City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings, as well as all other applicable provisions of local, state, and federal law, unless specifically exempted.
- B. Critical areas subject to the provisions of this Chapter include:
 - 1. Critical aquifer recharge areas.
 - 2. Special flood hazard (frequently flooded) areas.
 - 3. Geologic hazard areas.
 - 4. Wetlands.
 - 5. Fish and wildlife habitat conservation areas.
- C. The following activities may be determined by the City to be exempt from the provisions of this Chapter:
 - 1. Emergency actions necessary to prevent an immediate threat to life, or to public health, safety, or welfare, or that pose an immediate risk of damage to private structures or improvements and that require remedial or preventative action in a time frame too short to allow for compliance with the procedural requirements of this Chapter.

- a. Emergency actions that create an impact on a critical area or its buffer shall be limited to those actions that are required to address the emergency and generally are limited to the actions necessary to remove the immediate threat. Additional actions to permanently address a deficiency generally do not qualify as emergency actions and require full compliance with the procedural requirements of this chapter. Emergency actions should be carried out in a manner that has the least feasible impact on the critical area or its buffer.
 - b. The person or agency undertaking emergency action shall notify the City within five working days following commencement of the emergency activity. Within 30 days, the City shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the City determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement actions may be initiated.
 - c. After the emergency, the person or agency undertaking the action shall submit a critical area report assessing effects on critical areas 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 all approvals required by this Chapter. Restoration and/or mitigation activities must be initiated within 180 days of the date of the emergency, unless an extension is approved by the City, and completed in a timely manner.
2. Maintenance, operation and/or repair of rights-of-way, trails, roads, utilities, buildings and other facilities within critical areas and buffers. provided, that the activity does not further alter, impact, or encroach upon the sensitive area or buffer or further affect the functions of sensitive areas, and there is no increased risk to life, property, or the environment, as a result of the proposed operation, maintenance, or repair.
3. Maintenance of existing, lawfully established landscaping and gardens within a regulated critical area or its buffer, including but not limited to mowing lawns, weeding, removal of noxious and invasive species, harvesting and replanting of garden crops, pruning and planting of ornamental vegetation or indigenous native species to maintain the condition and appearance of such areas as they existed prior to adoption of this code. provided, that native growth protection areas, mitigation sites, or other areas protected via conservation easements or similar restrictive covenants are not covered by this exception.
4. Maintenance, repair or replacement of an existing legal, nonconforming structure that does not immediately, or is not likely in the future to further alter or increase the impact to the sensitive area or buffer and results in no increased risk to life, property, or the environment, as a result of the proposed modification or replacement, or reconstruction of unintentionally damaged nonconforming structures provided structures are not expanded or reconstructed for a new use.

5. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the existing improved portion of the public right-of-way (road surface, shoulder, sidewalks, and slopes) or the improved portion of City-authorized private roadway. provided, that no fill or discharge occurs outside the existing improved area and with appropriate best management practices to control erosion, sedimentation and other potential impacts. Excluded is work within a water body or wetland, including but not limited to culverts or bridge replacement or construction.
6. Utility projects that have minor or short-duration impacts to critical areas and buffers, as determined by the City in accordance with the criteria below, and which do not significantly impact the functions or values of a sensitive area(s). provided, that such projects are constructed with best management practices and appropriate restoration measures are provided. These activities shall not result in the transport of sediment or increased stormwater, or adversely affect health, property, or the environment. Such allowed minor utility projects shall meet the following criteria:
 - a. There is no practical or feasible alternative to the proposed activity with less impact on sensitive 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 less than 200 square feet of the sensitive area and/or buffer, exclusive of any equipment and/or vehicles needed to perform the activity.
7. Low impact activities such as hiking, canoeing, nature study, photography, fishing, education or scientific research.
8. Public and private pedestrian trails, provided that:
 - a. The trail surface does not exceed six feet in width.
 - b. The trail surface consists of uncompacted gravel or pervious materials, including boardwalks.
 - c. The trail meets all other City, state, and federal requirements, including state water quality standards. and
 - d. Sensitive area and/or buffer widths may be increased, where possible, equal to the width of the trail corridor, including disturbed areas.
9. The following non-aquatic vegetation removal activities:

- a. The removal of the noxious weed species designated by Washington State or the local weed control authority with hand labor and light equipment, or other invasive species.
 - b. The removal of hazard trees from sensitive areas and buffers that are posing a threat to public safety, or an imminent risk of damage to a permanent structure.
10. Minor site investigative work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads, removal of native trees or shrubs, or displacement of more than five cubic yards of material. Investigations involving displacement of more than five cubic yards of material, including geotechnical soil borings, groundwater monitoring wells, percolation tests, and similar activities shall require submittal of specific plans and restoration plans to the City prior to commencement of any activity. In every case, impacts to the sensitive area shall be minimized and disturbed areas shall be immediately restored. No activity shall commence or occur without City written approval.
11. The application of herbicides, pesticides, fungicides, organic or mineral-derived fertilizers, or other hazardous or potentially hazardous substances, if necessary, provided that their use shall be conducted in accordance with applicable local, state and federal law.
12. Activities undertaken to comply with a United States Environmental Protection Agency superfund related order, or a Washington Department of Ecology order pursuant to the Model Toxics Control Act that specifically preempts local regulations in the findings of the order.
13. Project and facilities for restoration and enhancement of ecological functions of critical areas and related resources may be allowed within critical areas and buffers, upon City approval of a restoration and mitigation plan in accordance with the provisions of this Chapter, or for restoration or enhancement programs in an adopted shoreline restoration plan pursuant to Chapter 173-26 WAC, a watershed planning document prepared and adopted pursuant to Chapter 90.82 RCW, a watershed restoration project pursuant to RCW 89.08.460, a salmonid recovery plan, the salmon recovery board habitat project list, or identified by the Washington Department of Fish and Wildlife as essential for fish and wildlife habitat enhancement pursuant to RCW 77.55.290.
14. The repair and maintenance of drainage ditches.
15. The installation of individual service lines for agricultural purposes and to existing uses.
16. Reasonably necessary activities conducted by a public agency to control mosquitoes, pests, rodents, weeds, invasive species and the like.

17. Agricultural activities including farming, horticulture, normal maintenance and repair of irrigation delivery systems and drainage systems, ranching and grazing of animals and pest and weed control. This includes land lying idle under a government program, agricultural set-aside land and changes between agricultural activities.
18. Normal and routine maintenance of agricultural ponds, livestock watering ponds, and fishponds.
19. Intentional construction of artificial structures from upland areas for purposes of stormwater drainage or water quality control, grassy swales or ornamental landscape ponds, which are not a part of a critical mitigation plan and are consistent with the Stormwater Management Manual for Western Washington, as adopted and implemented by the City.
20. Normal dredging required to maintain flows and minimize flooding, provided that other applicable local, state, and federal permits are obtained.
21. Cases where a federal agency has jurisdictional control over a wetland and the City determines that those permit conditions would satisfy the requirements of this Chapter.

18.10.020 General Provisions.

- A. It shall be the responsibility of Property Owners and Project Sponsors to know and/or to identify the location of critical areas on and near their property and to comply with the provisions of this Chapter at all times.
 1. Property Owners and Project Sponsors that may be proposing development activities in proximity of critical areas are strongly encouraged to schedule and attend a conference with City staff to discuss the applicability of these regulations prior to preparing and submitting land use applications to the City.
 2. The City maintains public maps that may assist in the identification of critical areas.
 - a. It is the responsibility of the Property Owner/Project Sponsor to identify and map all critical areas on their property.
 - b. The presence of a critical area and/or its associated buffer on a parcel triggers the requirements of these regulations, regardless of whether a critical area or buffer is depicted on an official map.
 3. Reasonable access to the project site shall be provided to the City, state, and federal agency staff for the purpose of inspections and compliance review during any proposal review, restoration, emergency action, new construction, or monitoring period.
- B. These regulations shall apply in addition to the other applicable provisions of this Title, as well as applicable local, state, and federal regulations.

1. Compliance with the provisions of this Chapter does not necessarily constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Hydraulic Project Approvals permits, Army Corps of Engineers Section 404 permits, National Pollutant Discharge Elimination System permits).
 2. The Project Sponsor shall be responsible for obtaining all required permits and approvals before initiating any action.
- C. The City, when regulating uses, activities, and developments within or adjacent to, and likely to affect one or more critical areas, shall do so consistent with the best available science and the provisions of this Chapter.
1. The best available science is that scientific information applicable to the critical area prepared by local, state, or federal natural resource agencies, a qualified professional, or team of qualified professionals that is consistent with criteria established in WAC 365-195-900 through WAC 365-195-925.
 2. 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 anecdotal information, non-expert opinion and hearsay.
 3. 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 City may:
 1. Take a "precautionary or a no-risk approach," that strictly limits development and land use activities until the uncertainty is sufficiently resolved. and/or
 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.

D. Property Owners and Project Sponsors shall, when designing development activities that may affect geologic hazard areas, wetlands, and fish and wildlife habitat conservation areas, use the following measures, listed in priority order:

1. Avoid the adverse impact altogether by not taking a certain action or parts of an action or moving the proposed action.
2. Minimize adverse impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology and engineering, or by taking affirmative steps to avoid or reduce adverse impacts.
3. Rectify the adverse impact by repairing, rehabilitating or restoring the affected environment to the conditions existing at the time of the initiation of the project.
4. Reduce or eliminate the adverse impact over time by preservation and maintenance activities during the life of the action.
5. Compensate for the adverse impact by replacing, enhancing, or providing similar substitute resources or environments.
6. Monitor the impact for a reasonable period of time and taking appropriate corrective measures. and
7. Mitigate the adverse impact through a combination of measures.

E. Reasonable Use Exception

1. Project review: If the application of this title would deny all reasonable use of the subject property, the property owner may apply for an exception pursuant to this section. To qualify for an exception the applicant must demonstrate all of the following:
 - a. That no other reasonable use can be made of the property that will have a lesser adverse impact on the critical area and adjoining and neighboring lands;
 - b. That the proposed use does not pose a threat to the public health, safety or welfare;
 - c. Any alteration is the minimum necessary to allow reasonable use of the property; and,
 - d. The inability of the proponent to derive reasonable use of the property is not the result of actions by the applicant after the effective date of this chapter.
 - e. A request for a reasonable use exception shall be submitted to the City with the application materials for the particular development proposal. The application shall be supplemented with an explanation as to how the reasonable use exception criteria are satisfied. The City may require additional information or studies to supplement the reasonable use exception request.

- f. Where a request for a reasonable use exception is granted, impacts to critical areas and buffers shall be mitigated consistent with the purpose and standards of this Chapter to the greatest extent feasible.
 - g. A reasonable use exception shall be processed by the administrator.
- F. A Critical Area Authorization or Permit is required before any construction or development activity may be initiated on a site with an area that meets the criteria for designation as a Special Flood Hazard Area, Geologic Hazard Area, Wetland, or Fish and Wildlife Habitat Conservation Area(s) or their associated buffers.
 - 1. A Critical Area Authorization must be based on a written finding by the City that:
 - a. The proposed activity is exempt. or
 - b. The proposed activity only occurs outside of the critical area and the associated buffer. or
 - c. The City has adequate information to determine that the proposal will not have an adverse impact on the Critical Area. or
 - d. The proposed activity will not have an adverse impact on the critical area and otherwise complies with the provisions of this Section.
 - 2. A Critical Area Permit shall be based on the findings and recommendations contained in a Critical Area Report(s).
- G. In order to receive a required Critical Area Permit, Project Sponsors must prepare and submit for City review and approval a critical area report(s) in a format prescribed by the City
 - 1. The City shall determine the scope, content, and format for a Critical Area Report based on pre-application consultation with the Project Sponsor and his/her consultants, resource agencies, and qualified professionals.
 - a. Please contact the City Community Development Department or go to the City's website to get the most recent copy of the City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings, August 18, 2021, or as subsequently amended, which includes the *Guidelines for preparing a Critical Area Report*.
 - b. Individual critical areas reports may be combined into a single comprehensive report, in a format approved by the City.
 - 2. Critical Area Reports shall be prepared by a qualified professional, as determined by the City.

- a. The cost of preparing required critical areas report(s) shall be borne by the Applicant/Project Sponsor.
 - b. The cost of a professional peer review of any required critical areas report, if required by the City, shall be borne by the Applicant/Project Sponsor.
3. Critical Area Reports shall be submitted to the City in draft form for City review and comment. Following this review, the City shall notify the Applicant in writing:
 - a. That the report complies with City guidelines and that it may be submitted in final form.
 - b. That additional information is necessary and/or revisions must be made before the report can be accepted for processing, and that identifies the corrective actions that must be taken. or
 - c. That the report does not comply with City guidelines and that identifies the corrective actions that must be taken.
4. Upon acceptance of the Critical Area Report(s), the City shall utilize the report to evaluate the proposed development activity and to establish conditions of approval. In addition, the City may require the Project Sponsor to:
 - a. Submit detailed construction plans and drawings prepared by a qualified professional necessary to implement mitigating measures and other conditions of approval.
 - b. Conduct or permit to be conducted on-going monitoring and evaluation.
 - c. Install protective fencing and signage.
 - d. Provide the City with financial guarantees. and
 - e. Comply with other such measures as may be necessary to comply with the provisions of the applicable local, state, and federal laws.
- G. Fencing and Signs of Critical Areas and Required Buffers. The City may require, as a condition of approval, that temporary or permanent fencing and signage may be installed to protect critical areas and their buffers from inappropriate uses, unauthorized development activities, intrusion, or accidental encroachment.
 1. The outer perimeter of the critical 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 is subject to inspection by the City prior to the commencement of permitted activities. This

- temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.
2. Fencing installed as part of a proposed activity or as required in this Section shall be designed so as to not interfere with native species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to critical areas and buffers.
- H. In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of private property containing a critical area or buffer on which a development proposal has been approved, shall file a notice with the County Records and Elections Division, as directed by the City. 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."
- I. Any changes to the City of Castle Rock Critical Areas Ordinance Manual: Standard Specifications & Drawings, including changes to this chapter, CRMC 18.10 *Critical Areas*, requires a minimum of one (1) public comment period to ensure public participation and understanding of the changes suggested for the Ordinance and associated Manual.

18.10.030 Definitions.

For the purposes of this chapter, the following definitions shall apply unless the context clearly requires otherwise. It is further acknowledged that several of the following terms appear in other codes and those may be slightly different than those contained in this code.

“Agricultural activities (existing and ongoing)” means those activities conducted on lands defined in RCW 84.34.020(2), Open space, agricultural, timber lands – Current use – Conservation futures, and those activities involved in the production of crops and livestock, including but not limited to operation and maintenance of existing farm and stock ponds or drainage systems, irrigation systems, changes between agricultural activities, and maintenance or repair of existing serviceable structures and facilities. Activities which bring an area into agricultural use are not part of an ongoing activity. An activity ceases to be ongoing when the area on which it was conducted has been converted to a nonagricultural use or, with the exception of forest practices, has been unattended for five years.

“Alluvial fan” means a low, outspread, relatively flat to gently sloping mass of loose alluvium, shaped like an open fan, deposited by a stream where it issues from a narrow valley, or where a tributary stream issues into the main stream, or wherever a constriction in a valley abruptly ceases or the gradient of the stream suddenly decreases; it is steepest near the mouth of the valley where its apex points upstream, and it slopes gently and convexly outward with gradually decreasing gradient.

“Alluvium” means sand, clay, etc., gradually deposited by moving water, as along a riverbed, stream or shore of a lake.

“Alteration” means a human-induced action which materially affects a regulated critical area or associated buffer, such as a physical change to the existing condition of land or improvements, including but not limited to construction, clearing, filling, and grading.

“Applicant” means the person, party, firm, corporation, Indian tribe, or federal, state or local government, or any other entity that proposes any activity that could affect a critical area.

“Aquifer recharge area” means areas where water infiltrates the soil and percolates through it and surface rocks to the groundwater.

“Best available science” means scientific methodology that is the product of a valid scientific process. Such a process will have undergone peer review (see Appendix 18.10A), be replicable, contain logical conclusions and reasonable inferences, and be based on scientific research, inventories, surveys, assessments and/or statistical analysis conducted by a qualified scientific expert.

“Best management practices” means systems of practices and management measures that: (1) control soil loss and reduce water quality degradation caused by nutrients, animal waste, and toxins; (2) control the movement of sediment and erosion caused by land alteration activities; (3) avoid adverse impacts to surface and groundwater quality, flow, and circulation patterns; and (4) avoid adverse impacts to the chemical, physical, and biological characteristics of a critical area.

"Critical areas" include the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas. "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company.

“Conservation easement” means an interest or right of use over a property, less than fee simple (means that the easement has been conveyed to the public by deed or other document, but the actual land stays with the original landowner), to protect, preserve, maintain, improve, restore, limit the future use of, or conserve for open space purposes any land or improvement on the land.

“Construction” means any act or process that requires a building or fill and grading permit, and/or that adds an addition onto an existing building or erects a new principal or accessory structure on a lot which is subject to the design standards for the district in which the property is located.

“Development” means a construction project involving property improvement or a change of physical character within the site; the act of using land for building or extractive purposes. “Development” shall include, but shall not be limited to, the activities identified in CRMC 18.10.060.

“Enhancement” means actions performed to improve the condition or functions and values of an existing viable wetland or buffer, or fish and wildlife habitat area or buffer. Enhancement actions include but are not limited to increasing plant diversity, increasing fish and wildlife habitat, installing environmentally compatible erosion controls, and removing invasive plant species such as milfoil and loosestrife.

“ESA” means the Endangered Species Act, specifically Section (4)(d), Protective Regulations.

“Excavation” means the mechanical removal of earth material.

Existing and Ongoing Agricultural Activities. See “agricultural activities.”

“Filling” means the act of placing fill material (on any critical area) including temporary stockpiling of fill material.

“Fill material” means a deposit of earth or other natural or manmade material placed by artificial means.

“Fish,” as used in this chapter, refers to resident game fish; anadromous fish and specified salmonoids listed as endangered or threatened under the Federal Endangered Species Act, Section (4)(d), or the Washington State List of Threatened and Endangered Species.

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

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

“Geologist” means a person who is licensed as a professional geologist in Washington State in accordance with Chapter 18.220 RCW.

“Geotechnical assessment” means an assessment prepared by a geotechnical engineer licensed by the state of Washington, which evaluates the site conditions and the effects of a proposal, and identifies mitigating measures to ensure that the risks associated with geologic hazards will be substantially reduced. See Appendix 18.10A.

“Geotechnical engineer (engineering geologist)” means a practicing geotechnical/civil engineer licensed as a professional civil engineer with the state of Washington, who is also licensed as a professional geologist in Washington State in accordance with Chapter 18.220 RCW.

“Geotechnical report” means a report prepared by a geotechnical engineer including a description of the site geology, conclusions, and recommendations regarding the effect of geologic conditions on the proposed development, opinions and recommendations of the adequacy of the site to be developed, the effects of groundwater interception and infiltration, seepage, potential slip planes, and changes in soil bearing strength, and the impacts of the proposed development and appropriate mitigating measures. See Appendix 18.10B.

“Grading” means an excavating and/or filling of the earth’s surface or combination thereof.

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

“Hydric soils” means soils which are wet long enough to periodically produce anaerobic (reduced oxygen) conditions, thereby influencing plant growth.

“Hydrogeologist” means a person who is licensed as a professional hydrogeologist in Washington State in accordance with Chapter 18.220 RCW.

“Hydrologic unit (watershed)” means an area of land above or upstream from a specific point on a stream, which is enclosed by a topographic divide (i.e., hillsides, mountains, cliffs, etc.) such that direct surface runoff from precipitation normally drains by gravity into the stream or the area above the specified point on a stream.

“Indigenous” means any native species of plant or wildlife that occurs naturally on a particular site or area.

“Landfill” means a disposal facility or part of a facility at which solid waste is placed in or on land.

“Landslide” means abrupt downslope movement of a mass of soil or rock.

Landslide Hazard Area. See CRMC 18.10.150(C).

“Liquefaction” means a process in which soil loses strength, and behaves like a liquid.

“Mitigation” means compensating action designed to replace project-induced critical area losses or impacts, including, but not limited to, avoiding, minimizing, or compensating for adverse wetland impacts.

1. In-Kind Mitigation. Replacement of wetlands or surface water systems with substitute wetlands or surface water systems whose characteristics and functions and values closely approximate those destroyed or degraded by a regulated activity.

2. Out-of-Kind Mitigation. Replacement of surface water systems or wetlands with substitute surface water systems or wetlands whose characteristics do not closely approximate those destroyed or degraded by a regulated activity.

“Mitigation plan” means a plan that outlines the activities that will be undertaken to alleviate project impacts. The plan generally contains: a site and project description; an environmental assessment of the functions and values of the site that will be impacted; a description of the proposed mitigation; the goals and objectives of the proposed mitigation; the performance standards against which success will be measured; monitoring of and reporting on the success of the mitigation; and a contingency plan in case of failure.

“Noxious weeds” means any plant which, when established, is highly destructive, competitive, or difficult to control. The county maintains a noxious weed list.

“Open space” means land eligible for tax assessment at its current use value as authorized by Chapter 84.34 RCW.

“Pond” means a naturally existing or artificially created body of standing water which exists on a year-round basis and occurs in a depression of land or expanded part of a stream.

“Priority habitat” means those habitat types or elements with a 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 species” means fish and wildlife species requiring protective measures and/or management guidelines to ensure their perpetuation as determined by the Washington State

Department of Fish and Wildlife's Priority Habitats and Species List, as now exists or is hereafter amended.

"Qualified expert," for the purposes of these regulations, means a person who has received a degree from an accredited college or university in a field necessary to identify and evaluate a particular critical area, and/or a person who is professionally trained, licensed and certified in such field(s). Areas of technical expertise shall generally be as follows: wetlands biology or ecology (for wetlands); stream and/or fisheries biology or ecology (for streams); wildlife biology or ecology (for critical habitat); or a licensed geologist, hydrogeologist or engineering geologist (most frequently referred to as a geotechnical engineer) for geologic hazard areas in accordance with Chapter 18.220 RCW. When a landscape or planting plan is required by these regulations, a qualified expert is one who has demonstrated expertise in the use of indigenous plant species, slope stabilization, and arboricultural practices. Professionals shall be required to demonstrate the basis for their qualifications, and submit copies of past reports that have been accepted by other jurisdictions on critical area permit applications. A demonstration of qualifications may include, but shall not be limited to, submission of a copy of professional certification, such as either a graduate certificate or state license.

In understanding wetland regulation it is important to distinguish between "biological," "jurisdictional," and "regulated" wetlands. (1) Biological wetland: A biological wetland is one that is determined (by a qualified expert) to have the physical, biological and chemical characteristics to be called a "wetland" [see definition of "wetland" in this section]; (2) Jurisdictional wetland: A jurisdictional wetland is one that a particular law has determined should be regulated by the provisions of the law. It may be the same as a biological wetland or it may represent a subset of biological wetlands. For example, the Shoreline Management Act has defined wetlands under its jurisdiction as being all wetlands associated with tidal waters and certain lakes and streams. Most freshwater wetlands in the state are not within the shorelines jurisdiction. The SMA definition further restricts jurisdictional wetlands by specifically excluding artificial wetlands intentionally created from nonwetland sites such as canals, farm ponds and landscape amenities. Thus, even though some of these areas may meet the above biological definition, the SMA would not regulate them; (3) Regulated wetland: While most jurisdictional wetlands are going to be regulated to some extent, there are always certain activities that are exempt from a given law. This results in some jurisdictional wetlands not being regulated. For example, a wetland may fall under SMA jurisdiction because it meets the specific criteria contained in the SMA wetland definition. However, if the wetland occurred in an area that had been historically farmed, a landowner could plow the wetland to plant a crop without having to get a shoreline permit because the activity is exempt. Thus, some people have been confused by the notion that an area may meet the above jurisdictional definition of a wetland, are delineated as such, and still be exempt from any regulation because of the particular activity proposed.

Resident Game Fish. "Game fish," as described in the Washington Game Code, spend their life cycle in freshwater. Steelhead, Sea-Run Cutthroat and Dolly Varden trout are anadromous game fish and should not be confused with resident game fish.

"Restoration" means efforts performed to reestablish functional values and characteristics of a critical area that have been destroyed or degraded by past alterations (e.g., filling or grading).

“Riparian habitat area (RHA)” means an area adjacent to aquatic streams with flowing water (e.g., rivers, perennial or intermittent streams, seeps, springs) that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.

“Riparian zone” means the upland area immediately adjacent to and paralleling a body of water and is usually composed of trees, shrubs and other plants. Riparian functions include bank and channel stability, sustaining water supply, providing flood storage, retainment of woody debris, leaf litter, nutrients, sediment and pollutant filtering, while providing shade, shelter and other functions that are important to the survival of both fish and wildlife.

“Slope” means an inclined earth surface, the inclination of which is expressed as the ratio of horizontal distance to vertical distance. In these regulations, slopes are generally expressed as a percentage; percentage of slope refers to a given rise in elevation over a given run in distance. Slopes 15 to 30 percent constitute areas of geologic concern. Slopes greater than 30 percent constitute potential areas of geological hazard.

“Soil with severe erosion hazard” means any soil type having a degree of hazard or limitation of severe or very severe according to Table 3 of the Soil Survey of Cowlitz County Area, Washington, issued February 1974 by the U.S. Department of Agriculture, Soil Conservation Service.

“Undisturbed buffer” means a protective area left in its natural state, except for any access and/or utility crossings approved by the city planner, between land development and a critical area.

“Utility line” means pipe, conduit, cable, or other similar facility by which services are conveyed to the public or individual recipients. Such services shall include, but are not limited to, water supply, electric power, natural gas, communications, and sanitary sewer.

"Wetland" or "wetlands" means areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands.

“Wetland evaluation technique” means a technique for evaluating wetlands as described in the Washington State Department of Ecology Publication Nos. 99-115 and 99-116 titled Methods of Assessing Wetland Functions (see www.ecy.wa.gov).

“Wetland functions” are determined by physical, chemical, and biological characteristics and include but are not limited to fish and wildlife habitat, aquifer recharge and discharge, water quality, shoreline stabilization, and flood and erosion control.

14.70.040 Critical Aquifer Recharge Areas. Critical aquifer recharge areas (CARAs) are lands with prevailing geologic conditions associated with infiltration rates that create a high

potential for contamination of ground water resources or contribute significantly to the replenishment of ground water.

- A. The entire City of Castle Rock is hereby designated as a critical aquifer recharge area and the provisions of this Chapter shall apply to all proposed development activities unless specifically exempted, or otherwise provided.
 - 1. All uses and development activities shall comply with local, state, and federal laws and regulations to protect groundwater including, but not limited to the Washington Administrative Code Chapters 173-216, 173-218, 173-240, 173-303, 173-304, 173-360 and the US Clean Water Act.
 - 2. The City may require a critical area report prepared by a qualified professional and supported by best available science, to identify design features and best management practices necessary to protect the quality and quantity of groundwater.
 - 3. Uses and activities may only be permitted if the Project Sponsor can show that the proposed use or activity will not cause contaminants to enter local aquifers, adversely affect the recharging of the aquifer, or adversely affect the quantity or quality of groundwater.

18.10.050 Special Flood Hazard Areas.

- A. All Special Flood Hazard Areas in the City of Castle Rock, as determined by utilizing data obtained from the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) are subject to the provisions of this Section. Special Flood Hazard Areas are subject to inundation by 1-percent-annual chance flood, and shall include Zones A, AE, A1-30, AH, AO, AR, and A99.
- B. No development activities or new uses may be permitted on sites with designated Special Flood Hazard Areas without a Critical Areas Authorization or Permit in accordance with the provisions of this Chapter, including but not limited to, Chapter 18.10.020. For information on how to prepare a required special flood hazard report please refer to the Guidelines for Preparing Special Flood Hazard Area Reports section of the City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings, August 18, 2021, or as subsequently amended.
- C. All proposed development activities and new uses on sites with designated Special Flood Hazard Areas must comply with FEMA regulations and standards. Please note that federal flood insurance purchase requirements apply in these zones.

18.10.060 Geologic Hazard Areas. The purpose of these regulations is to maintain the integrity of designated geologic hazard areas and their buffers in order to protect adjacent lands from the impacts of landslides, mudslides, subsidence, excessive erosion and seismic events, and to safeguard the public from these threats to life or property.

- A. Geologic hazard areas in the City of Castle Rock shall include those areas that are susceptible to one or more of the following types of hazards:
 - 1. Erosion hazard.
 - 2. Landslide hazard.
 - 3. Seismic hazard. or
 - 4. Other geological events including, mass wasting, debris flows, rock falls, and differential settlement.
- B. No development activities or new uses may be permitted on sites with areas that meet the criteria for designation as a Geologic Hazard Area or an associated buffer without a Critical Areas Authorization or Permit in accordance with the provisions of this Chapter, including but not limited to, Chapter 18.10.020.
 - 1. The City may waive or reduce engineering study and design requirements in geologic hazard areas for:
 - a. Additions or alterations to existing structures that do not increase occupancy or significantly affect the risk of structural damage or injury. or
 - b. New buildings that are not dwelling units or used as places of employment or public assembly and do not pose a significant threat to a dwelling unit(s) or places of employment or public assembly.
 - 2. For more information on how to identify geologic hazard areas and the standards to protect them, please refer to the Standards for Identifying and Protecting Geologic Hazard Areas section of the City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings, August 18, 2021, or as subsequently amended.
 - 3. For information on how to prepare the required Geologic Hazard Area Report please refer to the Guidelines for Preparing Geologic Hazard Area Reports section of the City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings, August 18, 2021, or as subsequently amended.

18.10.070 Wetlands. Wetlands are areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway.

Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands.

- A. All areas within the City of Castle Rock meeting the wetland designation criteria in the approved federal wetland delineation manual and applicable regional supplements, as amended, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter.
 - 1. Wetlands shall be rated according to the Washington Department of Ecology Wetland Rating System, as set forth in the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06007), or as revised. Wetland delineations are valid for five (5) years after such date the City shall determine whether a revision or additional assessment is necessary.
 - 2. A buffer area shall be established for all designated wetlands to protect the function and values of the wetland.
- B. No development activities or new uses may be permitted on sites that meet the criteria for designation as a wetland or an associated buffer without a Critical Areas Authorization or Critical Areas Permit in accordance with the provisions of this Chapter, including but not limited to, Chapter 18.10.020.
 - 1. The following uses and activities may be permitted by the City in wetlands through a Critical Areas Authorization:
 - a. Conservation or preservation of soil, water, vegetation, fish, and other wildlife that does not entail changing the structure, or functions of the existing wetland.
 - b. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, or alteration of the wetland by changing existing topography, water conditions or water sources.
 - c. Recreational and educational activities.
 - d. Research.
 - e. Drilling for utilities under a wetland provided that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. The City may require the Project Sponsor to submit a special study prepared by a qualified professional to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed prior to any drilling or drilling associated activities.
 - f. Enhancement of a wetland through the removal of non-native invasive species. Weeding shall be restricted to hand removal and weed material shall be removed

from the site. Bare areas that remain after weed removal shall be re-vegetated with native shrubs and trees at natural densities. Some hand seeding may also be done over the bare areas with native plants.

2. For more information on the rating of wetlands as well as the criteria and standards for classifications and establishing buffer areas, please refer to the Standards for Classifying and Protecting Wetlands section of the City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings, August 18, 2021, or as subsequently amended.
3. For more information on how to prepare a required Wetlands Report please refer to the Guidelines for Preparing a Wetlands Report section of the City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings, August 18, 2021, or as subsequently amended.

18.10.080 Fish and Wildlife Habitat Conservation Areas.

- A. All areas within the city meeting one or more of the following criteria, regardless of any formal designation, are hereby designated Fish and wildlife habitat conservation areas and are subject to the critical area provisions of this Chapter:
 1. Areas where state or federal designated endangered, threatened, and sensitive species have a primary association.
 - a. Federal designated endangered and threatened species are those fish, wildlife, and plant 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.
 - b. State designated endangered, threatened, and sensitive species are those fish, wildlife and plant species native to the State of Washington identified by the state Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species), and WAC 232-12-011 (state threatened and sensitive species).
 2. Priority habitats and species identified by the state Department of Fish and Wildlife. 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.

3. Habitats and species of local importance as identified by the City, including those that possess unusual or unique habitat warranting protection because of qualitative species diversity or habitat system health indicators.
 4. Naturally occurring ponds are those ponds under 20 acres and their submerged aquatic beds that provide native 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.
 5. Waters of the state includes lakes, rivers, ponds, streams, inland waters, underground waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington, as classified in WAC 222-16-031.
 6. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.
 7. Natural area preserves, and natural resource conservation areas are defined, established, and managed by the Washington State Department of Natural Resources.
 8. Streams shall be designated in accordance with the Washington State Department of Natural Resources (DNR) stream type as provided in WAC 222-16-030. Streams are further categorized according to Ecosystem Diagnosis and Treatment (EDT)/Snake River Salmon Recovery Plan priority protection reaches.
 9. Areas of rare plant species and high-quality ecosystems that are identified by the Washington State Department of Natural Resources through the Natural Heritage Program.
- B. No development activities or new or modified uses may be permitted on sites that meet the criteria for designation as a Fish and wildlife habitat conservation area or an associated buffer without a Critical Areas Authorization or Permit in accordance with the provisions of this Chapter, including but not limited to, Chapter 18.10.020.
1. For information on the standards for identifying and protecting Fish and wildlife habitat conservation areas please refer to the Standards for Classifying and Protecting Fish and wildlife habitat conservation areas section of the City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings, August 18, 2021, or as subsequently amended.
 2. For information on how to prepare the required critical areas report for development activities on sites meeting the criteria of designation as a Fish and Wildlife Habitat Area, please refer to the Guidelines for Classifying and Protecting Fish and wildlife

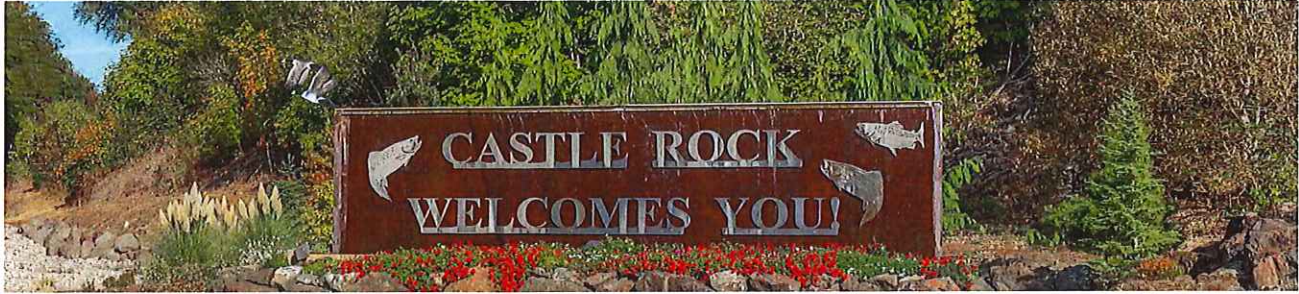
habitat conservation areas section of the City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings, August 18, 2021, or as subsequently amended.

18.10.090 Enforcement.

- A. When a critical area or its buffer has been altered in violation of this Chapter, the City shall have the authority to issue a stop work order to cease all development activities, and order restoration, rehabilitation, replacement, or where determined appropriate, mitigation measures at the owner's or other responsible party's expense to compensate for violation of provisions of this Chapter and other applicable City codes.
1. All development work shall remain stopped until a restoration and/or mitigation plan is prepared at the Project Sponsor's expense and approved by the City. The plan must be prepared by a qualified professional and shall describe how the actions proposed meet the minimum requirements of this Section.
 2. The City may, at the violator's expense, seek expert advice in determining the adequacy of the plan.
 3. Inadequate plans shall be returned to the violator for revision and resubmittal, with a written explanation regarding any deficiencies and/or additional information that may need to be submitted.
 4. Any work recommenced shall be done in accordance with the approved restoration/mitigation plan.
 5. 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 to the condition and state pre-existing the violation provided that if the violator can demonstrate in a restoration/mitigation plan that greater functional and habitat values can be obtained, these standards may be modified by the City:
 - a. The function and values of the affected area shall be restored, including water volumes, quality and wildlife habitat.
 - b. The soil types and configuration shall be replicated.
 - c. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation typically found on the site in species types, sizes, and densities.
 6. 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 any buffers shall be replanted with native vegetation sufficient to minimize the hazard.
- B. Representatives of the City are authorized to make site inspections and take such actions as are necessary to enforce this Chapter. The authorized representatives shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

Any violation of this Chapter shall be enforced in accordance with the provisions of the Castle Rock Municipal Code. Any person, party, firm, corporation, or other legal entity convicted of violating any of the provisions of this Chapter shall be subject to civil or criminal penalties. Each day or portion of a day during which a violation of this Chapter is committed or continued shall constitute a separate offense. Any development carried out contrary to the provisions of this Chapter shall constitute a public nuisance in accordance with the provisions of CPMC 8.24 and may be enjoined as provided by the statutes of the State of Washington.



City of Castle Rock Critical Areas Ordinance Manual

Standard Specifications & Drawings

DRAFT DATE: Wednesday, August 11, 2021

Adopted by City of Castle Rock City Council
X, 2021

Effective:

Contents

General Requirements	3
Fish and Wildlife Habitat Conservation	5
Guidelines for Fish and Wildlife Habitat Conservation Reports	19
Standards for Classifying and Protecting Fish and Wildlife Habitat	21
Geologic Hazard Area	32
Guidelines for Preparing Geologic Hazard Area Reports	32
Standards for Identifying and Protecting Geologic Hazard Areas	37
Wetlands	Error! Bookmark not defined.
Guidelines for Preparing Wetlands Reports	Error! Bookmark not defined.
Standards for Classifying and Protecting Wetlands	Error! Bookmark not defined.
Special Flood Hazard Area	42
Guidelines for Preparing a Special Flood Hazard Area Reports	42
Critical Aquifer Recharge Area	44
Guidelines for Preparing Critical Aquifer Recharge Area Reports	44

General Requirements

- A. The scope, content, and format of all critical areas reports shall be subject to City review and approval, and should include:
1. The name and contact information of the Property Owner, Project Sponsor, and Applicant;
 2. The names and professional qualifications of the persons that prepared the report and supporting documents, including their experience in proposing and implementing mitigation plans for the associated type of critical areas relevant to the proposed project;
 3. A description of the proposed action and the required permits and approvals, including:
 - a. Measures taken in the design of the proposed action to avoid or minimize potential adverse impacts;
 - b. Proposed construction sequencing, timing, and duration; and
 - c. A description of the proposed stormwater management plan, if applicable, including temporary erosion control measures.
 4. A site plan for the proposed development, drawn to scale with dimensions, showing:
 - a. The boundaries of the site and adjoining parcels;
 - b. The location of all critical areas and buffers on and near the site;
 - c. Existing natural and man-made features on the site, including existing buildings, disturbed areas, utilities, and easements; and
 - d. Areas proposed for development including clearing and grading.
 5. A technical analysis of all critical all critical areas and buffers on or adjacent to the site, including:
 - a. Documentation of the location of critical areas and their buffers;
 - b. A characterization of the critical areas including classifications and an assessment of their function and values;
 - c. A statement specifying the assumptions made and relied upon;
 - d. A discussion of the performance standards applicable to the critical area and the proposed activity based on Best Available science;
 - e. An assessment of the potential impacts to the critical areas and buffers that may result from proposed development;

- f. An analysis of site development alternatives; and
 - g. Recommended measures to further avoid or minimize potential adverse impacts, such as limitations on the dates or times of construction activities.
- 6. A recommended Mitigation Plan based on Best Available Science. This should include, but is not limited to:
 - a. A complete description of the recommended mitigating measures, including on-site and off-site measures;
 - b. Proposed buffers and setbacks and limitations on development activities in these areas;
 - c. Buffer averaging;
 - d. Monitoring protocols;
 - e. Proposed maintenance activities; and
 - f. Proposed financial guarantees or other measures to ensure the performance or recommended mitigating measures.

Wetlands

Guidelines for Preparing Wetlands Reports

A Critical Area Authorization or Permit is required before any construction or development activity may be initiated on a site with areas meeting the criteria for designations as a wetland or an associated buffer, in accordance with the provisions of Castle Rock Municipal Code Chapter 18.10.020.

1. A Critical Area Authorization shall be issued based on a finding that the proposed activity is exempt, or that City has adequate information to determine that the proposal will not have an adverse impact on Critical Areas, and otherwise complies with the provisions of Chapter 18.10.020 and Chapter 18.10.070.
2. A Critical Area Permit shall be based on the findings and recommendations contained in a Wetland Report.

In addition to the minimum required contents of critical area reports, a critical area report for wetlands shall contain an analysis of the wetlands including the following site- and proposal-related information at a minimum:

1. A written assessment and accompanying maps of the wetlands and buffers within 200 feet of the project area, including the following information at a minimum:
 - a. Wetland rating, wetland delineation and required buffers;
 - b. Existing wetland acreage;
 - c. Wetland category; vegetative, faunal, and hydrologic characteristics;
 - d. Soil and substrate conditions;
 - e. Topographic elevations, at two-foot contours; and
 - f. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year — drift lines, algal layers, moss lines, and sediment deposits).
2. A discussion of measures, including avoidance, minimization, and mitigation, proposed to protect existing wetlands within the project area.
3. Functional evaluation for the wetland and buffer within the project area using a local or state agency recognized method and including the reference of the method and all data sheets.
4. Proposed mitigation, if needed, including a written assessment, and accompanying maps of the mitigation area, including the following information at a minimum:

- a. Existing wetland acreage and proposed impact area;
 - b. Vegetative, faunal, and hydrologic conditions;
 - c. Relationship within watershed and to existing water bodies;
 - d. Soil and substrate conditions, topographic elevations;
 - e. Existing and proposed adjacent site conditions;
 - f. Required wetland buffers; and
 - g. Property ownership.
5. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs.

Standards for Classifying and Protecting Wetlands

- A. Wetlands in the City of Castle Rock are rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Eastern Washington: 2014 Update (Ecology Publication #14-06-030, October 2014), or as revised. The descriptions of wetland categories according to the Rating System are generally as follows:
1. Category 1 Wetlands include alkali wetlands, wetlands that are identified by scientists of the Washington Natural Heritage Program (DNR) as wetlands with high conservation value, bogs, mature old-growth forested wetlands over one-quarter acre with slow-growing trees, forests with stands of aspen, and wetlands that perform many functions very well function at a very high level (scores twenty-two to twenty-seven points). They meet at least one of the following criteria: (a) represent a unique or rare wetland type; or (b) are more sensitive to disturbance than most wetlands; or (c) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; (d) provide a high level of functions (scores of 22 or more points using the Eastside rating system); or (e) are documented wetlands of local significance. Generally, these wetlands are not common and make up a small percentage of the wetlands in the region.
 2. Category II wetlands provide high levels of some functions (scores between 19 and 21 points). These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection.
 3. Category III wetlands are 1) vernal pools that are isolated, and 2) wetlands with a moderate level of functions (scores between 16 and 18 points). Wetlands scoring between 16 and 18 points generally have been disturbed in some ways, and are often smaller, less diverse and/or more isolated from other natural resources in the landscape than Category II wetlands.
 4. Category IV wetlands have the lowest levels of functions (scores less than 16 points) and are often heavily disturbed. These wetlands may provide some important functions and also need protection.
- B. A buffer area shall be established for all designated wetlands to protect the function and values of the wetland. The criteria and standards for establishing buffer areas can be found in this manual and references standards as adopted by reference in the Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10 Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1), Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised, Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance (Version 1). Washington State Department of Ecology Publication #06-06-011a. Olympia, Washington. Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans--Version 1, (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised), and Selecting

Wetland Mitigation Sites Using a Watershed Approach (Western Washington) (Publication #10-06-07, November 2010)., or as subsequently amended.

1. The standard buffer widths are based on wetland category, intensity of impacts, and wetland functions or special characteristics. The buffer is to be vegetated with native plant communities that are appropriate for the site conditions. If vegetation in the buffer is disturbed (grazed or mowed), applicants planning changes to land that will increase impacts to wetlands need to rehabilitate the buffer with native plant communities that are appropriate for the site conditions. The width of the buffer is measured in horizontal distance.
 2. 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.
 3. Buffers shall not include areas that are functionally and effectively disconnected from the wetland by a road or other substantially developed surface of sufficient width and with use characteristics such that buffer functions are not provided.
- C. Wetland buffer widths may be modified on a case-by-case basis by averaging buffer widths, based on a Wetland Report that demonstrates to the satisfaction of the City, that the following criteria can be met:
1. Buffer width averaging shall be allowed only where:
 - a. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a “dual-rated” wetland with a Category I area adjacent to a lower-rated area.
 - b. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower-functioning or less sensitive portion.
 - c. The total area of the buffer after averaging is equal to the area required without averaging and all increases in buffer dimension for averaging are generally parallel to the wetland edge.
 - d. The buffer at its narrowest point is never less than seventy-five percent of the required width.
 2. Averaging to allow reasonable use of a parcel may be permitted when all of the following are met:
 - a. There are no feasible alternatives to the site design that could be accomplished without buffer averaging.

- b. The averaged buffer will not result in degradation of the wetland's functions and values.
 - c. The total buffer area after averaging is equal to the area required without averaging and all increases in buffer dimension for averaging are generally parallel to the wetland edge.
- D. The buffer at its narrowest point is never less than three-quarters of the required width except where the director finds that there is an existing feature such as a roadway that limits buffer dimension, or an essential element of a proposed development such as access that must be accommodated for reasonable use and requires a smaller buffer.
- E. The applicant implements all reasonable measures to reduce the adverse effects of adjacent land uses and ensure no net loss of wetland functions and values in conjunction with a wetland assessment study and mitigation plan.
- H. The City may increase the width of the standard buffer on a case-by-case basis, based on a critical area report, when a larger buffer is required to protect critical habitats, or such increase is necessary to:
 - 1. Protect the function and value of the wetland from proximity impacts of adjacent land use, including noise, light, and other disturbance, not sufficiently limited by buffers provided above;
 - 2. Maintain viable populations of native priority species of fish and wildlife; or
 - 3. Protect wetlands or other critical areas from landslides, erosion, or other hazards.
 - 4. Buffer requirements will be based on the studies provided identifying the specific type of wetland.
- I. The width of a wetland buffer may be increased or decreased by the City on a case-by-case basis based on approval of a wetland report that documents that a larger buffer is needed to protect wetland functions or values or that a smaller buffer adequately protects wetlands without a net loss of functions or values.
 - 1. The standard buffer widths identified above assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community, or the buffer should be widened to ensure that adequate functions of the buffer are provided. The proponent shall maintain the viability of the buffer in perpetuity as specified in the wetland report.
 - 2. Wetland buffers may be reduced by no more than 25% of the standard buffer width.

3. The applicant implements all reasonable measures to reduce the adverse effects of adjacent land uses and ensure no net loss of buffer functions and values. The specific measures that shall be implemented include:
- Direct lights away from the wetland and buffer.
 - Locate facilities that generate substantial noise (such as some manufacturing, industrial and recreational facilities) away from the wetland and buffer.
 - Establish covenants limiting use of pesticides to outside the established buffer area of the wetland.
 - Implement integrated pest management programs.
 - Infiltrate or treat, detain, and disperse runoff into buffer.
 - Post signs at the outer edge of the critical area or buffer to clearly indicate the location of the critical area.
 - Plant buffer with native vegetation appropriate for the region to create screens or barriers to noise, light, human intrusion and discourage domestic animal intrusion.
 - Use low impact development if possible where appropriate.
 - Establish a permanent conservation easement to protect the wetland and the associated buffer.

Table 1: Land Use Level of Impact

Land Use Intensity	Proposed Land Use Types*
Low	Timber management activities, including harvesting, thinning, brush and weed control, and control efforts for fire, insects, and disease
	Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.)
	Unpaved trails
	Utility corridor without a maintenance road and little or no vegetation management
Moderate	Residential (one unit/acre or less)
	Moderate intensity open space (parks with biking, jogging, etc.)
	Paved trails
	Building of logging roads
	Excavation of driveways
	Utility corridor or right-of-way shared by several utilities and including access/maintenance road
High	Commercial, urban, industrial, institutional, and retail sales

	• Residential development and residential subdivisions (more than one unit/acre)
	• High intensity recreation (golf courses, ball fields, etc.)
	• Minor transportation improvements

*The above list of land use types are examples and not an exhaustive list; other similar uses may be included in each category at the discretion of the Director. *Source: Cowlitz County Code Section 19.15.120 Wetlands*

Table 1: Cowlitz County Mitigation Ratios

Wetland Category	Creation	Re-establishment-Rehabilitation Only	Creation and Rehabilitation	Creation and Enhancement	Enhancement Only
Category I: based on total functions	4:1	8:1	1:1 C and 6:1 RH	1:1 C and 12:1 E	16:1 E
Category I: Bog	Not possible	6:1 RH of a bog	Not possible	Not possible	Case-by-case
Category I: Forested	6:1	12:1	1:1 C and 10:1 RH	1:1 C and 20:1 E	24:1
Category II	3:1	6:1	1:1 C and 4:1 RH	1:1 C and 8:1 E	12:1
Category III	2:1	4:1	1:1 C and 2:1 RH	1:1 C and 4:1 E	8:1
Category IV	1.5:1	3:1	1:1 C and 1:1 RH	1:1 C and 2:1 E	6:1

**This document, Appendix 8-C of Wetlands in Washington State, Volume 2 – Protecting and Managing Wetlands (Granger et al. 2005). *Source: Cowlitz County Critical Areas Best Available Science Review (Table 4-2-2)*

Legend: C = Creation, RH = Rehabilitation, E = Enhancement

Table 3: Buffers Required to Protect Water Quality Functions

Wetland Rating	Low Intensity Use	Moderate Intensity Use	High Intensity Use
Category I	50 ft.	75 ft.	100 ft.
Category II	50 ft.	75 ft.	100 ft.
Category III	40 ft.	60 ft.	80 ft.
Category IV	25 ft.	40 ft.	50 ft.

Buffer widths in Table 3 apply to all Category IV wetlands regardless of habitat score and all other wetlands with habitat scores of three to four points on the rating form. *Source: Cowlitz County Code Section 19.15.120 Wetlands*

Table 4: Buffers Required to Protect Habitat Functions

Habitat Score in the Rating Form	Low Intensity Use	Moderate Intensity Use	High Intensity Use
Category I Bogs			
Not Applicable	125 ft.	190 ft.	250 ft.
Category I or II Wetlands			
5 points	60 ft.	90 ft.	120 ft.
6 points	90 ft.	130 ft.	180 ft.
7 points	130 ft.	195 ft.	260 ft.
8-9 points	150 ft.	225 ft.	300 ft.
Category III Wetlands			
5 points	60 ft.	90 ft.	120 ft.
6 points or greater	75 ft.	110 ft.	150 ft.

Source: Cowlitz County Code Section 19.15.120 Wetlands

Table 5: Required Measures to Minimize Impacts to Wetlands

Examples of Disturbance	Activities and Uses That Cause Disturbances	Examples of Measures to Minimize Impacts
Lights	• Parking lots • Warehouses • Manufacturing • Residential	• Direct lights away from wetland
Noise	• Manufacturing • Residential	• Locate activity that generates noise away from wetland
Toxic runoff*	• Parking lots • Roads • Manufacturing • Residential areas • Application of agricultural pesticides • Landscaping	• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150 ft. of wetland • Apply integrated pest management
Stormwater runoff	• Parking lots • Roads • Manufacturing • Residential areas • Commercial • Landscaping	• Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns that directly enters the buffer • Use low intensity development techniques
Change in water regime	• Impermeable surface • Lawns • Tilling	• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	• Residential areas	• Use privacy fencing • Plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion

		• Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	• Tilled fields	• Use best management practices to control dust

*These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site. *Source: Cowlitz County Code Section 19.15.120 Wetlands*

- B. Proposed development activities or uses that may have an adverse impact on wetlands may be required to provide compensatory mitigation, in accordance with the findings and recommendations of a Wetlands Report, as determined by the City.

Mitigation Standards. When the acreage required for compensatory mitigation is divided by the acreage of impact, the result is a number known variously as a replacement, compensation, or mitigation ratio. Compensatory mitigation ratios are used to help ensure that compensatory mitigation actions are adequate to offset unavoidable wetland impacts by requiring a greater amount of mitigation area than the area of impact. Requiring greater mitigation area helps compensate for the risk that a mitigation action will fail and for the time lag that occurs between the wetland impact and achieving a fully functioning mitigation site.

1. The ratios presented are based on the type of compensatory mitigation proposed (e.g., restoration, creation, and enhancement). In its Regulatory Guidance Letter 02-02, the U.S. Army Corps of Engineers provided definitions for these types of compensatory mitigation. For consistency, the authors of this document use the same definitions which are provided under Compensatory Mitigation in Section 18.10. Off-site compensatory mitigation may be required in cases where there are no corresponding opportunities on the project site to replace in-kind elements of a wetland that have been adversely affected as a result of a regulated activity. Such mitigation shall conform to provisions of this manual and Castle Rock Code Sections 18.10.
2. The City may adjust these ratios when a combination of mitigation approaches is proposed. In such cases, the area of altered wetland shall be replaced at a one to one ratio through re-establishment or creations, and the remainder of the area needed to meet the ratio can be replaced by enhancement at a two to one ratio. For example; impacts to one acre of a Category II wetland requiring a three to one ratio for creation can be compensated by creating one acre and enhancing four acres (instead of the additional two acres of creation that would otherwise be required).
 - a. These ratios are based on the assumption that the rehabilitation or enhancement actions implemented represent the average degree of improvement possible for the site. Proposals to implement more effective rehabilitation or enhancement actions may result in a lower ratio, while less effective actions may result in a higher ratio. The distinction between rehabilitation and enhancement is not clear-cut. Instead, rehabilitation and enhancement actions span a continuum. Proposals that fall within the gray area between rehabilitation and enhancement will result in a ratio that lies between the ratios for rehabilitation and the ratios for enhancement.

- b. Natural Heritage sites, alkali wetland, and bogs are considered irreplaceable wetlands because they perform some functions that cannot be replaced through compensatory mitigation. Impacts to such wetlands would therefore result in a net loss of some functions no matter what kind of compensation is proposed.

Reference: U. S. Army Corps of Engineers publication Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (WMVCR), Regional Supplement to the 1987 Wetland Delineation Manual (Corps Publication # ERDC/ EL TR-10-03).

- 3. Mitigation provisions shall have adequate buffers to ensure wetland protection and sustainability. The buffer shall be based on the category and land-use intensity in Section 18.10.340C; provided, that the director may approve a smaller buffer when existing site constraints (such as a road) prohibit attainment of the standard buffer.
- 4. Mitigation Maintenance and Monitoring. Annual mitigation maintenance and monitoring reports shall include:
 - a. Descriptive data for vegetation, soils, and hydrology.
 - b. Itemized list of replaced vegetation.
 - c. Quantitative assessment of invasive species.
 - d. Descriptive photographs.
 - e. Statement of overall success of mitigation.
 - f. Schedule of activities for the next year of maintenance and monitoring.
- L. In addition to meeting the requirements of Chapter 18 of Castle Rock Municipal Code, a mitigation plan for wetland and wetland buffer impacts shall meet the following requirements:
 - 1. The plan shall be based on applicable portions of the Washington State Department of Ecology's Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans, 2006, as amended, or other appropriate guidance document that is consistent with best available science.
 - 2. The plan shall contain sufficient information to demonstrate that the proposed activities are logistically feasible, constructible, ecologically sustainable, and likely to succeed. Specific information to be provided in the plan shall include:
 - a. General description and scaled drawings of the activities proposed including clearing, grading/excavation, drainage alterations, planting, invasive plant management, installation of habitat structures, irrigation, and other site treatments associated with the development activities and proposed mitigation action(s);

- b. A description of the ecological functions and values that the proposed alteration will affect and the specific ecological functions and values the proposed mitigation area(s) shall provide, and an assessment of factors that may affect the success of the mitigation program;
 - c. Overall goals of the plan, including wetland function, value, and acreage;
 - d. Description of baseline (existing) site conditions including topography, vegetation, soils, hydrology, habitat features (i.e., snags), surrounding land use, and other pertinent information;
 - e. Field data confirming the presence of adequate hydrology (surface and/or groundwater) to support existing and compensatory wetland area(s);
 - f. Nature of mitigation activities, including area of restored, created, enhanced and protected wetland, by wetland type;
 - g. Detailed grading and planting plans showing proposed post-construction topography; general hydrologic patterns; spacing and distribution of plant species, size and type of proposed planting stock, watering or irrigation plans, and other pertinent information;
 - h. A description of site treatment measures including invasive species removal, use of mulch and fertilizer, placement of erosion and sediment control devices, and best management practices that will be used to protect existing wetlands and desirable vegetation;
- 3. Specific measurable performance standards that the proposed mitigation action(s) shall achieve, together with a description of how the mitigation action(s) will be evaluated and monitored to determine if the performance standards are being met; and identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates that project performance standards are not being met. The performance standards shall be tied to and directly related to the mitigation goals and objectives.
 - 4. Cost estimates for the installation of the mitigation program, monitoring, and potential corrective actions if project performance standards are not being met.
 - 5. Mitigation activities shall be timed to occur in the appropriate season based on weather and moisture conditions and shall occur as soon as possible after the permitted alteration.

M. 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 City 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.
- C. The following uses and activities 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 to minimize impacts to the buffer and adjacent wetland:
- 1. Passive recreation facilities designed in accordance with the findings and recommendations of a Wetlands Report, including:
 - a. Walkways and trails that are made of pervious materials and require no excavation for foundation or stabilization, provided that those pathways that are generally parallel to the perimeter of the wetland shall be located in the outer 25 percent of the buffer area, and shall be limited to six feet from shoulder to shoulder in width, unless a greater width is approved by the City;
 - b. Wildlife viewing structures that are temporary in nature or not built with permanent foundations; and
 - c. Fishing areas accessed by foot.
 - 3. Stormwater management facilities are not allowed in buffers of Category I wetlands. Stormwater management facilities, limited to stormwater dispersion outfalls and bioswales, may be allowed within the outer 25 percent of the buffer of Category II, III or IV wetlands only, provided that:
 - a. No other location is feasible; and
 - b. The location of such facilities will not degrade the functions or values of the wetland.
 - 4. The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:
 - a. A wetland or its buffer may not be subdivided.
 - b. Land that is located partially within a wetland or its buffer may be subdivided provided that the buildable portion of each lot meets the minimum lot size requirements.
 - c. Access roads and utilities serving the proposed subdivision may be permitted within the wetland and associated buffers only if, based on the associated critical area report, the

City determines that no other feasible alternative exists. Mitigation requirements outlined in Castle Rock Municipal Code Chapter 18.10 Critical Areas to these roads.

5. On-site sewage disposal system conventional drainfields may be permitted in the outer 25 percent of a Category II, III and IV wetland buffer when accessory to an approved residential structure, if the following conditions are met:
 - a. It is not feasible to connect to a public sanitary sewer system;
 - b. There is no reasonable location outside the wetland buffer based on analysis of conditions within the contiguous property owned by the applicant;
 - c. The facility is located as far from the wetland edge as possible and is designed and constructed in a manner that minimizes disturbance of soils and vegetation, and no trees in excess of four inches in diameter are removed or disturbed, unless absolutely necessary.
 - j. Clearing, grading, and excavation activities are limited to the minimum necessary and the area is restored following installation.
1. Maintenance, repair, or operation of existing structures, facilities, or improved areas, including minor modification of existing serviceable structures within a buffer zone where modification does not adversely impact wetland functions, and subject to the provisions for nonconforming use and facilities.
2. Public and private roadways and railroad facilities, including bridge construction and culvert installation, if the following criteria are met:
 - a. There is no reasonable location or route outside the wetland or wetland buffer based on analysis of system needs, available technology and alternative routes. Location within a wetland buffer shall be preferred over a location within a wetland.
 - b. Facilities parallel to the wetland edge are located as far from the wetland edge as possible and in a manner that minimizes disturbance of soils and vegetation.
 - c. Clearing, grading, and excavation activities are limited to the minimum necessary, which may include placement on elevated structures as an alternative to fill, where feasible.
 - d. Impacts on wetland functions are mitigated in accordance with Section 18.10.070
3. Access to private development sites may be permitted to cross Category II, III, or IV wetlands or their buffers, pursuant to the criteria in Subsection F of this section; provided, that alternative access shall be pursued to the maximum extent feasible, including through the provisions of Chapter 8.24 RCW. Exceptions or deviations from technical standards for width or other dimensions, and specific construction standards to minimize impacts may be specified, including placement on elevated structures as an alternative to fill.

4. Utility lines and facilities providing local delivery service, not including facilities such as electrical substations, water and sewage pumping stations, water storage tanks, petroleum products pipelines and not including transformers or other facilities containing hazardous substances, may be located in Category II, III, and IV wetlands and their buffers and/or Category I wetland buffers if the following criteria are met:
 - a. There is no reasonable location or route outside the wetland or wetland buffer based on analysis of system needs, available technology and alternative routes. Locations within a wetland buffer shall be preferred over locations within a wetland.
 - b. The utility line is located as far from the wetland edge as possible and in a manner that minimizes disturbance of soils and vegetation.
 - c. Clearing, grading, and excavation activities are limited to the minimum necessary to install the utility line, which may include boring, and the area is restored following utility installation.
 - d. Buried utility lines shall be constructed in a manner that prevents adverse impacts to subsurface drainage. This may include the use of trench plugs or other devices as needed to maintain hydrology, as determined by a qualified professional.
 - e. Impacts on wetland functions are mitigated in accordance with Section 18.10.070.
- J. Proposed development activities or uses that may have an adverse impact on wetlands may be required to provide compensatory mitigation, in accordance with the findings and recommendations of a Wetlands Report, as determined by the City.
 1. The standards for compensatory mitigation may be found in the City of Castle Rock document entitled *Guidelines for Classifying and Protecting Wetlands, April 25, 2019*, or as subsequently amended.
 - a. Wetland buffer widths may be increased, decreased, or modified on a case-by-case basis by averaging buffer widths, based on a Wetlands Report that demonstrates to the satisfaction of the City, that the criteria found in the City of Castle Rock document entitled *Guidelines for Classifying and Protecting Wetlands, April 25, 2019*, or as subsequently amended, can be met.

Fish and Wildlife Habitat Conservation

Guidelines for Fish and Wildlife Habitat Conservation Reports

A Critical Area Authorization or Permit is required before any construction or development activity may be initiated on a site with an area that meets the criteria for designation as a Fish and Wildlife Habitat Conservation Area(s) or an associated buffer in accordance with the provisions of City of Castle Rock Municipal Code (CRMC) Chapter 18.10.

1. A Critical Area Authorization may be issued by the City based on a finding that the proposed activity is exempt, or that City has adequate information to determine that the proposal will not have an adverse impact on Critical Areas, and otherwise complies with the provisions of Chapter 18.10.
2. A Critical Area Permit shall be based on the findings and recommendations contained in a Fish and Wildlife Habitat Conservation Report.

Reports for Fish and Wildlife Habitat Conservation Areas shall be prepared by a qualified professional who is a biologist with experience preparing reports for the relevant type of habitat. The City shall determine the scope, content, and format for a required Fish and Wildlife Habitat Conservation Report based on pre-application consultation with the Applicant, his/her consultants, resource agencies, and qualified professionals. The following guidelines are provided as a resource to Applicants. Please note however, that these guidelines are subject to periodic review and update by the City. The most recent version of these guidelines may be obtained at City Hall, or on the City's website.

1. A habitat assessment is an investigation of the project area to evaluate the presence or absence of critical native fish, wildlife, or plant species or habitat. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:
 - a. Detailed description of native vegetation on and adjacent to the project area;
 - b. Identification of any native species of local importance, priority species and habitats (PHS), or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
 - c. A discussion of any federal, state, or local special management recommendations, including department of fish and wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;
 - d. A detailed discussion of the direct and indirect potential benefits and impacts on habitat by the project, including potential impacts to water quality;

- e. A discussion of measures, including avoidance, minimization, and mitigation, proposed to protect existing habitats to be conducted in accordance with Section 18.10; and
 - f. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs, consistent with Section 18.10.
2. In addition, the City may also require:
- a. Detailed surface and subsurface hydrologic features both on and adjacent to the site.
 - b. An evaluation by an independent qualified professional regarding the Applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate; and/or
 - c. That the Applicant consults with the Washington Department of Fish and Wildlife, the Cowlitz Tribe, and/or other appropriate agencies prior to preparing and submitting the report.

Standards for Classifying and Protecting Fish and Wildlife Habitat

Areas within the City meeting one or more of the following criteria, may be designated as Fish and Wildlife Habitat Conservation Areas, subject to the provisions of this Section, and shall be managed consistent with the principles of best available science, such as the *Washington State Department of Fish and Wildlife's Management Recommendations for Priority Habitat and Species*.

Table 2: Minimum Recommended Widths of Riparian Habitats

Table 19.15.130-B. Riparian Habitat Areas Stream Type Required RHA Widths

Stream	RHA Width (ft.) ^a
Type S water	See SMP
Type F water, channel width greater than 20 feet	150
Type F water, channel width less than or equal to 20 feet	100
Type Np water	50
Type Ns water	50

^a RHA widths shall be measured horizontally from the ordinary high water mark *Source: Cowlitz County Code Section 19.15.130 Fish and Wildlife Habitat Conservation Areas*

A. Fish and wildlife habitat conservation areas—Water bodies—Buffer averaging.

1. The City may permit a proposal to reduce the standard buffer on a portion of the site if the buffer is increased on another portion of the site, so that the total buffer area has not been reduced, based on a written finding that there will be no net loss of ecological function provided that:
 - a. Averaging is necessary to avoid an extraordinary hardship to the applicant caused by circumstances peculiar to the property;
 - b. Supporting documentation may be required from a qualified professional;
 - c. The site has not applied buffer width reduction or modification by any prior action administered by Castle Rock. Sites which utilize this provision are not eligible for any future buffer width modifications, under any provision of this Program, except as part of an approved variance.
 - d. Additional conditions of approval and/or mitigation measures including but not limited to such as requirements to increase native vegetation, limit native vegetation removal, limit the use of fertilizers and pesticides, further protect steep slopes, and/or the payment of a mitigation fee may be required; and

- e. At no point along the shoreline may the buffer be reduced by more than 35% of the standard buffer for the applicable designation, provided that:
 - i. On lots less than 300 feet in depth which are encumbered by a public transportation corridor, the buffer may be reduced through averaging up to 50% of the applicable standard buffer: and
 - ii. All structures are located as far landward as practical, and not closer than 50 feet from the ordinary high water mark.

B. Fish and wildlife habitat conservation areas—Water bodies—Buffer increase.

- 1. The City may increase the width of the standard buffer on a case-by-case basis, based on a critical area report, when a larger buffer is required to protect critical habitats, or such increase is necessary to:
 - a. Protect native fish and wildlife habitat, maintain water quality, ensure adequate flow conveyance; provide adequate recruitment for large woody debris, maintain adequate stream temperatures, or maintain in-stream conditions.
 - b. Compensate for degraded vegetation communities or steep slopes adjacent to the stream.
 - c. Maintain areas for channel migration.

C. Protect adjacent or downstream areas from erosion, landslides, or other hazards.

D. Fish and wildlife habitat conservation areas—Water bodies—Buffer decrease.

- 1. The City may decrease the width of the standard buffer on a case-by-case basis, based on a critical area report, when a larger buffer is required to protect critical habitats, or such increase is necessary to:
 - a. The buffer reduction shall not adversely affect the habitat functions and values of an adjacent habitat conservation area or other critical area
 - b. The slopes adjacent to the habitat conservation area within the buffer area are stable and the gradient does not exceed 30 percent.
 - c. The buffer shall not be reduced to less than 50 percent of the standard buffer as defined in Chapter 18.10. A 35-foot buffer cannot be decreased.
- 2) The following table identifies potential buffer reductions with accompanying riparian habitat enhancement.
- 3) Habitat enhancement plans prepared by a qualified professional must be provided to the City identifying existing conditions, and how the enhancement plan will improve riparian

functions over existing conditions. A five-year monitoring plan must be included. The plan must also address how land outside a reduced buffer would protect surface water quality.

2. When compensatory mitigation is required, the applicant shall submit a compensatory mitigation plan with sufficient information to demonstrate that the proposed activities are logistically feasible, constructible, ecologically sustainable, and likely to succeed. In addition to the requirements of Section 18.10.115, specific information to be provided in the plan shall include:
 - a. General description and scaled drawings of the activities proposed including clearing, grading/excavation, drainage alterations, planting, invasive plant management, installation of habitat structures, irrigation, and other site treatments associated with the development activities and proposed mitigation action(s);
 - b. A description of the functions and values that the proposed mitigation area(s) shall provide, together with a description of required and an assessment of factors that may affect the success of the mitigation program; and
 - b. A description of known management objectives for the native species or habitat.
 - c. Required mitigation shall be completed as soon as possible following activities that will disturb fish and wildlife habitat conservation areas and during the appropriate season. Mitigation shall be completed prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing native wildlife and flora.
3. The City may require monitoring of mitigation activities and submittal of annual monitoring reports to ensure and document that the goals and objectives of the mitigation are met.
 - a. The frequency and duration of the monitoring shall be based on the specific needs of the project, as determined by the City.

E. Fish and wildlife habitat conservation areas—Piped streams.

- a. Building over a natural stream that is located in an underground pipe or culvert, except as allowed in Section 18.10 for transportation or utility crossings, is prohibited. Relocation of the piped stream system around structures is allowed. The relocated system shall be sized to convey the 100-year future land use condition runoff from the total upstream tributary area as determined from a hydrologic and hydraulic analysis performed in accordance with standards determined by the city.
- b. No riparian buffers are required along segments of piped or culverted streams unless designated by the City for removal. Any easements or setbacks from pipes or culverts shall be consistent with adopted city regulations or design standards as administered by the city public works department. Setback requirements will include an easement over the piped stream system and a building setback from the edge of the easement. The city will determine the setback requirement during the permit review process. The setback size

will be dependent upon the amount of space that would be needed for maintenance, operation, and future replacement of the piped stream system.

F. Habitat Specific Performance Standards.

1. Endangered, Threatened, and Sensitive Species. No development shall be allowed within a habitat conservation area or buffer with which state or federal endangered, threatened, or sensitive species have a primary association.
 - a. Whenever activities are proposed adjacent to a habitat conservation area with 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 submitted to the city. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the department of fish and wildlife and the appropriate federal agency.
2. Wetland Habitats. All proposed activities within or adjacent to habitat conservation areas containing wetlands shall, at a minimum, conform to the wetland development performance standards set forth in this critical areas manual document, in addition to meeting the habitat conservation area standards in this Chapter.
3. Riparian Habitat Areas. Unless otherwise allowed in this Chapter, all structures and activities shall be located outside of the riparian habitat buffers;
 - a. Buffers shall be established for habitats that include aquatic systems.
 - b. Recommended buffer widths are identified in the critical areas designation map. A riparian habitat shall have at least the buffer width recommended in Table 6, unless a greater width is required pursuant to Section 18.10 and the standards outlined in this manual. Widths shall be measured outward, 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;
 - c. The required buffer shall be extended to include any adjacent regulated wetland(s), landslide hazard areas and/or erosion hazard areas and required buffers, but shall not be extended across roads or other lawfully established structures or hardened surfaces that are functionally and effectively disconnected from the stream.
 - d. Buffers in conjunction with other critical areas. Where other critical areas defined in this chapter fall within the water body buffer, the buffer area shall be the most beneficial of the buffers applicable to any applicable critical area.
4. Anadromous Fish.
 - a. All activities, uses, and alterations proposed to be located in water bodies used by native anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of native anadromous fish habitat, including adhering to the following standards:

- (1) 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;
 - (2) An alternative alignment or location for the activity is not feasible;
 - (3) The activity is designed so that it will not degrade the functions or values of the native fish habitat or other critical areas;
 - (4) Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to an approved critical area report, and
 - (5) Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved mitigation plan.
- b. Structures that prevent the migration of native salmonids shall not be allowed in the portion of water bodies currently 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. Fills shall not adversely impact native anadromous fish or their habitat or shall mitigate any unavoidable impacts.
5. 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 the wetland section of this manual and Section 18.10.
 6. In areas designated as high density of wintering birds of prey, tree and perch removal shall be discouraged, and limited to hazard tree removals unless otherwise approved by the director.
 7. In areas designated as hawk habitat tree removal will be restricted to the non-nesting season August through January and limited to hazard tree removal unless otherwise approved by the City.
 8. In areas designated as hawk habitat, and in areas where a hawk nest is known to occur, noise generating activities should be restricted during the nesting season, specifically from March 1 through June 30. Noise generating activities that may be restricted include construction activities that generate more than 100 decibels (like pile-driving, blasting or other intense, short duration impacts).
- G. The following activities or uses may be permitted in streams and/or their buffers when all reasonable measures have been taken to avoid adverse effects on species and habitats, the amount and degree of the alteration are limited to the minimum needed to accomplish the project purpose, and compensatory mitigation is provided for all adverse impacts that cannot be avoided.
1. Restoration of streams previously piped or channeled into a new or relocation streambed when part of a restoration plan that will result in equal or better habitat and water quality and quantity,

and that will not diminish the flow capacity of the stream or other natural stream processes; provided, that the relocation has a state hydraulic project approval and all other applicable permits.

2. Road, trail, bridge, and right-of-way crossings, provided they meet the following criteria:
 - a. There is no other feasible alternative route with less impact on critical areas.
 - b. The crossing minimizes interruption of natural processes such as the downstream movement of wood and gravel and the movement of all native fish and wildlife. Bridges are preferred for all stream crossings and should be designed to maintain the existing stream gradient and substrate, provide adequate horizontal clearance on each side of the ordinary high water mark and adequate vertical clearance above ordinary high water mark for animal passage. If a bridge crossing is not feasible, culverts shall be designed according to applicable state and federal guidance criteria for native fish passage as identified in Fish Passage Design at Road Culverts, WDFW March 1999, and/or the National Marine Fisheries Service Guidelines for Salmonid Passage at Stream Crossings, 2000 (and subsequent revisions), and in accordance with a state hydraulic project approval. The applicant or property owner shall maintain passage for native fish through the bridge or culvert.
 - c. The city may require that existing culverts be removed, repaired, or modified as a condition of approval if the culvert is detrimental to native fish habitat or water quality, and a feasible alternative exists.
 - d. Crossings shall be limited to the minimum width necessary. Common crossings are the preferred approach where multiple properties can be accessed by one crossing.
 - e. Access to private development sites may be permitted to cross streams, if there are no feasible alternative alignments. Alternative access shall be pursued to the maximum extent feasible, including through the provisions of Chapter 8.24 RCW. Exceptions or deviations from technical standards for width or other dimensions, and specific construction standards to minimize impacts may be specified, including placement on elevated structures as an alternative to fill, if feasible.
3. Passive outdoor recreational or educational activities which do not significantly affect the function of the water body or regulated buffer (including wildlife management or viewing structures, outdoor scientific or interpretive facilities, trails, hunting blinds, etc.) and meet the following criteria:
 - a. Trails shall not exceed six feet in width and shall be surfaced with gravel or pervious material, including boardwalk.
 - b. The trail or facility shall be located in the outer 75 percent of the buffer area unless a location closer to the water body edge is required for interpretive purposes.
 - c. The trail or facility shall be constructed and maintained in manner that minimizes disturbance of the water body or buffer.

4. Utility lines and facilities providing local delivery service, not including facilities such as electrical substations, water and sewage pumping stations, water storage tanks, petroleum products pipelines and transformers or other facilities containing hazardous substances, may cross water bodies or be located in buffers, if the following criteria are met:
 - b. There is no reasonable location or route that does not cross the water body or outside the buffer based on analysis of system needs, available technology and alternative routes. Locations within a buffer shall be preferred over locations within a water body. Crossings shall be contained within the footprint of an existing road or utility crossing where possible.
 - c. Impacts to native fish and wildlife habitat shall be avoided to the maximum extent possible and mitigated when avoidance is not feasible.
 - d. Utilities that cross water bodies shall be as close to perpendicular to the channel as possible to minimize disturbance. Boring under the water body may be required.
 - e. If not a crossing, the utility line shall be located as far from the water body as possible.
 - f. The utility installation shall maintain the existing stream gradient and substrate.
 - g. Clearing, grading, and excavation activities shall be limited to the minimum necessary to install the utility line, and the area is restored following utility installation.
5. Stormwater conveyance or discharge facilities such as infiltration systems, dispersion trenches, level spreaders, and outfalls may be permitted in a fish and wildlife habitat conservation area buffer on a case-by-case basis when all of the following are met:
 - a. There are no feasible locations for these facilities outside the buffer.
 - b. The discharge is located as far from the ordinary high water mark as possible and in a manner that minimizes disturbance of soils and vegetation.
 - c. The discharge outlet is in an appropriate location and is designed to prevent erosion and promote infiltration.
 - d. The discharge meets stormwater flow and water quality standard as provided in the 2004 Ecology Stormwater Manual for Eastern Washington, as amended, or the equivalent.
6. Stream bank stabilization, shoreline protection, and public or private launching ramps may be permitted subject to all of the following standards:
 - a. Natural shoreline processes will be maintained to the maximum extent practicable. The activity will not result in increased erosion and will not alter the size or distribution of shoreline or stream substrate, or eliminate or reduce sediment supply from feeder bluffs;
 - b. Adverse impact to native fish or wildlife habitat conservation areas, specifically juvenile and adult native fish migration corridors, or associated wetlands will be mitigated;

- c. Nonstructural measures, such as placing or relocating the development further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient;
 - d. Stabilization is achieved through bioengineering or soft armoring techniques in accordance with an applicable hydraulic project approval is issued by the Washington Department of Fish and Wildlife;
 - e. Hard bank armoring may occur only when the property contains an existing permanent structure(s) that is/are in danger from shoreline erosion caused by riverine processes; armoring shall not increase erosion on adjacent properties and shall not eliminate or reduce sediment supply.
7. New public flood protection measures and expansion of existing measures may be permitted; provided, that bioengineering or soft armoring techniques shall be used where feasible. Hard bank armoring may occur only in situations where soft approaches do not provide adequate protection, and shall be subject, where applicable, to hydraulic project approval, and other permits.
8. New docks shall be permitted as an accessory to water-dependent uses or associated with a single-family residence; provided, that it is designed and used only as a facility for access to watercraft.
- a. To limit the effects on ecological functions, the number of docks should be limited, and new subdivisions should employ shared moorage whenever feasible.
 - b. Docks shall be located and designed to minimize adverse effects on ecological processes through location where they will interfere with fluvial and limnal processes including gradient and substrate; recruitment of woody debris; and native fish habitat, including that related to native anadromous fish.
 - c. Docks shall minimize reduction in ambient light level by limiting width to the minimum necessary and shall not exceed four feet in width, except where specific information on use patterns justifies a greater width. Materials that will allow light to pass through the deck may be required including grating on walkways or gangplanks in near shore areas.
 - d. Approaches shall utilize piers or other structures to span the entire upper foreshore to the point of intersection with stable upland soils and shall be designed to avoid interfering with stream processes.
 - e. Pile spacing shall be the maximum feasible to minimize shading and avoid a wall effect that would block or baffle currents, sediment movement or movement of native aquatic life forms, or result in structure damage from driftwood impact or entrapment.
 - f. Docks should be constructed of materials that will not adversely affect water quality or native aquatic plants and animals in the long term.

9. Launch ramps may be permitted for access to the water for the public or for residents of a development or for water dependent use subject to the following criteria:
 - a. Launch ramps shall be located and designed to minimize adverse effects on fluvial and limnal processes including stream gradient and substrate; recruitment of woody debris; and native fish habitat, including that related to anadromous fish.
 - b. Ramps shall be placed and maintained near flush with the bank slope. Preferred ramp designs, in order of priority, are:
 - (1) Open grid designs with minimum coverage of beach substrate;
 - (2) Seasonal ramps that can be removed and stored upland;
 - (3) Structures with segmented pads and flexible connections that leave space for natural shoreline substrate and can adapt to changes in shoreline profile.
10. In-stream structures, such as high flow bypasses, dams, and weirs, other than those regulated exclusively by the Federal Energy Regulatory Commission (FERC) shall be permitted only when the multiple public benefits are provided and ecological impacts are fully mitigated. Dams on shorelines of the state shall be regulated in accordance with the shoreline master program.
 - a. In-stream facilities locations shall avoid areas of high habitat value for native aquatic organisms, specifically indigenous anadromous fish.
 - b. In-stream facilities shall be designed to produce the least feasible effect on fluvial processes and shall minimize change in gradient.
 - c. In-stream facilities shall provide mitigation of all impacts on native aquatic species and habitat.
 - d. In-stream facilities shall provide native fish passage, in accordance with Chapter 77.57 RCW.
 - e. A construction bond for 150 percent of the cost of the structure and all mitigation measures shall be filed prior to construction and a maintenance agreement shall specify responsibility for maintenance, shall incorporate the maintenance schedule specified by the design engineer, shall require annual inspections by a civil engineer licensed in the State of Washington and shall stipulate abandonment procedures which shall include, where appropriate, provisions for site restoration.
11. Facilities permitted as shoreline dependent or shoreline oriented uses in accordance with the city shoreline master program, if applicable, may be located in water bodies and buffers; provided, that only those facilities that are water dependent or water oriented and facilities for necessary access may be located in water bodies and buffers; and provided, that the facility is located, designed, constructed and operated to minimize and, where possible, avoid critical area disturbance to the maximum extent feasible.

12. Clearing and grading, when allowed as part of an authorized use or activity or as otherwise allowed in these standards, may be permitted; provided, that the following shall apply:
 - a. Appropriate erosion and sediment control measures shall be used at all times. The soil duff layer shall remain undisturbed to the maximum extent possible. Where feasible, disturbed topsoil shall be redistributed to other areas of the site.
 - b. The moisture-holding capacity of the topsoil layer shall be maintained by minimizing soil compaction or reestablishing natural soil structure and infiltrative capacity on all areas of the project area not covered by impervious surfaces.
13. Repairs to failing on-site sewage systems associated with an existing structure shall be accomplished by utilizing one of the following methods that result in the least impact:
 - a. Connection to an available public sanitary sewer system;
 - b. Replacement with a new on-site sewage system located in compliance with City of Castle Rock applicable standards; and the Walla Walla County Health Department.
 - c. Repair to the existing on-site septic system.

H. Activities that adversely affect native fish and wildlife habitat conservation areas and/or their buffers should generally be avoided through site design, including clustering. Unavoidable impacts to designated native species or habitats shall be compensated for through habitat creation, restoration and/or enhancement to achieve no net loss of habitat functions and values in accordance with the purpose and goals of this chapter.

J. General Performance Standards.

1. A habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with this Chapter.
2. 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.
3. Mitigation sites shall try to achieve contiguous functioning habitat corridors in accordance with a mitigation plan that is part of the 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.
4. The City 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 guided by best available science and may include:
 - a. Establishment of buffer zones;

- b. Preservation of critically important native vegetation and/or habitat features such as snags and downed wood;
 - c. Limitation of access to the habitat area, including fencing to deter unauthorized access;
 - d. Seasonal restriction of construction activities;
 - e. Establishment of a duration and timetable for periodic review of mitigation activities; and
 - f. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation, pursuant to Section 18.10.120.
5. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater 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.
6. Any approval of alterations or impacts to a habitat conservation area shall be guided by best available science.
7. The City 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 to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the management recommendations issued by the Washington Department of Fish and Wildlife.
- a. When a species is more susceptible to adverse impacts during specific periods of the year, activities may be further restricted during the specified season.
8. The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:
- a. A habitat conservation area or its buffer may not be subdivided.
 - b. The buildable portion of each lot meets the minimum lot size requirements.
 - c. Access roads and utilities serving the proposed development may be permitted within the habitat conservation area and associated buffers only if, the City determines that no other feasible alternative exists and when consistent with this Chapter, and subject to any applicable mitigation requirements.

Geologic Hazard Area

Guidelines for Preparing Geologic Hazard Area Reports

A Critical Area Authorization or Permit is required before any construction or development activity may be initiated on a site with areas that meet the criteria for designation as a designated Geologic Hazard Area(s) or an associated buffer, in accordance with the provisions of CRMC Chapter 18.10

1. A Critical Area Authorization shall be issued based on a finding that the proposed activity is exempt, or that City has adequate information to determine that the proposal will not have an adverse impact on Critical Areas, and otherwise complies with the provisions of CRMC and this manual.
2. A Critical Area Permit shall be based on the findings and recommendations contained in a Geologic Hazard Area Report.

Reports for geologic hazard areas shall be prepared by a geotechnical engineer or geologist, licensed in the State of Washington, with experience analyzing geologic, hydrologic, and ground water flow systems; or by a geologist who earns his or her livelihood from the field of geology and/or geotechnical analysis, with experience analyzing geologic, hydrologic and ground water flow systems, who has experience preparing reports for the relevant type of hazard. Preparation of these reports by a State of Washington registered geologist is preferred.

The City shall determine the scope, content, and format for the required Geologic Hazard Area Report based on pre-application consultation with the Applicant, resource agencies, and qualified professionals. The following guidelines are provided as a resource to Applicants. Please note however, that these guidelines are subject to periodic review and update by the City. The most recent version of these guidelines may be obtained at City Hall, or on the City's website.

Typically, a Geologic Hazard Area Report should include:

1. Site and Construction Plans. The report shall include a copy of the site plans for the proposal showing:
 - a. The type and extent of geologic hazard areas, and any other critical areas, and buffers on, adjacent to, or within 200 feet of, or that are likely to impact the proposal;
 - 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. The topography, in two-foot contours, 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 and engineering properties of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the readily available site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted taxonomic 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, test, investigations, or studies that support the identification of geologic hazard areas; and
 - c. A description of the vulnerability of the site to seismic and other geologic events.
3. The report shall contain a geotechnical 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. 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.
5. Where a valid geotechnical report has been prepared within the last five 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 geotechnical assessment detailing any changed environmental conditions associated with the site.
6. 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.
7. A report for an erosion hazard or landslide hazard area shall include the following information:
 - a. A site plan for the proposal showing:
 - (1) The height of slope, slope gradient, and cross section of the project area;
 - (2) The location of springs, seeps, or other surface expressions of ground water on or within 200 feet of the project area or that have potential to be affected by the proposal; and
 - (3) The location and description of surface water runoff;

- b. The geotechnical analysis shall specifically include:
- (1) A description of the extent and type of vegetative cover;
 - (2) An estimate of load capacity including surface and ground water conditions, public and private sewage disposal systems, fills and excavations and all structural development;
 - (3) An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;
 - (4) An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event;
 - (5) Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties.
 - (6) A study of slope stability including an analysis of proposed angles of cut and fill and site grading;
 - (7) Recommendations for building limitations, structural foundations, and an estimate of foundation settlement;
 - (8) An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion;
- c. The hazards analysis component of the report shall specifically include:
- (1) A description of the extent and type of vegetative cover;
 - (2) A description of subsurface conditions based on data from site-specific explorations;
 - (3) Descriptions of surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;
 - (4) An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;
 - (5) An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event;
 - (6) Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties;
 - (7) A study of slope stability including an analysis of proposed cuts, fills, and other site grading;
 - (8) Recommendations for building siting limitations; and

- (9) An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion;
- d. The technical information for a project within a landslide hazard area shall include a geotechnical engineering report prepared by an engineer licensed in the State of Washington that presents engineering recommendations for the following:
 - (1) Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;
 - (2) Recommendations for drainage and subdrainage improvements;
 - (3) Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and
 - (4) Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate;
- e. For any development proposal on a site containing an erosion hazard area, an erosion and sediment control plan shall be required. The erosion and sediment control plan shall be prepared in compliance with requirements set forth in the City's construction standards;
- f. The report shall include a drainage plan for the collection, transport, treatment, discharge and/or recycle of water. The drainage plan should consider on-site septic system disposal volumes where the additional volume will affect the erosion or landslide hazard area.
- g. Hazard and environmental mitigation plans for erosion and landslide hazard areas shall include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan and/or other means for maintaining long term soil stability.
- h. If the City determines that there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to the receiving waters, or the sensitivity of the receiving waters, the critical area report shall include a plan to monitor the surface water discharge from the site. The monitoring plan shall include a recommended schedule for submitting monitoring reports to the city.
- 8. In addition to the basic report requirements, a report for a seismic hazard area shall also meet the following requirements:
 - a. The site map shall show all known and mapped faults within 200 feet of the project area, or that have potential to be affected by the proposal.

- b. The hazards analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated, fault displacement and liquefaction potential).
 - c. Where liquefaction risks of high, moderate to high or moderate exist, the report shall address soil and structural mitigation measures.
9. Other Geologic Hazard Areas. In addition to the basic report requirements, the City may require the following information to be included in the report when determined to be necessary to the review of the proposed activity and the hazard in question,
- a. Site Plan. The site plan shall show all hazard areas located within 200 feet of the project area or that have potential to be affected by the proposal; and
 - b. Geotechnical Analysis. The geotechnical analysis shall include a complete discussion of the potential impacts of the hazard on the project area and of the proposal on the hazard area.

Standards for Identifying and Protecting Geologic Hazard Areas

A. Geologic hazard areas in the City of Castle Rock shall include those areas that are susceptible to one or more of the following types of hazards:

1. Erosion hazard;
2. Landslide hazard;
3. Seismic hazard; or
4. Other geological events including, mass wasting, debris flows, rock falls, and differential settlement.

B. Erosion hazard areas include sites which:

1. Contain soils or soils complexes identified by the U.S. Department of Agriculture's Natural Resource Conservation Service or the Soil Survey for City of Castle Rock as having "moderate to severe, "severe" or "very severe" erosion hazard potential; or
2. Are impacted by stream bank erosion; or
3. Areas with a slope greater than 15 percent.

C. Landslide hazard areas include sites which are susceptible to landslides because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other physical factors. Potential landslide hazard areas exhibit one or more of the following characteristics:

1. Slopes exceeding 35 percent with a vertical relief of ten or more feet except areas composed of competent rock and properly engineered slopes designed and approved by a geotechnical engineer licensed in the State of Washington and experienced with the types of conditions present at the site in question;
2. Areas mapped by the Washington State Department of Natural Resources (slope stability mapping) as unstable ("U"), unstable old slides ("UOS"), or unstable recent slides ("URS");
3. Areas designated by the U.S. Department of Agriculture's Natural Resource Conservation Service as having "severe" limitation for building site development;
4. Areas that have shown evidence of historic failure or instability, including back-rotated benches on slopes; areas with structures that exhibit structural damage such as settling and racking of building foundations; and areas that have toppling, leaning, or bowed trees caused by ground surface movement;

5. Slopes greater than 15 percent that have a relatively permeable geologic unit overlying a relatively impermeable unit and having springs or groundwater seepage;
6. Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action;
7. Areas located in a canyon or active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and
8. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Washington State Department of Natural Resources;
9. Areas that are at risk of mass wasting due to seismic forces; and
10. Slopes having gradients steeper than 80 percent subject to rock fall during seismic shaking.

D. Seismic hazards areas include sites identified in Washington State Department of Natural Resources seismic hazard and liquefaction susceptibility maps for Eastern Washington and other geologic resources. Seismic hazard areas are those areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, soil liquefaction or surface faulting including:

1. Areas subject to surface faulting during a seismic event;
2. Areas with underlying deposits indicative of a risk of liquefaction during a seismic event, including those areas mapped as "moderate", "moderate to high" and "high" by the Washington State Department of Natural Resources;
3. Areas subject to slope failure during a seismic event;
4. Areas that are at risk of mass wasting due to seismic forces.

Geologic hazard areas shall also include sites with other geologic hazards determined by a qualified professional to be subject to severe risk of damage as a result of other geological events including mass wasting, debris flows, rock falls and differential settlement.

E. Development activities proposed for sites that contain Geologic Hazard Areas shall comply with the following Performance Standards, unless otherwise provided:

1. Alterations of geologic hazard areas or associated buffers may only occur for activities that:
 - a. Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;
 - b. Will not adversely impact other critical areas;
 - c. 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

- d. Are determined to be safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the State of Washington.
2. Critical facilities shall not be located in seismic hazard areas unless mitigation shall be provided which renders the proposed development as stable as if it were not located within a seismic hazard area.
3. In addition to the provisions of this Chapter, alterations of geologic hazard areas or associated buffers must conform to city construction standards and building codes.
4. Development may be allowed in seismic hazard areas when all of the following apply:
 - a. If evaluation of site-specific subsurface conditions by a qualified professional demonstrates that the proposed development site is not subject to the conditions indicating seismic risk, the provisions of this Subsection shall not apply.
 - b. If a site is subject to seismic risk, the applicant shall implement appropriate engineering design based on analysis by a qualified professional of the best available engineering and geological practices that either eliminates or minimizes the risk of structural damage or injury resulting from seismically induced settlement or soil liquefaction, including compliance with the following criteria:
 - (1) Subdivision within a seismic hazard areas shall assure that each resulting lot has sufficient buildable area outside of the hazard area or that appropriate limitations on building and reference to appropriate standards are incorporated into subdivision approval and may be placed as restrictions on the face of the plat;
 - (2) Structures in seismic hazard areas shall conform to applicable analysis and design criteria and provisions of building and construction codes as currently adopted by the city.
 - (3) Public roads, bridges, utilities and trails shall be allowed when there are no feasible alternative locations and geotechnical analysis and design are provided that ensure the roadway, bridge and utility structures and facilities will not be susceptible to damage from seismic induced ground deformation. Mitigation measures shall be designed in accordance with the most recent version of the American Association of State Highway and Transportation Officials (AASHTO) Manual or other appropriate document.

F. Activities on sites containing erosion or landslide hazards shall also meet the following requirements:

1. A buffer shall be established from all edges of erosion or 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 erosion and 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. The minimum buffer shall be equal to the height of the slope or 50 feet, whichever is greater.

- b. The buffer may be reduced to a minimum of ten feet when a qualified professional demonstrates to the City's satisfaction that the reduction will adequately protect the proposed development, adjacent developments and uses and the subject critical area.
 - c. The buffer may be increased where the director determines that a larger buffer is necessary to prevent risk of damage to proposed and existing development; provided that information supporting a buffer increase shall be provided to the applicant in writing and shall contain a specific explanation regarding the need and purpose of the increase.
2. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a geotechnical analysis is submitted and determines 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. 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. In addition to those requirements outlined in Section 18.10, the basic development construction standards within geologic hazard areas 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 should be clustered to avoid geologic hazard 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 should 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.
 - g. Development shall be designed to minimize impervious lot coverage.

4. 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 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 consistent with local design and construction standards.
6. 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 hazards areas downstream from the discharge;
 - b. Discharged at flow durations matching predeveloped conditions, 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. The division of land in erosion and landslide hazard areas and associated buffers is subject to the following:
 - a. An erosion or landslide hazard area or its buffer may not be subdivided.
 - b. The buildable portion of each lot meets the minimum lot size requirements.
 - c. Access roads and utilities may be permitted within the erosion or landslide hazard area and associated buffers if, based on the associated critical area report, the city determines that no other feasible alternative exists, and subject to any applicable mitigation requirements.
8. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.

G. Sites containing extreme slope hazards as determined by a qualified professional shall be considered unbuildable. This includes construction of buildings, sewage disposal systems and roads.

Special Flood Hazard Area

Guidelines for Preparing a Special Flood Hazard Area Reports

A Critical Area Authorization or Permit is required before any construction or development activity may be initiated on a site with a designated Special Flood Hazard Area(s) in accordance with the provisions of CRMC Chapter 18.10.050.

1. A Critical Area Authorization shall be issued based on a finding that the proposed activity is exempt, or that City has adequate information to determine that the proposal will not have an adverse impact on Critical Areas, and otherwise complies with the provisions of Chapter 18.10.
2. A Critical Area Permit shall be based on the findings and recommendations contained in a Special Flood Hazard Area Report.

Reports for Special Flood Hazard Areas shall be prepared by a professional engineer, architect, or qualified professional, as determined by the City. The City shall determine the scope, content, and format for a required Special Flood Hazard Area Report based on pre-application consultation with the Applicant, resource agencies, and qualified professionals. The following guidelines are provided as a resource to Applicants. Please note however, that these guidelines are subject to periodic review and update by the City. The most recent version of these guidelines may be obtained at City Hall, or on the City's website.

Typically, a Special Flood Hazard Area Report should include:

1. A written report that may include, but is not limited to:
 - a. A narrative description of the proposed development;
 - b. Characterization of the Special Flood Hazard Area;
 - c. A description of proposed flood proofing measures, and the basis for those measures;
 - d. Other measures proposed to avoid or minimize potential adverse impacts; and
 - e. A description of the extent to which any watercourse will be altered or relocated as a result of proposed development and proposed mitigating measures; and
 - f. Certification that the proposed floodproofing methods and mitigating measures comply with the applicable standards for the Special Flood Hazard Zone.
2. A map of the proposed site, drawn to scale, depicting:
 - a. Property lines and ownership;

- b. The boundaries of any Special Flood Hazard Areas and any other critical areas and their buffers on or adjacent to the site;
- c. Existing and proposed contour lines;
- d. Base flood elevation data available on or near the site;
- e. The location of existing and proposed utilities, impervious surfaces, and easements;
- f. The location and elevations of existing structures;
- g. The location of proposed structures and the elevation of the lowest habitable floor (including basements); and
- h. Proposed areas where no, or limited development, shall occur.

Critical Aquifer Recharge Area

Guidelines for Preparing Critical Aquifer Recharge Area Reports

Development activities that have the potential to negatively impact the quality or quantity of groundwater, shall not be permitted, unless a hydrogeologic testing and site evaluation satisfactorily demonstrates that significant adverse impacts can be avoided, minimized, or mitigated. The required hydrogeologic testing and site evaluation shall be conducted by a qualified expert, as determined by the City. A written report shall be submitted for City review and should include:

1. Characterization of the site and its relationship to the aquifer and an analysis of:
 - a. The geologic setting and soils information of site and surrounding area.
 - b. Water quality data, including pH, temperature, conductivity, nitrates, and bacteria.
 - c. Location and depth to perched water tables.
 - d. Recharge potential of facility site (permeability/transmissivity).
 - e. Local groundwater flow, direction and gradient.
 - f. Surface water locations within one thousand feet of the site.
2. An evaluation of the ability of the site to accommodate the proposed activity including a discussion of the effects of the proposed project on groundwater quality and quantity.
3. Recommendations on appropriate mitigation, if any, to assure that there shall be no significant degradation of groundwater quality or quantity.

PUBLIC NOTICE
Notice of SEPA DNS, and Public Hearing
Text Amendments to Castle Rock Municipal Code Title 18.10
Critical Areas Ordinance

Proponent: City of Castle Rock, WA

Location: Citywide Critical Areas Ordinance

Lead agency: City of Castle Rock, WA

Description of proposal: The City of Castle Rock is initiating text amendments to the Castle Rock Municipal Code pertaining to title 18.10 Critical Areas. These amendments seek compliance with the Washington State Growth Management Act (GMA), and RCW 36.70A. Please contact the City of Castle Rock to view the proposed amendments.

Determination of Non-Significance (DNS): The City of Castle Rock Planning Department determined that these proposals will not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request at: 141 "A" Street SW, Castle Rock, WA 98611.

Notice of Public Hearing of the Planning Commission:

Date: November 19, 2024

Time: 6:00 pm

Location: Castle Rock Senior Center 222 2nd Ave SW, Castle Rock, WA 98611

Purpose: To review the proposed text amendments and make a recommendation to the City Council, pursuant to Castle Rock Municipal Code 17.72.

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from November 2, 2024. Comments must be submitted by November 16, 2024, to the City of Castle Rock Agency Contact below.

AGENCY CONTACT: Karlene Akesson, Deputy Clerk
141 "A" Street SW
PO Box 370, Castle Rock, WA 98611
kakesson@ci.castle-rock.wa.us
360-274-8181

RESPONSIBLE OFFICIAL: Mike Manning, City Planner
141 "A" Street SW
PO Box 370, Castle Rock, WA 98611
mike.manning@scjalliance.com
509-835-3770, ext. 394

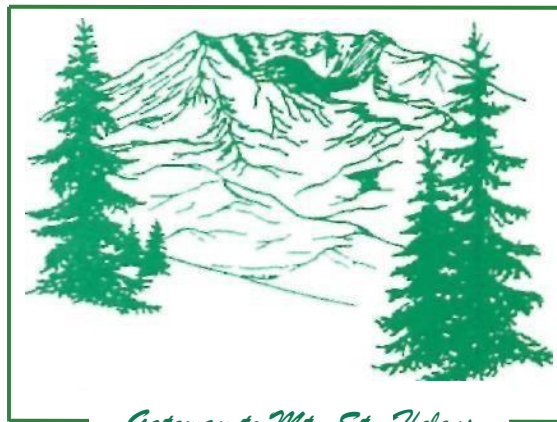
Signature: Mike Manning, October 26, 2024



You may appeal this determination pursuant to CRMC 18.04.220, an appeal of SEPA threshold determinations or SEPA actions shall be combined with any appeals of associated applications or permits. Appeals must be filed within 10 days of the decision and must be appealed to Castle Rock City Council.

City of Castle Rock

P.O. Box 370
CASTLE ROCK, WA 98611
(360) 274-8181



Gateway to Mt. St. Helens

SEPA ENVIRONMENTAL CHECKLIST

What is this for?

The City and other governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information will also help determine if it's possible to avoid, minimize, or compensate (mitigate) for the probable significant impacts; or whether an environmental impact statement needs to be prepared to further analyze the proposal.

How to fill this out:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach, excerpt, or refer to additional studies or reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decisionmaking process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The City or other agencies may ask you to explain your answers or provide additional information to determine if there may be a significant adverse impact.

If you're using this checklist for a nonproject proposal (such as an ordinance, regulations, plans, or programs), complete the applicable parts of Parts A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. For nonproject actions, the lead agency may exclude questions in Part B that do not contribute meaningfully to the analysis of the proposal.

This form is set up as a Word table. Except for a few questions that ask for you to select options, each question is followed by a blank field in which you can type your answer. Type in the shaded box. Check boxes will fill in when you click them. Each field will expand to accommodate your text, and the overall form will expand to additional pages as you fill in answers.

A. BACKGROUND

1. Name of proposed project, if applicable:

Critical Areas Ordinance 2023 Periodic Review

2. Name of applicant:

City of Castle Rock

3. Address and phone number of applicant or contact person:

141 A Street SW, PO Box 370

4. Date checklist prepared:

10/23/2024

5. Agency requesting checklist:

City of Castle Rock, WA

6. Proposed timing or schedule (including phasing, if applicable):

City Council Adoption in November 2024

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? ☐ Yes ☒ No If yes, explain.

The city of Castle Critical Areas Ordinance (CAO) will be periodically reviewed, at a minimum every eight years, corresponding to the schedule in the Growth Management Act Amendments will be made as necessary to reflect changing local circumstances, new information or improved data, and changes in State statutes and regulations.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

No

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? ☐ Yes ☐ No If yes, explain.

CAO is pending adoption by City Council;

10. List any government approvals or permits that will be needed for your proposal, if known.

Planning Commisssion approval and adoption by city council.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. (There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers here.)

The city of Castle Rock has completed a periodic review of it Crtical Areas Ordinance in compliance with RCW 36.70A.130. The intent of the Crtitcal Areas Ordinance update is to ensure ongoing protection of environmentally sensitive areas using the best available science, adapt to changing conditions, comply with state law, balance development with conservation, and mitigate risks to public health and safety.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description and, if you haven't already done so with the permit application to which this checklist is related, a site plan, vicinity map, and topographic map, if reasonably available.

The Critical Areas Ordinance applies city wide in Castle Rock.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site:

☐ Flat ☐ Rolling ☐ Hilly ☐ Steep slopes ☐ Mountainous

☐ Other (specify): N/A proposal is a non-project action.

- b. What is the steepest slope on the site (approximate percent slope)?

N/A proposal is a non-project action.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)?
If

you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

N/A proposal is a non-project action.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? ☐ Yes ☐ No
If so, describe.

N/A proposal is a non-project action.

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

N/A proposal is a non-project action.

- f. Could erosion occur as a result of clearing, construction, or use? ☐ Yes ☐ No
If so, generally describe.

N/A proposal is a non-project action.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

N/A proposal is a non-project action.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

N/A proposal is a non-project action.

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known:

N/A proposal is a non-project action.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? ☐ Yes ☐ No
If so, generally describe.

N/A proposal is a non-project action.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

N/A proposal is a non-project action.

3. Water

a. Surface Water

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? ☐ Yes ☐ No
If yes, describe type and provide names. If applicable, state what stream or river it flows into.

N/A proposal is a non-project action.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? ☐ Yes ☐ No
If yes, please describe, and attach available plans.

N/A proposal is a non-project action.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

N/A proposal is a non-project action.

- 4) Will the proposal require surface water withdrawals or diversions? ☐ Yes ☐ No Give general description, purpose, and approximate quantities if known.

N/A proposal is a non-project action.

- 5) Does the proposal lie within a 100-year floodplain? ☐ Yes ☐ No If so, note location on the site plan.

- 6) Does the proposal involve any discharges of waste materials to surface waters? ☐ Yes ☐ No If so, describe the type of waste and anticipated volume of discharge.

N/A proposal is a non-project action.

b. Ground Water

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? ☐ Yes ☐ No If so, give a general description of the well, proposed uses, and approximate quantities withdrawn from the well.

N/A proposal is a non-project action.

Will water be discharged to groundwater? ☐ Yes ☐ No

Give general description, purpose, and approximate quantities if known.

N/A proposal is a non-project action.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

N/A proposal is a non-project action.

c. Water runoff (including stormwater)

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

N/A proposal is a non-project action.

- 2) Could waste materials enter ground or surface waters? ☐ Yes ☐ No If so, generally describe.

N/A proposal is a non-project action.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site?
☐ Yes ☐ No
If so, describe.

N/A proposal is a non-project action.

- d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

N/A proposal is a non-project action.

4. Plants

- a. Check the types of vegetation found on the site:

☐ alder ☐ maple ☐ aspen ☐ fir ☐ cedar ☐ pine ☐ other tree(s) (specify): N/A proposal is a non-project action.

☐ shrubs ☐ grass ☐ pasture ☐ crop or grain ☐ orchards, vineyards or other permanent crops
☐ cattail ☐ buttercup ☐ bulrush ☐ skunk cabbage ☐ other wet soil plant(s) (specify): N/A proposal is a non-project action.

☐ water lily ☐ eelgrass ☐ milfoil ☐ other water plant(s) (specify): N/A proposal is a non-project action.

☐ other types of vegetation N/A proposal is a non-project action.

- b. What kind and amount of vegetation will be removed or altered?

N/A proposal is a non-project action.

- c. List threatened and endangered species known to be on or near the site.

N/A proposal is a non-project action.

- d. List all noxious weeds and invasive species known to be on or near the site.

N/A proposal is a non-project action.

5. Animals

- a. Check any birds and other animals which have been observed on or near the site or are known to

be on or near the site.

☐ hawk ☐ heron ☐ eagle ☐ songbirds, ☐ other bird(s) (specify): N/A proposal is a non-project action.

☐ deer ☐ bear ☐ elk ☐ beaver ☐ other mammal(s) (specify): N/A proposal is a non-project action.

☐ bass ☐ salmon ☐ trout ☐ herring ☐ shellfish ☐ other fish (specify): N/A proposal is a non-project action.

- b. List any threatened and endangered species known to be on or near the site.

N/A proposal is a non-project action.

- c. Washington as whole lies within the Pacific Flyway. Is the site part of any other migration route?

☒ Yes ☐ No If so, explain.

N/A proposal is a non-project action.

- d. Proposed measures to preserve or enhance wildlife, if any:

N/A proposal is a non-project action.

- e. List any invasive animal species known to be on or near the site.

N/A proposal is a non-project action.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

N/A proposal is a non-project action.

- b. Would your project affect the potential use of solar energy by adjacent properties? ☐ Yes ☐ No
If so, generally describe.

N/A proposal is a non-project action.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

N/A proposal is a non-project action.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? ☐ Yes ☒ No If so, describe.

N/A proposal is a non-project action.

- 1) Describe any known or possible contamination at the site from present or past uses.

N/A proposal is a non-project action.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

N/A proposal is a non-project action.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

N/A proposal is a non-project action.

- 4) Describe special emergency services that might be required.

N/A proposal is a non-project action.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

N/A proposal is a non-project action.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

N/A proposal is a non-project action.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

N/A proposal is a non-project action.

- 3) Proposed measures to reduce or control noise impacts, if any:

N/A proposal is a non-project action.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? ☐ Yes ☐ No If so, describe.

N/A proposal is a non-project action.

- b. Has the project site been used as working farmland or working forest land? ☐ Yes ☐ No If so, describe.

N/A proposal is a non-project action.

How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any?

N/A proposal is a non-project action.

If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

N/A proposal is a non-project action.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? ☐ Yes ☐ No If so, how?

N/A proposal is a non-project action.

- c. Describe any structures on the site.

N/A proposal is a non-project action.

- d. Will any structures be demolished? ☐ Yes ☐ No If so, what?

N/A proposal is a non-project action.

- e. What is the current zoning classification of the site?

N/A proposal is a non-project action.

- f. What is the current comprehensive plan designation of the site?

N/A proposal is a non-project action.

- g. If applicable, what is the current shoreline master program designation of the site?

N/A proposal is a non-project action.

- h. Has any part of the site been classified as a critical area by the city or county? ☒ Yes ☐ No
If so, specify.

N/A proposal is a non-project action.

- i. Approximately how many people would reside or work in the completed project?

N/A proposal is a non-project action.

- j. Approximately how many people would the completed project displace?

N/A proposal is a non-project action.

- k. Proposed measures to avoid or reduce displacement impacts, if any:

N/A proposal is a non-project action.

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

N/A proposal is a non-project action.

- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term . commercial significance, if any:

N/A proposal is a non-project action.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or lowincome housing.

N/A proposal is a non-project action.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or lowincome housing.

N/A proposal is a non-project action.

- c. Proposed measures to reduce or control housing impacts, if any:

N/A proposal is a non-project action.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?

N/A proposal is a non-project action.

- b. What views in the immediate vicinity would be altered or obstructed?

N/A proposal is a non-project action.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

N/A proposal is a non-project action.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

N/A proposal is a non-project action.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

N/A proposal is a non-project action.

- c. What existing off-site sources of light or glare may affect your proposal?

N/A proposal is a non-project action.

- d. Proposed measures to reduce or control light and glare impacts, if any:

N/A proposal is a non-project action.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

N/A proposal is a non-project action.

- b. Would the proposed project displace any existing recreational uses? ☐ Yes ☐ No If so, describe.

N/A proposal is a non-project action.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

N/A proposal is a non-project action.

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? ☐ Yes ☐ No If so, specifically describe.

N/A proposal is a non-project action.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. ☐ Yes ☐ No
Are there any material evidence, artifacts, or areas of cultural importance on or near the site? ☐ Yes ☐ No
Please list any professional studies conducted at the site to identify such resources.

N/A proposal is a non-project action.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with local tribe(s) and the state Department of Archeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.

N/A proposal is a non-project action.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

N/A proposal is a non-project action.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. If any, show on site plan.

N/A proposal is a non-project action.

- b. Is the site or affected geographic area currently served by public transit? ☐ Yes ☐ No If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

N/A proposal is a non-project action.

- c. How many additional parking spaces would the completed project or non-project proposal have?
How many would the project or proposal eliminate?
N/A proposal is a non-project action.
- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? ☐ Yes ☐ No If so, generally describe (indicate whether public or private).
N/A proposal is a non-project action.
- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? ☐ Yes ☐ No If so, generally describe.
N/A proposal is a non-project action.
- f. How many vehicle trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?
N/A proposal is a non-project action.
- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? ☐ Yes ☐ No If so, generally describe.
N/A proposal is a non-project action.
- h. Proposed measures to reduce or control transportation impacts, if any:
N/A proposal is a non-project action.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? ☐ Yes ☐ No If so, generally describe.
N/A proposal is a non-project action.
- b. Proposed measures to reduce or control direct impacts on public services, if any.
N/A proposal is a non-project action.

16. Utilities

- a. Check utilities currently available at the site:
☐ electricity ☐ natural gas ☐ potable water ☐ irrigation water ☐ refuse service ☐ telephone
☐ sanitary sewer ☐ septic system ☐ other (specify): N/A proposal is a nonproject action.
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
N/A proposal is a non-project action.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:

Manually sign above, print, & scan; or
insert electronic signature here.

Name:

Mike Manning

Position:

Contract Planner

Agency/Organization:

SCJ Alliance

Date Submitted:

10/24/2024

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(Do NOT use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment. When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

This proposal is a state mandated periodic review, update to the CAO will not increase discharge to water, emissions to air, production, storage, or release of toxic or hazardous substances, or production of noise.

Proposed measures to avoid or reduce such increases are:

Click or tap here to enter text.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

This proposal is a state mandated periodic review, update to the CAO will not have negative impact on plants, animals, fish, or marine life, rather support the protection.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Insert text here.

3. How would the proposal be likely to deplete energy or natural resources?

This proposal is a state mandated periodic review, update to the CAO will not deplete energy or natural resources.

Proposed measures to protect or conserve energy and natural resources are:

Insert text here.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species' habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

This proposal is a state mandated periodic review, update to the CAO will serve to protect environmentally sensitive areas.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Insert text heret.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The proposal is a state mandated periodic review, update to the CAO will not have negative impact on shorelines.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Insert text here.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

This proposal is a state mandated periodic review, update to the CAO will not increase demands on transportation or public services

Proposed measures to reduce or respond to such demand(s) are:

Insert text here.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

This proposal is a state mandated periodic review, update to the cAO will not conflict with local, state, or federal laws, or requirements for protection of the enviornment.



State of Washington
DEPARTMENT OF FISH AND WILDLIFE
Southwest Region 5 • 5525 South 11th St Ridgefield, WA 98642 Telephone:
(360) 696-6211 • Fax: (360) 906-6776

November 15, 2024

Mike Manning
City of Castle Rock
141 "A" Street SW,
Castle Rock, WA 98611

RE: Notice of SEPA DNS, Text Amendments to Castle Rock Municipal Code Title 18.10 Critical Areas Ordinance

Dear Mr. Manning:

On behalf of the Washington State Department of Fish and Wildlife (WDFW), we thank you for the opportunity to comment on the proposed changes to the City of Castle Rock's Critical Areas Ordinance (CAO). WDFW commented on a previous version of the CAO in December of 2022. It is unclear if the proposed draft differs from the previous update or whether our comments were addressed or incorporated. WDFW staff have not received the reference documents from city planners, including the *City of Castle Rock Critical Areas Ordinance Manual Standard Specifications & Drawings* and *Standards for Classifying and Protecting Fish and Wildlife Habitat Conservation Areas*. Since these documents are referenced in the CAO, we request copies of these documents and additional time for review and subsequent comment.

WDFW has substantial concerns with this CAO since we cannot confirm how our previous comments were addressed to ensure no net loss of ecological function. Our primary concern is that the regulatory requirements are not outlined within the proposed CAO, but instead, referenced in a separate document, "Standards for Classifying and Protecting Fish and wildlife habitat conservation areas," dated August 18, 2021, or as subsequently amended (CAO section 18.10.080 (B) 1, page 20). Neither document appears to be open for public comment. WDFW recommends integrating the "Standards" document into the CAO itself to ensure that it is easy to find and included in future CAO updates/reviews. **Furthermore, WDFW requests an additional public comment period so we have an opportunity to provide meaningful recommendations on the components of the CAO pertaining to Priority Habitat and Species (PHS).**

Below, we outline our initial concerns and recommendations that we provided in our 2022 comment letter, emphasizing recommended updates for the *Standards for Classifying and Protecting Fish and Wildlife Habitat Conservation Areas*. Without reviewing the current version of the document, we are unable to provide updated comments. Additionally, we have included a checklist that evaluates the proposed CAO for compliance with WDFW recommendations for riparian ecosystem protection. Each question in the checklist identifies specific ordinance provisions, assesses their alignment with WDFW guidance, and highlights areas for improvement. We recommend reviewing the "Citation in CAO" column for the relevant ordinance language and the "Direct Answer" column to quickly assess compliance.

Stream Designation

EXHIBIT A Critical Areas 18.10.080

8. Streams shall be designated in accordance with the Washington State Department of Natural Resources (DNR) stream type as provided in WAC 222-16-030.

The draft CAO's reliance on DNR FP stream typing is problematic because this classification system was specifically designed for forestry applications, as stated in WAC 222-16-030. DNR FP stream typing guides forest management activities, such as timber harvesting, and was not intended for broader land use planning outside of forestry. By applying this forestry-based classification to RMZs within the CAO, the city fails to account for the distinct ecological requirements of non-forested, semi-urban, and agricultural areas, which differ substantially from those in managed forests. Extending forestry-specific classifications to diverse land use settings overlooks the need for adaptive buffer strategies that consider a broader range of ecological factors. Consequently, this misapplication limits the effectiveness of RMZs outside forestry, underscoring the necessity for adaptable, context-sensitive buffer guidelines aligned with the varied environmental needs of different landscapes.

Riparian Zone Widths

WDFW provides recommendations on how to best apply current science regarding riparian ecosystems through our recently published document *PHS Riparian Ecosystems, Volume 2: Management Recommendations* (Rentz et al. 2020). The science supports using site potential tree height at 200 years (SPTH200) instead of fixed riparian buffers that change depending on fish use. **SPTH200 should be used for *all* streams, not just those bearing fish.** According to the [SPTH200 mapping tool](#) provided by WDFW, SPTH200 ranges from 100 to 241 feet within the City of Castle Rock. All riparian management zones (RMZs) should be at least 100 feet wide in order to provide pollution and sediment removal functions. A width of 100 feet provides the width necessary for 95% pollution removal target for most pollutants. Within the 8/11/2021 "Standards" document, these RMZ widths would replace those shown in "Table 2: minimum Recommended Widths of Riparian Habitats" on page 21. Any references to buffer reduction should consider the 100-foot width to provide pollution removal functions.

Hawks

Within the "Standards" document, under Standards for Classifying and Protecting Fish and Wildlife Habitat, items F(6), F(7) and F(8) (page 25) refer to "areas designated as high density of wintering birds of prey," and "areas designated as hawk habitat." The draft CAO language does not define hawk habitat, and these are the only references to hawks in the Standards document.

Please note that not all hawk species are considered to be Priority Species in the WDFW Priority Habitats and Species list. WDFW does not maintain maps of all known hawk wintering areas, nesting sites, or other "hawk habitat." WDFW recommends the City of Castle Rock define such areas and a process to designate and map them. This could constitute a "habitat of local importance" as defined in 18.10.030 and protected under 18.10.080(3).

WDFW Engagement

Standards document, (2)(c) (p 20)

Please add language stating that consultation with the Washington Department of Fish and Wildlife is required prior to submitting a habitat assessment report when a project may potentially impact priority species and habitats (PHS), or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, or waters of the state.

Standards document, (J)(5) (p 31)

Please add language stating that WDFW shall be consulted when impacts to priority species and habitats (PHS), or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, or waters of the state are being mitigated.

Miscellaneous

Standards document, (C) (p 22)

"Protect adjacent or downstream areas from erosion, landslides, or other hazards."

We speculate that this contains a clerical error and was intended to be listed as idem "d" under (B)(1).

Standards document, (D)(1) (p 22)

"The City may decrease the width of the standard buffer on a case-by-case basis, based on a critical area report, when a larger buffer is required to protect critical habitats, or such increase is necessary to:"

We speculate that this statement contains a clerical error and is only meant to refer to buffer decreases. Regardless, we would again note our science-based recommendation that riparian zone width be delineated at a minimum of 100 feet, as this provides the width necessary for 95% pollution removal target for most pollutants.

Standards document, (D)(2) (p 22)

"The following table identifies potential buffer reductions with accompanying riparian habitat enhancement."

No table is included here. With regards to buffer reductions we would again note our science-based recommendation that riparian zone width be delineated at a minimum of 100 feet, as this provides the width necessary for 95% pollution removal target for most pollutants.

Standards document, (G)(2)(b) (p 26)

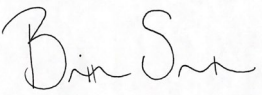
Please replace the reference to Fish Passage Design at Road Culverts (WDFW March 1999) with a reference to Water Crossing Design Guidelines (WDFW 2013).

Citation: Barnard, R. J., J. Johnson, P. Brooks, K. M. Bates, B. Heiner, J. P. Klavas, D.C. Ponder, P.D. Smith, and P. D. Powers (2013), Water Crossings Design Guidelines, Washington Department of Fish and Wildlife, Olympia, Washington. <https://wdfw.wa.gov/publications/01501>

Lastly, WDFW has released a new guidance document, [*Management Recommendations for Washington's Priority Habitats: Best Management Practices for Mitigating Impacts to Oregon White Oak Priority Habitat*](#). This document outlines Best Management Practices (BMPs) on how to minimize impacts to Oregon white oaks (OWO) during construction and how to calculate baseline ecological function to better inform mitigation requirements. This approach ties development impacts to baseline function to ensure there is no net loss to ecological function. WDFW wants to ensure that OWOs are addressed in the CAO. For implementation, we are available to review mitigation efforts and help guide applicants through this process.

Again, we thank you for the opportunity to provide input. Please contact me should you have any questions or need additional information.

Sincerely,



Brittney Salter
WDFW Region 5 Land Use Planning Lead

CC: George Fornes, WDFW Region 5 Habitat Biologist

CC: Jessica McConnell, WDFW Region 5 Assistant Regional Habitat Program Manager



State of Washington
DEPARTMENT OF FISH AND WILDLIFE

Mailing Address: P.O. Box 43200, Olympia, WA 98504-3200 • (360) 902-2200 • TDD (360) 902-2207

Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

Castle Rock Municipal Code Title 18.10 Critical Areas Ordinance
WDFW Critical Areas Ordinance Compliance Checklist
Prepared By Cole Webster
Land Use Conservation Planner
Land Use Conservation & Policy Section
Ecosystems Services
November 15, 2024

Question	Direct Answer	Citation in CAO	Explanation	WDFW Recommendation
1. Does your CAO intend to protect all key riparian ecosystem functions (i.e., shade, root strength, nutrient input, wood input, and pollution control)?	Yes	Section 18.10.010: "Riparian zone means the upland area immediately adjacent to and paralleling a body of water and is usually composed of trees, shrubs, and other plants. Riparian functions include bank and channel stability, sustaining water supply, providing flood storage, retainment of woody debris, leaf litter, nutrients, sediment, and pollutant filtering, while providing shade, shelter and other functions that are important to the survival of both fish and wildlife."	The CAO definition includes essential riparian functions, such as shade, nutrient input, and pollution control. However, this protection is only defined here and lacks further detailed protections in other sections.	Volume 2, Chapter 3.1: "WDFW recommends maintaining buffer zones that provide pollution removal, shading, and nutrient cycling to support riparian functions."

2. Depending on your ecoregion(s), do your FWHCAs utilize the appropriate methodology (whichever width is greater) for delineating riparian management zones (RMZs) for all stream types?	No	N/A	The CAO does not include specific methodologies, such as site-potential tree height (SPTH200), native vegetation extent, or a minimum 100-foot pollution removal distance for RMZs, lacking alignment with WDFW's recommended methods for delineation.	Volume 1, Chapter 2.3: "WDFW advises delineating RMZs based on ecoregion-specific methodologies or minimum pollution removal widths to maintain riparian protection."
3. If your jurisdiction does not delineate RMZs consistent with the methodologies listed in question 2, do your FWHCAs meet the intent of the RMR in Vol. 2 (or are they otherwise consistent with the BAS in Vol. 1) with regards to riparian functions?	No	N/A	The CAO lacks alignment with RMR principles or Best Available Science-based (BAS) methodologies as recommended by WDFW to ensure riparian function protection without explicit delineation guidance.	Volume 2, Chapter 2.5: "WDFW advises following RMR principles or BAS-compliant methods for RMZ delineation to protect riparian functions."
4. Where a channel migration zone (CMZ) is present, does the RMZ begin on the outer edge of the CMZ to the extent practicable?	No	N/A	The CAO does not mention RMZ delineation relative to CMZs or starting RMZs from the outer edge of CMZs, which is recommended by WDFW to protect riparian functions in areas subject to channel migration.	Volume 1, Section 4.2: "WDFW advises that RMZs extend from the outer edge of CMZs wherever practicable to include connected and relevant areas for riparian protection."
5. Is the RMZ width extended beyond a 100-foot minimum where needed to provide adequate pollution removal functions from upland adjacent land uses?	No	N/A	The CAO lacks language requiring RMZ widths beyond a 100-foot minimum in areas where additional buffer may be necessary for pollution removal (e.g., steep slopes, poor drainage, nitrogen-rich upland uses).	Volume 2, Page 18: "WDFW advises extending RMZ width beyond 100 feet in locations with heightened pollution potential, such as steep slopes or high nitrogen runoff areas."

6. In locations where riverine wetlands are present, do the RMZs incorporate them using the appropriate wetland delineation, assessment methodology, and protection (per Ecology guidelines)?	No	N/A	The CAO lacks guidance on incorporating riverine wetlands specifically within RMZs using recommended delineation and protection methods from the Washington State Department of Ecology.	Volume 1, Section 6.3: “WDFW advises using Ecology’s wetland delineation guidelines to incorporate riverine wetlands within RMZs for effective riparian protection.”
7. Does FWHCA designation also support terrestrial species, habitat connectivity, and Priority Habitats within and adjacent to RMZs?	Partially	Section 18.10.010: “Riparian habitat area (RHA) means an area adjacent to aquatic streams with flowing water (e.g., rivers, perennial or intermittent streams, seeps, springs) that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.”	While the CAO defines Riparian Habitat Areas (RHAs) as supporting both aquatic and terrestrial ecosystems, it does not specifically address connectivity or Priority Habitat protections within RMZs, which are essential for broader ecological functions.	Volume 3, Chapter 5.4: “WDFW advises that FWHCAs promote habitat connectivity and protect Priority Habitats to support ecological continuity and terrestrial species needs.”
8. Does your CAO apply the mitigation sequence to ensure no net loss of riparian ecological functions and values due to permitted activities within RMZs?	Partially	Section 18.10.010(C)(1)(c): “After the emergency, the person or agency undertaking the action shall submit a critical area report assessing effects on critical areas and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action.”	The CAO includes a mitigation sequence but does not specify a goal of “no net loss.” While steps for avoiding, minimizing, and mitigating impacts are included, the absence of a no-net-loss objective limits full alignment with WDFW standards.	Volume 2, Chapter 7.1: “WDFW recommends a mitigation sequence with a clear goal of no net loss of riparian functions.”
9. Does your CAO require that applicants provide a Critical Areas Report prepared by a qualified professional for projects in or near known or suspected FWHCAs, and require that a Habitat Management Plan be provided if FWHCAs are	Partially	Section 18.10.010: “For information on how to prepare the required critical areas report for development activities on sites meeting the criteria of designation as a Fish and Wildlife Habitat Area, please refer to the Guidelines for Classifying and Protecting Fish and Wildlife habitat conservation areas.”	The CAO references the need for a Critical Areas Report, directing applicants to an external guidelines document. However, it does not specify that the report must be prepared by a qualified professional nor require a Habitat Management Plan if impacts are identified.	Volume 2, Section 8.2: “WDFW advises a qualified professional’s report and a Habitat Management Plan for impacts on FWHCAs.”

found to be present and/or impacted by the project?				
10. Does your CAO require that On-Site Sewage Systems are located outside of RMZs?	No	N/A	The CAO does not include provisions requiring On-Site Sewage Systems to be located outside RMZs, which poses potential contamination risks to riparian zones.	Volume 1, Page 22: "WDFW advises that On-Site Sewage Systems be located outside RMZs to protect water quality."
11. Does your CAO prohibit new development that requires bank protection/hardening now or in the future (taking into consideration channel migration, wind and wave action, and climate change)?	No	N/A	The CAO does not include prohibitions on new development that may require bank hardening due to factors such as channel migration, wind and wave action, or climate change. WDFW recommends limiting such development to preserve natural riparian processes.	Volume 3, Section 9.5: "WDFW advises against permitting developments requiring bank protection, as these disrupt natural riparian processes."
12. Could other regulations conflict with your CAO and inadvertently impact riparian functions (e.g., clearing, grading, and filling ordinances)? If so, does your code include a provision that the regulation which provides greater protection to critical areas shall apply?	Yes	Section 18.10.020: "In cases where other regulations conflict with the requirements of this Chapter, the regulation that provides greater protection to the critical area shall apply."	The CAO specifies that, in cases of regulatory conflict, the rule providing greater critical area protection will prevail, aligning with WDFW's recommendation.	Volume 2, Chapter 10.3: "WDFW advises including provisions to ensure more protective regulations take precedence."

13. Does the issuance of an exemption letter or permit for invasive and/or noxious plant removal require that impacts to fish, wildlife, and habitat are minimized?	No	N/A	The CAO does not include requirements that plant removal must minimize impacts on habitat and wildlife, such as using non-invasive techniques, Ecology-approved herbicides, or limiting soil compaction.	Volume 1, Chapter 11.2: "WDFW advises that exemptions for plant removal include conditions to minimize habitat impacts."
14. Does your CAO include all the following provisions related to hazard tree management?	Partially	Section 18.10.010(C)(1): "The removal of hazard trees from sensitive areas and buffers that are posing a threat to public safety, or an imminent risk of damage to a permanent structure."	The CAO permits hazard tree removal for public safety but lacks provisions such as snag creation, arborist evaluations, and minimal impact requirements, which are WDFW recommendations for hazard tree management.	Volume 3, Chapter 12.1: "WDFW advises adopting hazard tree policies that ensure safety while protecting riparian functions."
15. Does your CAO incorporate a pathway to mitigate or compensate for impacts to RMZs arising from emergency activities?	Yes	Section 18.10.010(C)(1)(c): "After the emergency, the person or agency undertaking the action shall submit a critical area report assessing effects on critical areas and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action."	The CAO requires a post-emergency critical area report and mandates mitigation or restoration for impacts, aligning with WDFW's recommendations for emergency impact management.	Volume 1, Section 7.4: "WDFW advises jurisdictions to establish pathways for mitigating emergency impacts on RMZs."
16. Does your CAO require that impacts and disturbances from recreational trails and interpretive facilities are minimized to the extent practicable, informed by Priority Habitats and Species data and management recommendations?	No	N/A	The CAO does not include provisions to minimize recreational trail and facility impacts informed by Priority Habitats and Species data. This omission means that disturbances from recreational infrastructure may go unmanaged, impacting riparian functions.	Volume 2, Chapter 8.6: "WDFW advises minimizing trail and facility impacts based on Priority Habitats and Species data to protect ecological integrity."

17. Does your CAO include watershed-scale management considerations such as protecting and restoring watershed processes (e.g., channel movement, sediment transport); stormwater management; land management for stream temperatures; and protecting and restoring longitudinal, lateral, and vertical connectivity?	Partially	Section 18.10.010: “Project and facilities for restoration and enhancement of ecological functions of critical areas and related resources may be allowed within critical areas and buffers, upon City approval of a restoration and mitigation plan...”	The CAO permits ecological restoration projects, referencing various watershed and salmon recovery plans. However, it does not specifically address all WDFW-recommended watershed-scale elements (e.g., stormwater management, connectivity).	Volume 2, Chapter 5.2: “WDFW recommends incorporating watershed-scale management to support essential riparian processes.”
18. Does the CAO include measures for bolstering climate resilience within critical areas (e.g., increase habitat connectivity, plan for a wider range of stream flows, and increase stream shading)?	No	N/A	The CAO does not provide specific measures to improve climate resilience within critical areas, such as enhancing connectivity, adapting for varied stream flows, or increasing stream shading.	Volume 1, Section 13.3: “WDFW suggests measures such as improved habitat connectivity and stream shading to increase resilience against climate variability.”
19. Does the CAO include measures for controlling invasive species within RMZs?	Partially	Section 18.10.010(C)(1): “Invasive and noxious weed control efforts are allowed, with requirements to minimize impacts on surrounding habitats and avoid the use of hazardous substances, and only utilize Ecology-approved herbicides where appropriate.”	The CAO allows invasive and noxious weed control but does not explicitly apply this to RMZs. Without specifying RMZs, invasive species control may not fully protect riparian habitats.	Volume 2, Chapter 11.1: “WDFW recommends invasive species control measures within RMZs to maintain native vegetation and habitat health.”
20. Does your CAO require that temporary construction impacts are minimized within RMZs, and that disturbed	No	N/A	The CAO does not specify requirements for minimizing temporary construction impacts within RMZs or for restoring	Volume 1, Section 12.5: “WDFW advises minimizing construction impacts and restoring disturbed areas to sustain riparian functions.”

areas are restored to support riparian functions?			disturbed areas to support riparian functions.	
21. Does the CAO include specific protections for groundwater quality and quantity within critical aquifer recharge areas (CARAs)?	Yes	Section 18.10.040: “Development within critical aquifer recharge areas must avoid degradation of groundwater quality and ensure adequate quantity for maintaining ecological functions and protecting public health.”	The CAO provides specific protections aimed at preventing groundwater degradation and maintaining adequate groundwater quantity in CARAs, aligning with WDFW’s guidelines for protecting groundwater resources within critical areas.	Volume 1, Section 9.1: “WDFW recommends protecting groundwater quality and quantity in CARAs to support essential water resources for riparian ecosystems.”



November 15, 2024

City of Castle Rock, WA
Attn: Karlene Akesson, Kirsten Peterson, and Mike Manning
141 "A" Street SW
PO Box 370, Castle Rock, WA 98611

Re: Comments on Proposed Text Amendments Castle Rock Municipal Code (CRMC) to Title 18
Environmental Protection Chapter 18.10 Critical Areas

Dear City of Castle Rock and SJC Alliance,

Ecological Land Services (ELS) appreciate the opportunity to provide comments regarding the proposed updates to Title 18 Environmental Protection Chapter 18.10 Critical Areas of the City of Castle Rock (City) Critical Areas Ordinance (CAO). While the intent to update the CAO to meet regulatory and environmental needs is commendable, ELS would like to express some concerns regarding specific proposed changes. These issues are outlined below:

1. Discussion: Lack of a Wetland Buffer Table and Proposed Buffer Widths

The removal of the wetland buffer table introduces potential challenges by shifting the review process to a case-by-case basis, which can create inconsistencies in decision-making. Without standardized guidance, City reviewers and developers may encounter increased workloads due to the additional time and resources required to determine appropriate buffer dimensions for each individual project. This lack of clarity could also lead to delays and added costs for applicants navigating an unpredictable process. Furthermore, if the City becomes an applicant for development, it would face the same uncertainties, as undefined standards could complicate compliance and planning. Retaining a wetland buffer table with buffer widths ensures transparency and uniformity, fostering a more predictable and efficient review process for all stakeholders. We also wish to review what becomes proposed as specific buffer widths for wetlands to ensure they are reasonable in light of best available science balanced with the need for economic and human-built structures in a growing City such as Castle Rock.

Argument for retaining Wetland Buffer Table

The lack of wetland buffers from the CAO would eliminate an essential regulatory tool that ensures consistency, clarity, and effective protection of critical areas. Using Cowlitz County's Code (CCC) as an example, the inclusion of specific buffer standards provides clear benefits for both environmental protection and development regulation.

- **Standardized Guidance Promotes Clarity and Efficiency**

For example, CCC establishes clear buffer widths for wetlands based on scientifically informed categories and the intensity of proposed land uses. For example, *CCC Tables 19.15.120-A through 19.15.120-C* offer specific buffer dimensions tailored to the wetland category and habitat score, as well as the anticipated level of land use impact. This approach removes ambiguity, ensuring applicants, reviewers, and planners operate with a uniform understanding of expectations.

- **Science-Based Standards Provide Necessary Environmental Protections**

Buffers are needed for safeguarding wetland and habitat functions, such as water quality maintenance, flood control, and biodiversity preservation. The CCC recognizes these functions depend on site-specific characteristics like wetland category, habitat value and type, and intensity of proposed land use.

This approach is grounded in the best available science, ensuring buffer requirements are proportionate to environmental needs and land use impacts. Lacking specific buffers in the CAO leaves too much open for interpretation and impacts development by a lack of certainty and predictability.

- **Allowance for Site-Specific Flexibility**

The CCC balances standardization with flexibility by allowing for buffer adjustments based on site-specific conditions, as evaluated by qualified professionals. For instance:

- *CCC Section 19.15.120.c.* permits increased buffer widths when site-specific characteristics demand additional protection, such as steep slopes or proximity to particularly sensitive habitats.
- Conversely, buffers need not extend beyond existing barriers like roads or dikes that isolate wetland areas from proposed development, demonstrating the code is neither rigid nor arbitrary.

This balance of standardized expectations with adaptable implementation ensures environmental protections remain robust while providing opportunities for reasonable accommodations in development.

- **Avoiding Overreliance on Case-by-Case Evaluation**

By removing wetland buffer requirements, the City would rely entirely on discretionary, case-by-case evaluations. This approach risks:

- Inconsistencies in regulatory outcomes, as decisions may vary depending on the reviewer or project.

- Increased deference to state agencies, such as the Department of Ecology or Department of Fish and Wildlife, which may impose more stringent standards that are less aligned with local conditions.
- Greater time and financial burdens for applicants, who must navigate a less predictable process, potentially involving additional studies and agency consultations.
- **Harmonization with Countywide Standards**

The CCC provides a precedent for specifying wetland buffers. Adopting a similar approach in the City ensures consistency with broader regional practices, minimizing discrepancies that could confuse applicants or lead to uneven environmental protections. While we are not claiming the City should adopt County regulations already in effect, and we do wish to review and comment on proposed buffer widths, the City should develop buffer widths suitable for the needs of Castle Rock. Such buffer widths should be expected to provide protection for each Category of wetland based on its function and the proposed land use.

2. Discussion: Recognition of Existing Developed Conditions

Recognizing existing developed conditions is essential for accurately assessing the functionality and sensitivity of wetland areas. Many wetlands are functionally isolated by surrounding development, such as roads, buildings, and other infrastructure, which have significantly altered their ecological characteristics and buffer requirements. Ignoring these conditions diminishes the practical application of the ordinance by applying standards that may not reflect the current state of the environment. Additionally, this oversight creates inconsistencies with scientific methodologies and established practices in other jurisdictions, where existing developed conditions are a standard consideration. Including this provision in the updated CAO would ensure regulations are both practical and scientifically grounded, enhancing their credibility and applicability.

Argument for Recognition of Existing Developed Conditions

Incorporating functional isolation within the buffer provision sections of Castle Rock's municipal code is essential for ensuring practical and equitable critical areas regulations. CCC 19.15.070 provides an effective example through exemptions that acknowledge the realities of existing developed conditions. Key considerations include:

- **Recognition of Reduced Ecological Sensitivity**

The CCC exempts activities like the maintenance, repair, and replacement of existing structures, roads, and utilities (CCC 19.15.070.C.) when confined to their current footprints. This recognizes areas adjacent to impervious surfaces or structures have diminished ecological functionality, making standard critical area protections less applicable. Including similar provisions in the CAO would align regulations with the altered environmental conditions of these areas.

- **Practical Approach to Disturbed Areas**

The CCC exemptions also extend to ongoing landscaping activities in areas previously disturbed before a specific date (CCC 19.15.070.F.). This ensures that property owners can continue maintaining their land without unnecessary regulatory barriers. The City could adopt a comparable approach, providing clear guidance for managing previously impacted areas while maintaining focus on preserving undisturbed critical habitats.

- **Avoiding Overregulation**

By accounting for functional isolation, the City can avoid imposing unnecessary restrictions on areas where prior development has already compromised ecological connections. For instance, wetlands adjacent to roads or buildings may no longer provide the same habitat functions, and applying standard buffer requirements in such cases would result in overly burdensome regulations without meaningful environmental benefits.

- **Alignment with Regional Standards**

Incorporating functional isolation into CAO would bring it in line with CCC exemptions and other regional practices. This consistency would streamline compliance for property owners and developers working across jurisdictions, reducing confusion and fostering a more predictable regulatory environment.

3. Discussion: Wetland Sizing Exemption

The exemption for wetlands of small size, for example 1,000-2,500 square feet, that are isolated from other wetlands or ecologically significant area is a common practice in many jurisdictions, reflecting a balance between environmental protection and practical land use considerations. Small wetlands can occur in areas where they have very low function (such as pastures) and if regulated they have a significant and often unintended consequence of over-regulation not commensurate with their size and function. Without clear local guidance, smaller wetlands may become subject to inconsistent interpretations, leading to potential overregulation of impacts that are generally considered minimal. Providing this exemption would provide a consistent and predictable framework for managing these areas, aligning with regional practices and reducing unnecessary regulatory burdens while still protecting larger, more ecologically significant wetlands.

Argument for Retaining Wetland Sizing Exemption

- **CCC Approach to Small Wetlands**

CCC includes exemptions for wetlands under 1,000 square feet, provided they meet specific criteria such as being isolated, not associated with riparian or shoreline areas, and not containing priority species or high habitat scores (CCC 19.15.070). This exemption allows for impacts to be mitigated through in-lieu fee programs or mitigation banks, but does not require buffers. This

approach ensures regulatory efforts are focused on wetlands with the highest ecological value, while smaller, less sensitive wetlands are not overregulated.

- **Castle Rock's Current Wetland Size Requirements**

The Cities current code under *CRMC 18.10.120.C* designates minimum sizes for regulated wetlands, with Category 3 and Category 4 wetlands requiring a minimum of 10,000 square feet, and Category 4(b) wetlands requiring 1 acre. While this provides some structure for wetland protection, it does not consider the impact of smaller wetlands that may not provide significant ecological functions or may be isolated by surrounding development. In addition, this is no longer supported by Best Available Science and the Washington Department of Ecology. That said, having small wetlands (1,000 square feet or less) still exempt from buffers makes regulatory common sense.

- **Need for Exemption for Wetlands Under 1,000 Square Feet**

Including the exemption for wetlands under 1,000 square feet in the CAO, as is done in Cowlitz County, would create more balanced and consistent regulations. Smaller wetlands are often isolated or degraded by surrounding development, making them less ecologically significant. Exempting them from the more stringent buffer and impact requirements would reduce unnecessary regulatory burdens and allow for a more efficient use of resources.

- **Focus on High-Value Wetlands**

By including the exemption for smaller wetlands, regulatory focus can remain on larger, more ecologically significant areas that provide vital functions like habitat, water filtration, and flood control. This approach ensures that resources are directed toward protecting wetlands that are most important for maintaining ecological balance while minimizing unnecessary regulation on smaller, less sensitive areas.

4. Discussion: Eliminating the Habitat Rating System

The proposed text amendments to the CAO remove the habitat rating system, which would shift the responsibility for evaluating habitat quality to state entities such as the Department of Ecology and the Department of Fish and Wildlife. These agencies may apply different standards and criteria, potentially leading to inconsistencies in the review process. This shift could result in a more stringent level of scrutiny than is appropriate for certain areas that may not possess the level of sensitivity typically regulated by these state agencies. As a result, relying on state standards could create challenges in applying a uniform approach to critical areas within Castle Rock, especially in areas that may not warrant the same level of regulation. This could lead to a mismatch between the City's specific environmental conditions and the broader standards set by state agencies. Here again, we wish to review and comment on whatever the proposed wetland rating system is for Castle Rock.

5. Discussion: Inclusion of Special Flood Hazard Areas (SFHAs) in the CAO

Including Special Flood Hazard Areas (SFHAs) in the CAO seems unnecessary, as it duplicates existing regulations already addressed in *CRMC 18.10.140.B*, which requires compliance with *CRMC 15.24 Flood Damage Prevention*.

○ **Existing FEMA Standards**

FEMA's federal regulations already govern development within the 100-year floodplain, ensuring adequate flood safety and environmental protection.

○ **Redundant Permitting**

Adding Special Flood Hazard Areas (SFHAs) to the CAO would introduce unnecessary permitting layers, increasing the time and costs for developers.

○ **Limited Environmental or Safety Benefits**

Including SFHAs in the CAO would not offer substantial additional benefits in terms of flood safety or environmental protection, as FEMA standards already address these concerns.

○ **Efficient Framework**

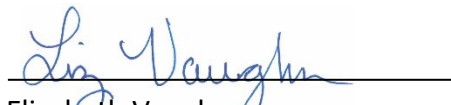
The current framework, which aligns with FEMA's rigorous standards, already provides sufficient protection for flood-prone areas while streamlining the permitting process.

○ **Unnecessary Complication**

Introducing SFHAs into the CAO would only complicate development procedures without enhancing flood risk management or safety outcomes.

Thank you for the opportunity to provide this information. Please consider these comments when reviewing potential changes to the current CAO within the City of Castle Rock. If you have any questions please contact Elizabeth Vaughn elizabeth@eco-land.com or Francis Naglich francis@eco-land.com by email or by phone (360) 578-1371.

Sincerely,


Elizabeth Vaughn
Wetlands Biologist I


Francis Naglich
Principal/Sr. Wetland Biologist

The November 19, 2024 Public Hearing will be re-opened during the next
regularly scheduled Planning Commission Meeting on
December 17, 2024 at 6:00pm

**Notice of Continued Public Hearing
Text Amendments to Castle Rock Municipal Code Title 18.10
Critical Areas Ordinance**

Notice of Continued Public Hearing of the Planning Commission:

Date: December 17, 2024 – The November 19, 2024 Public Hearing is to be re-opened during the next regularly scheduled Planning Commission Meeting on December 17, 2024 at 6:00pm

Time: 6:00 pm

Location: Castle Rock Senior Center 222 2nd Ave SW, Castle Rock, WA 98611

YOU ARE INVITED to attend and provide testimony to the Planning Commission on the above proposal.

You may also attend the meeting and participate in the hearing via phone or virtually through GoToMeeting:

To join this meeting from your computer, tablet or smartphone: <https://meet.goto.com/216918261>. To join this meeting using your phone: +1 (224) 501-3412 Access Code: 216-918-261 (Press *6 to speak) New to

GoToMeeting? Get the app now and be ready: <https://meet.goto.com/install>

Written comments will be accepted up to and at the public hearing. You may provide written comments by mail to: The City of Castle Rock, PO Box 370, Castle Rock, WA 98611, by email, or in person by contacting the staff member listed below.

Questions: For more information on the proposal, please contact Karlene Akesson at 360-274-8181 ext. 302 or kakesson@ci.castle-rock.wa.us or at the address listed below. Documents can be viewed at Castle Rock City Hall, 141 "A" Street SW, Castle Rock, WA 98611.

Posted: 11/20/2024

Post Office

Library

City Hall

Website

Civic Clerk Portal