

# Columbia County Critical Areas Ordinance

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# Chapter 1

## GENERAL PROVISIONS

### **Section 01: Title**

This ordinance shall be known as the "Columbia County Critical Areas and Resource Lands Ordinance".

### **Section 02: Purpose**

The purpose of this ordinance is to implement the general and specific goals and objectives of the Columbia County Comprehensive Plan for critical areas and resource lands. It is the further purpose of this ordinance to protect and conserve the functions and values of county critical areas and resource lands in accordance with the Washington State Growth Management Act and through the application of best available sciences consistent with the Washington Administrative Code (WAC) 365-195-900 through 365-195-925.

### **Section 03: Scope and administration**

#### A. Applicability

1. The provisions of this ordinance shall apply to all lands, land uses, and development activity within Columbia County whether or not a permit or authorization is required and shall apply to every person, firm, partnership, cooperation, group, government agency, or other entity that owns, leases, or administers land within the County. No person, company, agency, or applicant shall alter a critical area, a critical area buffer, or resource land as defined pursuant to Chapter 9 of this ordinance except as is consistent with the purpose and requirements provided herein.
2. The County shall not approve any permit or issue authorization to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or critical area buffer without first assuring compliance with the requirements herein including, but not limited to the following:
  - a. Building permits.

- b. Conditional use permits.
- c. Shoreline permits.
- d. Shoreline variance and exemptions.
- e. Subdivisions and short subdivisions.
- f. Planned unit development approvals.
- g. Zoning variance and rezones.
- h. Any other County permit or approval not exempted herein.

B. Administrative official

The Columbia County Planning and Building Director, or a person designated by the planning and building director, shall be the administrative official for the interpretation and application of the provisions set forth in this ordinance.

**Section 04: Allowed Activities**

A. The following activities shall be allowed without requiring further review or a critical areas report unless such a report was previously required during the review and approval process for the underlying permit:

1. All activities allowed by approved development permits including, but not limited to, subdivisions, short subdivisions, conditional use permits, and binding site plans in addition to construction activities associated with approved building permits if all of the following conditions have been met:
  - a. The provisions of this ordinance have been previously addressed as part of the approval process for the underlying permit.
  - b. There have been no material changes in the potential impact to any critical area or buffer since the prior review.
  - c. There is no new information available that is applicable to any critical area review of the site or particular critical area.
  - d. The permit or approval has not expired or, if no expiration date, no more than five years has elapsed since the issuance of that permit or approval.
2. Modification to existing structures: Structural modifications of, addition to, or replacement of an existing legally constructed structure that does not further alter or increase the impact to the critical area or buffer provided there is issuance of a valid building permit.
3. Activities within the improved right-of-way: Replacement, modification, or

construction of utility facilities, lines, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a County authorized private roadway except those activities that alter a wetland or watercourse such as bridges or culverts, or results in the transport of sediment or increased stormwater.

4. Public and private pedestrian trails: Public and private pedestrian trails, except in wetlands, fish and wildlife habitat conservation areas or their buffers, subject to the following:
  - a. The trail surface shall meet all other requirements including Columbia County water quality standards.
  - b. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the trail corridor including disturbed areas.
  - c. Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report.
5. Select vegetation removal: The following vegetation removal activities provided no vegetation shall be removed from a critical area or its buffer without approval from the administrative official:
  - a. The removal of the following vegetation:
    - i. Invasive weeds.
    - ii. Himalayan blackberry.
    - iii. Evergreen blackberry.
  - b. The removal of trees from critical areas and buffers that are hazardous and pose a threat to public safety or are an imminent risk to private property
6. Vegetation removal: Unless otherwise provided or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited.

7. Chemical applications: The application of herbicides, pesticides, organic or mineral derived fertilizers, or other hazardous substances, if necessary, as approved by the administrative official, provided that their use shall be restricted in accordance with Department of Fish and Wildlife Management Recommendations, the regulations of the Department of Agriculture, and the U.S. Environmental Protection Agency.
  8. Minor site investigative work: Work necessary for land use submittals such as surveys, soil logs, percolation tests, and other related activities where such activities do not require construction of new roads or significant amounts of excavation. Impacts to the critical area shall be minimized and disturbed areas shall be restored.
  9. Navigational aids and boundary markers: Construction or alteration of navigational aids and boundary markers.
- B. Best management practices required: All permitted activities shall be conducted using the best management practices that result in the least amount of impact to the critical area. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. Columbia county shall observe the use of best management practices adopted under county ordinance or resolution, or those prescribed by other agencies of jurisdiction and/or expertise to ensure that the activity does not degrade the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the expense of the party responsible for the critical area damage or alteration.

### **Section 05: Emergency permits and reasonable use exemptions**

- A. Emergency permit: The administrative official may issue a temporary emergency critical areas permit provided the following:
1. An imminent threat to public health, safety or the environment will occur if an emergency permit is not granted and the threat or loss may occur before a wetlands permit or fish and wildlife habitat conservation area review can be issued or conditioned under the procedures otherwise required by this ordinance.
  2. Any emergency permit granted shall incorporate to the greatest reasonable extent the standards and criteria required for non-emergency activities.

3. The permit shall be limited in duration to the time required to complete the authorized emergency activity and not exceed ninety days without re-application.
4. The restoration of any wetland, fish and wildlife habitat conservation area or geologically hazardous area altered as a result of the emergency activity shall be done within 90 days following the emergency repair, or during the growing season following the emergency action.

B. Reasonable Use means the minimum use to which a property owner is entitled under applicable state and federal constitutional provisions, including takings and substantive due process. Reasonable use shall be liberally construed to protect the constitutional property rights of the applicant. A reasonable use exemption may only be secured by using the County's conditional use process.

A reasonable use exemption may be secured only if:

1. The strict application of the CAO would deny reasonable use of the property.
2. There is no other reasonable use that would result in less impact on the critical area.
3. Any alterations permitted to the critical area shall be the minimum necessary to allow for reasonable use of the property.

C. Private Property Rights

Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions. The county shall evaluate proposed regulatory or administrative actions to assure that such actions do not result in an unconstitutional taking of private property.

D. Decision: The administrative official shall include findings in a written decision for placement in files associated with the exemption request. If an exemption is approved, the written decision shall include a statement that the exemption does not give permission to degrade a critical area or ignore risk from natural hazards. Furthermore, any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense.

## **Section 06: Best available science**

For the purposes of this ordinance, the following criteria shall apply to the use of best available science:

- A. Protection for function, values and anadromous fish: Critical area reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat, such as salmon and bull trout.
  
- B. Best available science consistent with criteria: The best available science is that scientific information applicable to the critical area prepared by local, state, or federal natural resource agencies, a qualified scientific professional or team of qualified scientific professionals, that is consistent with criteria established under WAC 365-195-900 through WAC 365-195-925.
  
- C. Characteristics of a valid scientific process: Relative to critical area protection, a valid scientific process is one that produces reliable information useful toward understanding the consequences of the County's regulatory decisions and in developing critical area policies and development regulations that will be effective in protecting the functions and values of critical areas. To determine whether information received during the permit review process is reliable scientific information, the administrative official shall determine whether the source of the information displays the characteristics of a valid scientific process. Those characteristics are as follows:
  - 1. Peer review: The information has been critically reviewed by other persons who are qualified experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a referred scientific journal generally indicates that the information has been appropriately peer reviewed.
  
  - 2. Methods: The methods used to obtain the information are clearly stated and reproducible. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer reviewed to assure their reliability and validity.

3. Logical conclusions and reasonable inferences: The conclusions presented are based on reasonable assumptions supported by other studies and are consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Information gaps and inconsistencies with other pertinent scientific information are adequately explained.
  4. Quantitative analysis: The data has been analyzed using appropriate statistical or quantitative methods.
  5. Context: The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge.
  6. References: The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and information.
- D. Nonscientific information: Nonscientific information may supplement scientific information but is not an adequate substitute for valid and available scientific information. Common sources of non-scientific information include the following:
1. Anecdotal information: One or more observations that are not part of an organized scientific effort.
  2. Non-expert opinion: Opinion of a person who is not a qualified scientific expert in a pertinent scientific discipline.
  3. Hearsay: Information repeated from communication with others.
- E. Absence of valid scientific information: Where there is an absence of valid scientific information, or incomplete scientific information relating to a critical area, leading to uncertainty about the risk to critical area functions by permitting an alteration or impact to the critical area, the administrative official shall:
1. Take a precautionary no-risk approach that strictly limits development and land use activities until the uncertainty is sufficiently resolved.



2. Require an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and non-regulatory 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.
  - c. Commit to the appropriate time frame and scale necessary to reliably evaluate regulatory and non-regulatory actions affecting the protection of critical areas and anadromous fisheries.

#### **Section 07: Record of Notice**

- A. All critical areas, once identified, shall be recorded on all documents of title of record for all affected property.
- B.** Notification. Property owners with land adjacent to identified critical areas must be notified of critical area buffers on their lands.
- c. Signing. The outer perimeter of identified critical areas shall be clearly marked throughout construction to ensure that no unauthorized intrusion will occur prior to the commencement of permitted activities. The administrative official may require permanent signs with specific and appropriate wording be installed along the boundary of a critical area as a condition of any permit or approval.

#### **Section 08: Conflict of terms and relationship to other ordinances**

The provisions of this ordinance shall be administrated as supplemental regulations to any Columbia County development ordinance applicable to a specific development permit application. In the event there is a conflict of terms with this ordinance and any

other county ordinance or development requirement, the more restrictive shall apply.

### **Section 09: Fees**

The applicant shall be responsible for the initiation, preparation, submission, and expense of all applications, reports, assessments, studies, plans, and other work as may be required herein. Application fees shall be assessed in accordance with the Columbia County Fee Schedule.

### **Section 10: Performance bonds**

When a performance bond or other surety instrument is attached as a condition of approval to a development permit, or any mitigation associated with a development permit, the applicant shall be required to post a monetary amount determined to be acceptable by the County in addition to the following requirements:

- A. The amount shall be 125% of the estimated cost of uncompleted actions or the estimated cost of restoring the functions and values of the critical area that is at risk, whichever is greater.
- B. Depletion or collection of bond funds shall not discharge the applicant's or violator's obligation to complete any required mitigation, maintenance, monitoring, or restoration.
- C. Public development proposals shall be exempt from this Section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.
- D. Failure to satisfy any provisions attached to a development permit under the terms of this ordinance shall constitute a default and authorize the County to demand payment of any financial guarantees.
- E. Any funds recovered pursuant to this Section shall be used to complete the required mitigation or other required actions.

## **Section 11: Variance**

- A. A variance from the provisions of this ordinance may be granted by the County in accordance with the variance procedures of the Columbia County Zoning Ordinance; and, if all of the following criteria is met:
1. Special conditions and circumstances exist that are peculiar to the subject land which are not applicable to adjoining lands and are not generally applicable to lands within the same zoning district.
  2. The special circumstances are not the result of actions by the applicant or others having legal interest in the subject land.
  3. A literal interpretation of the provisions of this ordinance would deprive the applicant of use rights and privileges permitted to other properties in the vicinity of the subject property and that the variance request is the minimum necessary to provide the applicant with such rights and privileges.
  4. Granting the requested variance will not confer special privilege to the applicant that is denied by this ordinance to other lands under similar circumstances.
  5. The variance is consistent with the general purpose and intent of this ordinance and will not further degrade the functions and values of the critical areas or be materially detrimental to the health, safety, and welfare of the general public.
  6. The decision to grant the variance includes the consideration of best available science and to the conservation or protection measures necessary to preserve or enhance anadromous fish habitat.
  7. The granting of the variance is consistent with the general purpose and intent of the Columbia County Comprehensive Plan.
- B. The County may attach conditions to any variance as determined necessary to secure adequate protection from adverse impacts to critical areas and/or the general public.

**Section 12: Severability**

If any chapter, section, provision, or term of this ordinance is held invalid by a court of jurisdiction, the validity of the remainder of this ordinance shall not be affected.

**Section 13: Violation. penalties. and enforcement**

- A. The County shall have the authority to issue a stop work order ceasing any unauthorized critical area alterations in violation of this ordinance and order restoration, rehabilitation, or replacement measures at the responsible party's expense to compensate for all violations. All development work shall remain stopped until a restoration plan is prepared and approved by the County. Such a plan shall be prepared by a qualified professional and shall describe how the proposed actions meet the minimum requirements of this ordinance. The administrative official shall, at the violator's expense, seek expert advice in determining the adequacy of the plan. Plans determined to be inadequate shall be returned to the applicant or violator for revision and re-submission.
  
- B. Violation of any provision of this ordinance shall be subject to a maximum monetary penalty of \$500.00. Each day a violation continues beyond any date issued by the County for abatement of a violation may be considered a new and separate violation.
  
- C. The administrative official shall have the authority to enforce the provisions of this ordinance.

**Section 14: Appeals**

Venue for appeals contesting any decision made pursuant to this ordinance shall lie in Columbia County, Walla Walla, or Franklin County, Washington State, pursuant to RCW 36.01.050 and as hereafter amended.

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## Chapter 2

### CRITICAL AREA PROJECT REVIEW PROCESS

#### **Section 01: County review**

- A. For the purpose of project review, the County shall:
1. Verify all applicant submitted information.
  2. Evaluate the project area and its vicinity for critical areas.
  3. Determine if the project is likely to impact the functions and values of critical areas.
  4. Determine if the project adequately addresses the impacts and/or avoids impacts to any critical area associated with the project.
- B. If the proposed project is within, adjacent to, or is likely to impact a critical area, the County shall:
1. Require a critical area report from the applicant that has been prepared by a qualified professional.
  2. Review and evaluate the critical area report.
  3. Determine whether the development proposal conforms to the purposes and performance standards of this ordinance.
  4. Assess potential impacts to the critical area and determine if they are necessary and unavoidable.
  5. Determine if any mitigation proposed by the applicant is sufficient to

protect the functions and values of the critical areas and the public health, safety and welfare consistent with the purpose of this ordinance.

### **Section 02: Pre-application conference**

Persons preparing development applications that may be regulated by the provisions of this ordinance shall consult with the administrative official prior to submitting an application. During the consultation, the administrative official shall discuss the requirements of this ordinance, explain the review process, provide critical area maps, scientific information and other available source materials, and identify any potential issues or concerns that may arise during the review process.

### **Section 03: Critical area identification form**

- A. Submission: Prior to the County's consideration of any proposed activity not found to be exempt under the provisions of this ordinance, the applicant shall submit a complete critical area identification form on forms provided by the Columbia County Planning and Building Department.
  
- B. Site inspection: Upon receipt of a project application and a critical area identification form, the administrative official shall conduct an on-site inspection to review critical area conditions. Reasonable access to the site shall be provided by the property owner for the purpose of any inspections during the review process and any future actions necessary for mitigation or monitoring.
  
- C. Review: After reviewing the critical area identification form and conducting a site inspection, the administrative official shall review other information available pertaining to the site and the proposal and make a determination as to whether any critical areas may be affected by the proposal and if a critical area report shall be required. The administrative official may use the following indicators to assist in determining the need for a critical area report:
  - 1. Indication on County critical area maps of a critical area or areas that may be impacted by the proposed activity.
  
  - 2. Information and scientific opinions from appropriate agencies such as, but not limited to, the departments of Fish and Wildlife, Ecology, and Natural Resources.

3. Documentation from scientific or other reasonable sources of the possible presence of a critical area.
  4. A finding by a qualified professional or reasonable belief by the administrative official that a critical area may exist on or adjacent to the site of the proposed activity.
- D. Decision: After site inspection and proposal review, the administrative official shall determine one of the following:
1. No critical areas present: The administrative official may determine that the project area is not within or adjacent to a critical area or buffer and the project activity is unlikely to degrade the functions or values of a critical area. Upon making this determination, the administrative official shall note the completion of the critical area review and note on the identification form the reasons that no further review is necessary. A summary of this information shall be included in any staff report, findings of facts, or approvals pertinent to the underlying permit.
  2. Critical areas present but no impact - waiver: If the administrative official determines that there are critical areas within or adjacent to the project area, but the proposed activity is unlikely to degrade the functions or values of the critical area, the requirement for a critical area report may be waived if there is substantial evidence that all of the following requirements will be met.
    - a. There will be no alteration of the critical area or buffer.
    - b. The development proposal will not impact the critical area in a manner contrary to the purpose and provisions of this ordinance.
    - c. The proposal is consistent with other applicable regulations and standards.
- E. Critical areas may be affected by proposal: If the administrative official determines that a critical area or areas may be affected by the proposal, the applicant shall be notified that a critical area report must be submitted prior to further review of the project. The notification shall indicate each of the critical area types that should be addressed within the report.

- F. Reconsideration of determination: A determination of the apparent absence of critical areas by the administrative official is not an expert certification and the determination is subject to possible reconsideration if new information is received. If the applicant desires greater assurance of the accuracy of the critical area review determination, the applicant may chose to hire a qualified professional to provide such assurance.

#### **Section 04: Critical area report**

- A. Preparation by a qualified professional: If required, the applicant shall submit a critical area report prepared by a qualified professional.
- B. Best available science: The critical area report shall use scientifically valid methods and studies in the analysis of critical area data and reference the source of science used. The report shall evaluate the proposal and all probable impacts to critical areas in accordance with all provisions of this ordinance.
- C. Report contents: At a minimum, a critical area report shall contain the following:
1. Name and contact information of the applicant, a description of the proposal and the permit being requested.
  2. A site plan of the proposal showing critical areas, buffers, the proposed development and its dimensions, and any proposed stormwater management plan.
  3. The names and qualifications of the persons preparing the report and dates and documentation of any fieldwork performed on the site.
  4. Identification and characteristics of all critical areas and buffers adjacent to the proposed project site.
  5. A statement attesting to the accuracy of the report and all assumptions made and relied upon.
  6. An assessment of the probable cumulative effects the proposed project will have on critical areas.



7. An analysis of site development alternatives.
  8. A description of mitigation efforts to minimize or avoid impacts to critical areas and an analysis of the probable effects any proposed mitigation will have on critical areas.
  9. Financial guarantees to ensure compliance.
- D. Supplemental and existing information: Unless determined otherwise by the administrative official, a critical areas report may be supplemented by, or composed in whole or in part, by any valid reports and studies previously prepared and applicable to the development being proposed.
- E. Limitations to study areas: The administrative official may limit the required geographical area of the critical area report if the applicant cannot obtain permission to access properties adjacent to the proposed project area, or if the proposed activity will affect only a limited part of the subject site.
- F. Modifications to required contents: The administrative official may approve an applicant's request for modification to the required content of the critical area report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation. The administrative official may require additional information if it is determined necessary to adequately review the proposed activity in accordance with the provisions of this ordinance.

#### **Section 05: Mitigation requirements**

- A. The applicant shall avoid all impacts that degrade the functions and values of a critical area. Unless otherwise provided herein, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas resulting from a proposed project or alteration shall be mitigated in accordance with an approved critical area report.
- B. Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from any hazards posed by a critical area

- C. Mitigation shall not be implemented until after County approval of a critical area report that includes a mitigation plan. All mitigation shall be in accordance with the approved critical area report and mitigation plan.

**Section 06: Mitigation sequencing**

- A. Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid or minimize impacts to critical areas. When an alteration is proposed, the alteration shall be avoided, minimized, or compensated for in the following order of preference:
  - 1. Avoiding the impact altogether by not taking a certain action or parts of an action.
  - 2. Minimizing impacts by limiting the scope of the action and its implementation, by using appropriate technology, or by taking affirmative steps such as project re-design, re-location, or timing to avoid or reduce impacts.
  - 3. Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions existing prior to a development or project activity.
  - 4. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area.
  - 5. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action.
  - 6. Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments.
  - 7. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

- B. Mitigation may include a combination of the above actions.

**Section 08: Mitigation plan requirements**

- A. When mitigation is required, a mitigation plan shall be submitted as part of the critical area report and shall include the following:

1. Environmental goals and objectives: The mitigation plan shall identify the environmental goals and objectives of the proposed mitigation including:
  - a. A description of the anticipated impacts to the critical area and the mitigating actions proposed to compensate for the impacts, including the site selection criteria, identification of resource functions, and beginning and end dates for completion of any construction activities.
  - b. A review of the best available science supporting the proposed mitigation and a description of the report author's experience regarding the restoration or creation of the type of critical area being proposed.
  - c. An analysis of the likelihood of success of the compensation project.
2. Performance standards: The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this ordinance have been met.
3. Detailed construction plans: The mitigation plan shall include written specifications and descriptions of the proposed mitigation including any construction time frames~ excavation details, erosion control, and planting plan details such as species, quantities, locations, plant size, spacing and maintenance. Written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other appropriate

drawings that show construction techniques or anticipated outcome.

4. Monitoring program: Mitigation plans shall include a program for monitoring construction of any compensation project and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a period of time necessary to establish that performance standards have been met, but not for a period of less than 5 years.
5. Contingency plan: The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.
6. Financial guarantees: The mitigation plan shall include financial guarantees to ensure that the mitigation plan is fully implemented.

## **Section 09: Determination**

- A. Criteria: The administrative official shall make a determination as to whether or not the proposed activity and mitigation complies with the following criteria:
  1. The proposal is consistent with the general provisions of this ordinance and with other applicable regulations and standards.
  2. The proposal protects critical area functions and values consistent with the best available science.
  3. The proposal minimizes any impacts on critical areas in accordance with the provisions and requirements of this Chapter.
  4. Any alterations permitted to any critical area are mitigated in accordance with all mitigation requirements provided herein.

- B. Favorable determination: If it is determined that the proposed activity meets all applicable criteria and provisions herein, the administrative official shall prepare a written determination of compliance with this ordinance. The determination and any attached conditions of approval shall be included in the project file for consideration during any future review of the underlying permit application. Any conditions included in the determination shall be attached to the underlying permit or approval.
  
- C. Unfavorable determination: If it is determined that a proposed activity does not adequately comply with the mitigation requirements and provisions of this ordinance, the administrative official shall prepare a written determination that includes findings of non-compliance. No proposed activity or permit request shall be approved or issued if the proposed activity does not adequately mitigate its impacts on critical areas or does not comply with the provisions of this ordinance.
  
- D. Completion of review: The County's determination regarding critical areas pursuant to this ordinance shall be final and concurrent with the final decision to approve or deny the development proposal or other activity involved.

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## Chapter 3

### CRITICAL AQUIFER RECHARGE AREAS

#### Section 01: Designation

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

1. Wellhead protection areas: Wellhead protection areas may be defined by the boundaries of the ten year time of ground water travel or boundaries established using alternate criteria approved by the Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.
  2. Sole source aquifers: Sole source aquifers are areas designated by the U.S. Environmental Protection Agency pursuant to the Federal Safe Water Drinking Act.
  3. Susceptible ground water management areas: Susceptible ground water management areas are areas that have been designated as moderately, or highly vulnerable or susceptible in an adopted ground water management program developed pursuant to Chapters 173-100 WAC.
  4. Special protection areas: Defined pursuant to WAC 173-200-090.
  5. Moderately, highly vulnerable or highly susceptible aquifer recharge areas: Aquifer recharge areas that are moderately, highly vulnerable or highly susceptible to degradation or depletion due to hydro-geologic characteristics are those areas delineated by a hydro-geologic study prepared in accordance with the state Department of Ecology guidelines or meeting the criteria established by the Department of Ecology.
- B. Aquifer recharge area susceptibility ratings: Aquifer recharge areas shall be rated as having high, moderate, or low susceptibility based on soil permeability, geologic matrix, infiltration, and depth to water as determined by the criteria established by the state Department of Ecology.
- C. Maps: Maps showing the approximate location and extent of critical aquifer recharge areas may be obtained or viewed at County offices. These maps are subject to continuous updating as new critical areas are identified; therefore, they are a reference source and are not intended to provide a formal critical area designation.

## **Section 02: Activities allowed without a critical area report**

In addition to the general activities allowed without a critical area report pursuant to

Section .04, Chapter 1 herein, the following activities shall be allowed in critical aquifer recharge areas and shall not require a critical area report:

- A. Construction of structures and improvements, including additions, resulting in less than five percent or 2,500 square feet, whichever is greater, total site impervious surface.
- B. Development and improvement of parks, recreation facilities, open space, or conservation areas resulting in less than 5% total impervious surface area.
- C. On-site domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of 1 system per acre.

### **Section 03: Hydro-geological assessment required**

In addition to the basic critical area report requirements, all critical area reports for proposed activities to be located in a critical aquifer recharge area shall contain a Level 1 hydro-geological assessment containing no less than the following information:

- A. Available information regarding geologic and hydro-geologic characteristics of the site including the surface location of all critical aquifer recharge areas located on-site or immediately adjacent to the site, and permeability of the unsaturated zone.
- B. Ground water depth, flow direction and gradient based on available information.
- C. Currently available data on wells and springs within 1,300 feet of the project area.
- D. Available historic water quality data for the area to be affected by the proposed activity.
- E. Best management practices proposed to be used within the project scope.

### **Section 04: Additional report requirements**

A. Level 2 hydro-geologic assessment: A Level 2 hydro-geologic assessment shall be required as part of the critical area report for any of the following proposed activities within a critical aquifer recharge area:

1. Activities that result in five percent or more impervious site area.
2. Activities that divert, alter, or reduce the flow of surface or ground waters, or otherwise reduce the recharging of the aquifer.
3. The use of hazardous substances other than household chemicals common for domestic uses.
4. The use of injection wells, including on-site septic systems, except domestic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per acre.
5. Any other activity determined by the administrative official likely to have an adverse impact on ground water quality or quantity, or on the recharge of the aquifer.

B. Level 2 hydro-geologic assessment - content: A level 2 hydro-geologic assessment shall include, as a minimum, the following:

1. Historic water quality data for the area to be affected by the proposed activity compiled for at least the previous 5 years.
2. Ground water monitoring plan provisions.
3. Discussion of the effects of the proposed project on the ground water quality.
4. Predictive evaluation of ground water withdrawal effects on nearby wells and surface water features.
5. Predictive evaluation of contaminant transport based on potential releases to ground water.



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

## **Section 05: Performance standards**

- A. General performance standards: Except as may be otherwise provided, the following standards shall apply within all critical aquifer recharge areas:
  1. Activities may only be permitted within a critical aquifer recharge area if the applicant can show that the proposed activity will not cause contaminants to enter the aquifer and the proposed activity will not adversely effect the recharging of the aquifer.
  2. The proposed activity must comply with the water source protection requirements and recommendations of the federal Environmental Protection Agency, the state Department of Health, and the Columbia County Health District.
  3. The proposed activity must be designed and constructed in accordance with all County surface water management and water quality regulations.
- B. Performance standards - specific uses: In addition to general performance standards required herein, the following standards shall be required for the following specific uses:
  1. Storage tanks: Storage tanks shall meet the following requirements in addition to County building codes:
    - a. Underground tanks: All new underground storage facilities proposed for storage of hazardous substances or hazardous wastes shall be designed and constructed to:
      1. Prevent releases due to corrosion or structural failure for the operational life of the tank.

2. Be constructed of non-corrosive material, steel clad with a non-corrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances.
  3. Use material in the construction or lining of the tank that is compatible with the substance to be stored.
- b. Above ground tanks: Above ground storage facilities proposed to store hazardous substances or waste shall be designed to:
- i. Not allow the release of a hazardous substance to the ground waters, or surface waters.
  - ii. Have a primary containment area enclosing or underlying the tank or part thereof.
  - iii. Incorporate a secondary containment system either built into the tank structure or a dike system built outside the tank or tanks.

2. Vehicle repair and servicing

- a. Vehicle repair and servicing shall be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing shall be stored in a manner protecting them from weather and provide containment in the event of leaks.
  - b. No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment shall be abandoned using techniques approved by the state Department of Ecology prior to the proposed activity.
3. Residential use of pesticides and nutrients: Application of household pesticides, herbicides, and fertilizers shall not exceed times and rates specified by the product manufacturer.

4. Spreading or injection of reclaimed water: Water re-use projects for reclaimed water shall be in accordance with County water and/or wastewater comprehensive plans and shall comply with the following requirements:
  - a. Surface spreading shall meet the ground water recharge criteria pursuant to Chapter 90.46.080 and 90.46.042 RCW.
  - b. Direct injection shall be in accordance with standards pursuant to Chapter 90.46.042 RCW.

**Section 06: Prohibited uses**

- A. Landfills, including hazardous waste, municipal solid waste, special waste, woodwaste, inert waste, and demolition waste.
- B. Underground injection wells of classes I, III, and IV and subclasses 5FOI, 5D03, 5F04, 5W09, 5WIO, 5WII, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells.
- C. Mining of metals and hard rock. Sand and gravel mining shall also be prohibited from critical aquifer recharge areas rated as highly susceptible or vulnerable.
- D. Wood treatment facilities that allow any portion of the treatment process to occur over natural or manmade permeable surfaces.
- E. Facilities that store, process, or dispose of radioactive substances.
- F. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source.
- G. Activities that would significantly reduce the recharge to aquifers that are a source of significant baseflow to a regulated stream.
- H. Activities that are not connected to an available sanitary sewer system in areas associated with sole source aquifers.

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## Chapter 4

# FISH AND WILDLIFE HABITAT CONSERVATION AREAS

### **Section 01: Designation**

- A. All areas within Columbia County meeting one or more of the following criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this ordinance. Fish and wildlife habitat conservation areas shall include:
1. Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association.
  2. State priority habitats and areas associated with state priority species.
  3. Habitats and species of local importance.
  4. Naturally occurring ponds under 20 acres.
  5. Waters of the state. Includes lakes, rivers, ponds, streams, inland waters, and all other surface waters and watercourses within the state of Washington as classified in WAC 222-16-031.
  6. Lakes, ponds, rivers, and streams planted with game fish by a government or tribal entity.
  7. State natural area preserves and natural resource conservation areas.
  8. Land essential for preserving connections between habitat blocks and open spaces.

B. The following critical area maps are hereby adopted by the County and shall be used to give an approximate location and extent of habitat conservation areas. These maps are subject to continuous updating as new critical areas are identified; therefore, they are a reference source and are not intended to provide a final critical area designation. They are as follows:

1. Department of Fish and Wildlife Priority Habitat and Species Maps.
2. Department of Natural Resources Official Water Type Reference Maps, as amended.
3. Department of Natural Resources Shorezone Inventory.
4. Department of Health Annual Inventory of Shellfish Harvest Areas.
5. Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors Reports published by the Washington Conservation Commission.
6. Department of Natural Resources State Natural Area Preserves and Natural Resource Conservation Area Maps.
7. Columbia county habitat maps.

C. Detailed information regarding the location, type, and extent of fish and wildlife habitat conservation areas may be obtained by consulting with the County or with a relevant agency such as the U.S. Fish and Wildlife Service, the state Fish and Wildlife Department, the Department of Natural Resources, the Snake River Salmon Recovery Board, and the National Marine Fisheries Service.

## **Section 02: Critical area report - additional requirements**

In addition to the basic critical area report requirements, the following elements shall be included in critical area reports for habitat conservation areas:

A. Preparation of report: Critical area reports for habitat conservation areas shall be

prepared by a qualified professional biologist with experience preparing reports for the relevant habitat.

B. Areas addressed: The following areas shall be addressed within a critical area report for habitat conservation areas:

- I. The project area of the proposed activity.
2. All habitat conservation areas and recommended buffers within 300 feet of the project area.
3. All shoreline areas, floodplains, and other critical areas and related buffers within 300 feet of the project area.

c. Habitat assessment: An investigation of the project area to evaluate the presence or absence of a potential critical fish or wildlife species or habitat. The assessment of habitats shall include, at a minimum, the following information:

1. Detailed description of vegetation on and adjacent to the project area.
2. Identification of any species of local importance, priority species, 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.
3. A discussion of any federal, state, or local special management recommendations including state Department of Fish and Wildlife habitat recommendations that have been developed for species or habitats located on or adjacent to the project area.
4. A detailed discussion of the potential impacts on habitat by the project, including potential impacts to water quality.
5. A discussion of measures, including avoidance, minimization and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the proposed activity.

6. A discussion of ongoing management practices that will protect habitat after development including proposed monitoring and maintenance programs.
- D. Additional information may be required: The administrative official may determine that due to the type of habitat or species present, or the project area conditions, additional information is necessary and the following may be required:
1. 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.
  2. A request for consultation with the state Department of Fish and Wildlife.
  3. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

### **Section 03: Performance Standards**

- A. General performance standards: Except as may be otherwise provided, the following standards shall apply within all habitat conservation areas:
1. Alteration of habitat areas: A habitat conservation area may be altered only if the alteration and any proposed mitigation does not degrade the functions and values of the habitat. New structures and land alterations shall be prohibited from habitat conservation areas except in accordance with this ordinance.
  2. Introduction of species: Any introduction of plant, wildlife, or fish species not indigenous to the region shall be prohibited from habitat conservation areas unless authorized by a state or federal permit or approval.
  3. Mitigation site location: Mitigation sites shall be located to achieve contiguous wildlife habitat corridors to minimize any isolating effects development may have on habitat areas.
  4. Additional conditions: The administrative official may condition permits or

approvals as determined necessary to minimize or mitigate any potential adverse impacts. Such conditions may include, but not be limited to, the following:

- a. Establishment of buffer zones.
  - b. Preservation of important vegetation.
  - c. Access limitations, including fencing, to the hazard area.
  - d. Seasonal construction restrictions.
  - e. Establishment of a duration and timetable for periodic review of mitigation activities.
5. Equivalent mitigation required: Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic functions and shall include mitigation for adverse impacts upstream and downstream of the development site.
6. Buffers: Required buffers shall consist of an undisturbed area of native vegetation, or areas identified for restoration, established to protect the functions and values as well as the integrity of the affected habitat. Required buffer widths shall be based on the type and intensity of the proposed development and shall be consistent with the state Department of Fish and Wildlife management recommendations.
7. Increased wetland buffers: The administrative official may require increased buffer widths in accordance with recommendations of a qualified professional biologist and the best available science when it is determined that a larger buffer is necessary to protect habitat area functions and values due to site specific characteristics.
8. Buffer reduction: The administrative official may allow a recommended buffer width to be reduced in accordance with a critical area report, the best available science, and the management recommendations issued by the state Department of Fish and Wildlife if:



- a. It will not reduce stream or habitat functions.
  - b. It will not adversely affect salmonid habitat.
  - c. It will provide additional natural resource protection such as buffer enhancement.
  - d. The total area contained in the buffer area after averaging is no less than that contained within the standard buffer.
  - e. The buffer area width is not reduced by more than 25% in any location.
9. Signs: The outer perimeter of the habitat conservation area or buffer shall be marked throughout construction to ensure that no unauthorized intrusion will occur prior to the commencement of permitted activities. The administrative official may require permanent signs with specific and appropriate wording be installed along the boundary of a habitat conservation area or buffer as a condition of any permit or approval.
10. Fencing: The administrative official shall condition any permit or approval for a habitat conservation area to require the installation of a permanent fence at the edge of the habitat conservation area or buffer when fencing will prevent future impacts to the habitat conservation area, including domestic grazing animals. Required fencing shall be designed to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts.
11. Subdivisions: Land that is wholly within a habitat conservation area or its buffer may not be subdivided. Land that is located partially within a habitat conservation area or its buffer may be divided if each resulting lot has sufficient buildable area outside the habitat conservation area or buffer. Access roads and utilities may be permitted within habitat conservation areas and buffers if the County determines that no other feasible alternative is available and when consistent with the provisions of this ordinance.
- B. Performance standards - specific habitats: In addition to general performance standards required herein, the following standards shall be required for specific

habitat conservation areas:

1. Endangered, threatened, and sensitive species

- a. No development shall be allowed within a habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association.
- b. Approval for alteration of land adjacent to a habitat conservation area or its buffer where endangered, threatened, and sensitive species have a primary association shall not occur prior to consultation with the state Department of Fish and Wildlife and the appropriate federal agency.
- c. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules, WAC 232-12-292 and any activity proposed within 800 feet, or within 2,640 feet and in a shoreline foraging area, of a verified nest territory or communal roost shall include a habitat management plan developed by a qualified professional. The habitat management plan shall be approved by the state Department of Fish and Wildlife prior to any final permit approvals.

2. Anadromous fish: All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall, at a minimum, adhere to the following standards:

- a. Activities shall be timed to occur only during the allowable work window as designated by the state Department of Fish and Wildlife for the applicable species.
- b. Alternative alignments or location for the activity is determined to be non-feasible.
- c. The activity is designed so that it does not degrade the functions and values of the fish habitat or other critical areas. Any impacts to the functions and values of the habitat conservation area shall be mitigated in accordance with an approved critical areas report mitigation plan.

3. Riparian habitat areas: Riparian habitat areas include aquatic and terrestrial ecosystems that mutually benefit each other such as those located adjacent to rivers, perennial or intermittent streams, seeps, and springs. Unless otherwise allowed pursuant to this ordinance, all structures and activities shall be prohibited within riparian habitat areas.

a. Riparian habitat area widths: Unless otherwise specified herein, the following widths shall apply to the specified riparian habitat area:

i. Type 1 and 2 stream types, or shorelines of the state, or shorelines of statewide significance shall have a riparian habitat area width of 250 feet.

ii. Type 3 stream types, or other perennial or fish bearing streams, 5 to 20 feet wide shall have a riparian habitat area width of 200 feet.

iii. Type 3 stream types, or other perennial or fish bearing streams less than 5 feet wide shall have a riparian habitat area width of 150 feet.

iv. Type 4 and 5, or intermittent streams and washes with low mass wasting potential shall have a riparian habitat area width of 150 feet.

v. Type 4 and 5, or intermittent streams and washes with high mass wasting potential shall have a riparian habitat area width of 200 feet.

The water typing system used herein for identification of stream types are those pursuant to WAC 222-16-031.

b. Riparian habitat area width measurement: Widths shall be measured outward in each direction, on the horizontal plane, from the ordinary high water mark or from the top of the bank in the absence of a high water mark.

c. Increased riparian habitat area width: The administrative official may require increased riparian habitat area width if it is determined in the critical area report or other appropriate information that an increase in width is necessary to protect the functions of the riparian habitat or other critical areas from degradation.

d. Riparian habitat area width averaging: The administrative official may allow

the riparian habitat area width reduced in accordance with a critical area report if:

- i. The reduction will not reduce stream or habitat functions, including those of non-fish habitat.
  - ii. The reduction will not degrade the habitat, including habitat for anadromous fish.
  - iii. The reduction will provide additional habitat protection.
  - iv. The total area contained in the riparian habitat area of each stream on the development site is not decreased.
  - v. The required riparian habitat area width is not reduced by more than 25% in anyone location.
  - vi. The reduction will not be located within another critical area or buffer and shall be supported by the best available science.
- e. Alternative mitigation: The performance standards set forth herein for riparian habitat areas may be modified by the County if the applicant demonstrates that greater habitat functions, on a per function basis, can be obtained as a result of alternative mitigation measures.
4. Aquatic habitat: Any activity which may be allowed pursuant to this Chapter that is within a riparian habitat area, pond, lake, water of the state, marine habitat or associated buffers shall not be approved unless the activity complies with the provisions of the Columbia County Shoreline Management Program, all applicable state and federal requirements, and is in accordance with an approved critical area report.

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## Chapter 5

### FREQUENTLY FLOODED AREAS

#### **Section 01: Designation**

Frequently flooded areas shall include the following:

- A. Areas of special flood hazard: Areas identified by the Federal Insurance Administration Flood Insurance Study for Columbia County and Incorporated Areas dated July 19, 2000 (revised) and accompanying maps, including Federal Emergency Management Agency Flood Insurance Rate Maps.
- B. Areas identified by the administrative official: Areas of special flood hazard identified by the administrative official based on review of base flood elevation and floodway data available from federal, state, local agency, or other valid sources when base flood elevation data has not been provided by the Federal Insurance Administration.

#### **Section 02: Critical area report - additional requirements**

In addition to the basic critical area report requirements, the following information shall be included in critical area reports for frequently flooded areas:

- A. All areas of a special flood hazard area as indicated on the flood insurance maps within 200 feet of the project area.
- B. All other flood areas indicated on the flood insurance maps within 200 feet of the project area.
- C. Site plan details illustrating the following:
  - 1. Floodplain, 10, 50, and 100 year flood elevations, floodway, other critical areas, buffers, and shoreline areas.

2. Proposed development including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances from the floodplain.
3. Clearing limits.
4. Elevation of the lowest floor of all structures and the level to which any non-residential structure has been flood-proofed.
5. Extent of watercourse alteration for any proposed alterations. The alteration description shall include a maintenance program that provides maintenance practices for the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished.
6. Information describing and documenting how the proposed watercourse alteration complies with requirements of Fish and Wildlife Habitat Conservation Areas, the County shoreline management program, and any other applicable state, federal, and local permit requirements.

### **Section 03: Disclaimer of liability**

The degree of flood protection required herein is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions; therefore, this ordinance does not imply that land outside frequently flooded areas will be free from flooding or resulting flood damage. This ordinance shall not create liability on the part of Columbia County or any officer or employee thereof, or the Federal Insurance Administration for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

### **Section 04: Performance standards**

- A. General performance standards: Except as may be otherwise provided, the following standards shall apply within all frequently flooded areas:
  1. A development permit shall be obtained prior to any alteration of land or for any new use in a frequently flooded area.

2. If there is insufficient data to make a determination of the base flood elevation, the administrative official shall require measures that assure any proposed structures will be reasonably safe from flooding. At a minimum, the base flood elevation shall be set two feet above the highest adjacent grade.
3. All proposed structures, utilities, and other improvements shall be located on the buildable portion of the site which is out of the floodplain. If there is no buildable area out of the floodplain, structures shall be placed on the highest land on the site, orientated parallel to water flow, and sited as far from any watercourse and other critical areas as possible.
4. All utilities and service facilities shall be designed and/or elevated or located to prevent water from entering or accumulating within the components during flood conditions.
5. Elevation certificates shall be required following construction of any structure within the floodplain where the base flood elevation is provided. The certificate shall state the elevation of the lowest floor of the structure and shall be submitted to the County for recording.
6. Fill or grading within the floodplain shall be prohibited unless determined by a qualified professional that the fill or grading will not block side channels, inhibit channel migration, increase flood hazards to others, or be placed within a channel migration zone.

B. Performance standards - specific uses: In addition to general performance standards required herein, the following standards shall be required for specific uses:

1. Residential and non-residential construction
  - a. New residential construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation. In addition, manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement.
  - b. New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall have the lowest

floor, including basement, elevated 1 foot or more above the base flood elevation or:

- i. Be flood-proofed below 1 foot or more above the base flood level so that the structure is watertight with walls substantially impermeable to water.
- ii. Have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.
- iii. Be certified by a registered engineer or architect that the design is in accordance with accepted standards for meeting the provisions of this subsection.

2. Utilities

- a. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems.
- b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

3. Subdivisions

- a. Subdivisions and short subdivisions shall be designed to minimize or eliminate flood damage. Public utilities and facilities such as sewer, gas, electrical, and water systems shall be located and constructed to minimize flood damage.
- b. Subdivisions and short subdivisions shall have adequate natural surface water drainage in accordance with County surface and storm management requirements.
- c. Subdivisions and short subdivisions shall show the 100-year floodplain, floodway, and any channel migration zones on the preliminary and final plat.



- d. All lots proposed within a subdivision or short subdivision shall have adequate building space outside the 100-year floodplain, floodway, and channel migration zone.

4. Alterations of watercourses

- a. Watercourse alterations shall only be allowed in accordance with the Fish and Wildlife Habitat Conservation Area provisions pursuant to this ordinance.
- b. Watercourse alteration projects shall not result in blockage of side channels.
- c. The County shall notify adjacent jurisdictions, the state Department of Ecology, and the Federal Insurance Administration of the proposed alteration no less than 30 days prior to issuing any permit or approval.
- d. The applicant shall maintain the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished. Maintenance shall be bonded for a minimum period of five years and be in accordance with an approved maintenance program.

**Section 05: Prohibited uses within frequently flooded areas**

- A. Critical facilities.
- B. Water wells used for potable water are prohibited from the floodway.
- C. On-site sewage disposal systems are prohibited from the floodway and channel migration zone.
- D. Encroachments, including new construction, substantial improvements, fill, and other development are prohibited in the floodway unless certified by a registered engineer that the proposed encroachment will not result in any increase in flood levels during the occurrence of base flood discharge.

E. Residential construction and reconstruction is prohibited in floodways with exception to the following:

1. Repairs, reconstruction, or improvements to a structure that does not increase the ground floor area.
2. Repairs, reconstruction, or improvements to a structure for which the cost does not exceed 50% of the market value of the structure either:
  - a. Before the repair, or reconstruction is started; or,
  - b. If the structure has been damaged and is being restored, before the damage occurred.
3. Improvements to a structure to correct existing violations of state or local health, sanitary or safety code specifications that have been identified by the County and that are the minimum necessary to assure safe living conditions, or to structures identified as historic places.

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# Chapter 6

## GEOLOGICALLY HAZARDOUS AREAS

### Section 01: Designation

Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

- A. Erosion hazard area: Erosion hazard areas are at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "moderate to severe", "severe" or "very severe" rill and inter-rill erosion hazard.
  
- B. Landslide hazard area: Landslide hazard areas include areas susceptible because of any combination of bedrock, soil, slope, slope aspect, structure, hydrology, or other factors and may include, but not be limited to the following:
  - 1. Areas delineated by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "severe" limitation for building and development.
  
  - 2. Areas mapped by the Department of Natural Resources "u" or class 3, "UOS" or class 4, and "URS" or class 5.
  
  - 3. Areas designated as quaternary slumps, earthflows, mudflows, or landslides on maps published by the U.S. Geological Surveyor Department of Natural Resources.
  
  - 4. Areas with all three of the following characteristics:
    - a. Slopes steeper than 15%.
  
    - b. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock.

- c. Springs or ground water seepage.
5. Areas that have shown movement during the Holocene epoch 10,000 years ago to the present or are underlain or covered by mass wastage debris from that epoch.
  6. Slopes that are parallel or sub-parallel to planes of weakness in sub-surface material such as bedding planes, joint systems, and fault planes.
  7. Slopes having gradients steeper than 80% subject to rock fall during seismic shaking.
  8. Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action.
  9. Areas that show evidence of risk from snow avalanches.
  10. Areas located in a canyon or on an active alluvial fan presently or potentially subject to inundation by debris flows or catastrophic flooding.
  11. Areas with a 40% or steeper slope with a vertical relief of 10 or more feet except areas composed of consolidated rock. A slope shall be delineated by establishing its toe and its top and measured by averaging the inclination over 10 feet or more of vertical relief.
- C. Seismic hazard areas: Areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting.
- D. Other hazard areas: Areas determined by the administrative official to be susceptible to other geological events including mass wasting, debris flows, rock falls, and differential settlement.

## **Section 02: Maps**

The approximate location and extent of geologically hazardous areas are shown on the

following critical area maps hereby adopted for reference. These maps are subject to continuous updating as new critical areas are identified; therefore, they are a reference source and are not intended to provide a final critical area designation. They are as follows:

- A. U.S. Geological Survey landslide and seismic hazard maps.
- B. Department of Natural Resources slope stability maps.
- C. Federal Emergency Management Administration flood insurance maps.
- D. Applicable maps adopted by Columbia county and local jurisdictions.

### **Section 03: Activities allowed without critical area report**

In addition the general activities allowed pursuant to Section .04, Chapter 1 herein, the following activities shall be allowed in geologically hazardous areas and shall not require a critical area report if the administrative official first determines the activity will not increase the risk of the hazard:

- A. Construction of new buildings with less than 2,500 square feet of floor or roof area, whichever is greater, and are non-residential or places of employment or public assembly.
- B. Additions to existing single story residences that are 250 square feet or less.
- C. Installation of fences.

### **Section 04: Critical area report - additional requirements for specific hazards**

- A. Erosion and landslide hazard areas: In addition to the basic critical area report requirements, the report for an erosion and landslide hazard area shall include the following information:
  - 1. Site plan: A site plan shall be included within the report showing the following:

- a. The height of the slope, slope gradient, and cross section of the project area.
  - b. Location of springs, seeps, or other surface expressions of ground water on or within 200 feet of the project area or that may be affected by the proposal.
  - c. The location and description of surface water runoff.
2. Geo-technical analysis: The geo-technical analysis shall include the following:
- a. A description of the extent and type of vegetative cover.
  - b. An estimate of load capacity including surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural development.
  - c. 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.
  - d. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or 100 year storm event.
  - e. Consideration of the run-off hazard of landslide debris and/or impacts of landslide run-out on down-slope properties.
  - f. A slope stability study including an analysis of proposed angles of cut and fill and site grading.
  - g. Recommendations for building limitations, structural foundations, and an estimate of foundation settlement.
  - h. An analysis of proposed surface and sub-surface drainage, and the vulnerability of the site to erosion.

3. Erosion and sediment control plan: Shall be prepared in compliance with all County stormwater management requirements.
  4. Drainage plan: Shall include a plan for the collection, transport, treatment, discharge, and/or recycle of water prepared in accordance with all County surface water management requirements.
  5. Mitigation plans: Shall include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or re-planting plan and/or other means for maintaining long term soil stability.
  6. Monitoring surface waters: If the administrative official determines there is significant risk of damage to downstream receiving waters due to potential erosion from a project site, the critical area report shall include a plan to monitor the discharge from the site including a recommended schedule for submitting monitoring reports to the County.
- B. Seismic hazard areas: In addition to the basic critical area report requirements, a seismic hazard area report shall also contain the following:
1. Site map: Shall show all known and mapped faults within 200 feet of the project area or areas that have potential to be affected by the proposal.
  2. Geo-technical analysis: Shall include a discussion of the potential impacts of seismic activity on the site such as force generation and fault displacement.

### **Section 05: Performance standards**

- A. General performance standards: Except as otherwise provided, the following performance standards shall apply to geologically hazardous areas:
1. The activity will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions.
  2. The activity will not adversely impact other critical areas.

3. The activity is designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than pre-development conditions.
  4. The activity is certified as safe under anticipated conditions by a qualified engineer or geologist licensed in the state of Washington.
- B. Critical facilities prohibited: Critical facilities shall not be sited within geologically hazardous areas unless there is no practical alternative.
- C. Performance standards - erosion and landslide hazard areas: In addition to general performance standards required herein, the following standards shall be required for erosion and landslide hazard areas:
1. A buffer from all edges of erosion or landslide hazard areas shall be established, the size of which shall be determined by the administrative official based upon review of and concurrence with a critical area report prepared by a qualified professional.
  2. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a geo-technical analysis is submitted that certifies the following:
    - 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.
    - c. The alterations will not adversely impact other critical areas.
- D. Design standards - erosion and landslide hazard areas: Unless it can be determined that an alternative design provides greater long-term slope stability, the following development design standards shall apply:
1. The 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 Uniform Building Code.

2. Structures and improvements shall be clustered to the extent allowed by county zoning density provisions to avoid geologically hazardous and other critical areas.
3. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation.
4. The development shall not result in greater risk or need for increased buffers on neighboring properties.
5. Retaining walls shall be preferred over graded artificial slopes for maintaining an existing natural slope.
6. Development shall minimize impervious lot coverage.
7. Unless otherwise part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or associated buffer shall be prohibited.
8. Utility lines and pipes shall be permitted only if it is demonstrated that no practical alternative is available. Lines and pipes shall be located above ground and anchored to be functional in the event of an underlying slide. Stormwater conveyance shall be through a high density polyethylene pipe with fuse welded joints or a similar product that is technically equal or superior.
9. Point discharges from surface water facilities and roof drains on to or upstream from an erosion or landslide hazard area shall be prohibited with the following exceptions:
  - a. Conveyance is via continuous storm pipe downslope to a point where there are no erosion hazard areas downstream from the discharge.
  - b. Discharge at flow durations match predeveloped conditions into existing channels that previously conveyed stormwater.
  - c. Discharge is dispersed up-slope of the steep slope to an undisturbed

low-gradient buffer adequate to infiltrate all surface and stormwater runoff without increasing the saturation of the slope.

- 10. Land that is wholly within an erosion or landslide hazard area or its buffer may not be subdivided. Land that is located partially within an erosion or landslide hazard area or its buffer may be divided if each resulting lot has sufficient buildable area outside the erosion or landslide hazard or buffer. Access roads and utilities may be permitted within the erosion or landslide hazard area and buffers if the County determines that no other feasible alternative is available.
  
- E. Prohibited development: On-site sewage disposal systems, including drainfields, shall be prohibited within erosion and landslide hazard areas and associated buffers.

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## Chapter 7

### WETLANDS

#### Section 01: Designation, rating, and mapping

- A. Designation: “Wetlands” are areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from 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.
  
- B. Ratings: Wetlands shall be rated according to the Department of Ecology wetland rating system found in the Washington State Wetland Rating System documents or as revised by Ecology. These documents contain the methods for determining the

following rating criteria:

1. Wetland rating categories

a. Category I: Category I wetlands shall meet the following criteria:

- i. Documented habitat for federal or state listed endangered or threatened fish, animal, or plant species;
- ii. High quality native wetland communities, including documented category I or II quality Natural Heritage wetland sites and sites which qualify as a category I or II quality Natural Heritage wetland as defined in the rating system documents;
- iii. High quality, regionally rare wetland communities with irreplaceable ecological functions, including sphagnum bogs and fens, estuarine, wetlands, or mature forested swamps as defined in the rating system documents; or,
- iv. Wetlands of exceptional local significance.

b. Category II: Category II wetlands shall meet the following criteria:

- i. Documented habitats for state listed sensitive plant, fish, or animal species;
- ii. Wetlands that contain plant, fish, or animal species listed as priority species by the state Department of Fish and Wildlife;
- iii. Wetland types with significant functions that may not be adequately replicated through creation or restoration;
- iv. Wetlands possessing significant habitat value based on a score of 22 or more points in the habitat rating system; or,
- v. Documented wetlands of local significance.

- c. Category III: Category III wetlands are those that do not satisfy category I, II or IV criteria, and with a habitat value rating of 21 points or less.
  - d. Category IV: Category IV wetlands shall meet the following criteria:
    - 1. Hydrologically isolated wetlands that are less than or equal to 1 acre in size, have only one wetland class, and are dominated (greater than 80% aerial cover) by a single non-native plant species (monotypic vegetation) or,
    - 2. Hydrologically isolated wetlands that are less than or equal to 2 acres in size, and have only one wetland class and greater than 90% aerial cover of non-native plant species.
  - 3. Date of wetland rating: Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the County, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities. Wetland rating categories shall not change due to illegal modifications.
- C. Mapping: The National Wetlands Inventory and United States Department of Agriculture National Resources Conservation Service soil maps are hereby adopted to be used for determining the approximate location and extent of County wetlands. These maps shall be used as a guide and do not provide a final critical area designation. The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional applying the Washington State Wetland's Identification and Delineation Manual as required pursuant to R.C.W. 36.70A.175.

## **Section 02: Allowed activities**

In addition to allowed activities listed pursuant to Section 04, Chapter 1 herein, the following activities shall be allowed in wetlands without a critical areas report, unless such activities result in a loss to the functions and values of a wetland or wetland buffer. The allowed activities include:

- A. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the 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.

### **Section 03: Critical area report - additional requirements**

In addition to the basic critical area report requirements, critical area reports for wetlands shall comply with the following:

- A. Preparation of report: Critical area reports for a wetlands shall be prepared by a qualified professional who is a wetland biologist with experience preparing wetland reports.
- B. Areas addressed: The following areas shall be addressed in critical area reports for wetlands:
  - 1. The project area of the proposed activity.
  - 2. All wetlands and recommended buffers within 300 feet of the project area.
  - 3. All shoreline areas, water features, floodplains, and other critical areas, and related buffers within 300 feet of the project area.
- c. Wetland analysis: Critical area reports for wetlands shall contain an analysis of the wetlands including, at a minimum, the following information:
  - 1. A written assessment and accompanying maps of the wetlands and buffers within 300 feet of the project area, including the following information:
    - a. Wetland delineation and required buffers.
    - b. Existing wetland acreage.
    - c. Wetland category with vegetative, faunal, and hydrologic

characteristics.

- d. Soil and substrate conditions.
  - e. Topographic elevations at two foot intervals.
2. A discussion of measures, including avoidance, minimization and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.
  3. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and wetland functions.
  4. Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information:
    - a. Existing and proposed wetland acreage.
    - 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.
    - 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.

#### **Section 04: Performance standards - general requirements**

- A. Activities may only be permitted in a wetland or wetland buffer if it is first demonstrated that the activity will not degrade the functions and values of the wetland or other critical areas.
  
- B. Activities and uses shall be prohibited from wetlands and wetland buffers except as provided for pursuant to this ordinance.
  
- C. Category I wetlands: Except as may otherwise be provided for pursuant to this ordinance, all uses and activities within category I wetlands shall be prohibited.
  
- D. Category II and III wetlands: The following standards shall apply:
  - 1. Water dependent activities may be allowed where there is no practical alternatives that would not have a less adverse impact on the wetland and other critical areas.
  
  - 2. Where non-water dependent activities are proposed, it shall be presumed that alternative locations are available and activities and uses shall be prohibited unless the applicant demonstrates the following:
    - a. The basic project purpose cannot reasonably be accomplished and successfully avoid, or result in less impact on, a wetland on another site in the general region.
  
    - b. All alternative designs that would avoid, or result in less adverse impact on, a wetland or its buffer, such as a reduction in the size, scope, or configuration of the project, are not feasible.
  
- E. Standard wetland buffer widths: Required standard wetland buffers, based on wetland category and land use intensity, are as follows:
  - 1. Category I

High intensity:	300 feet.
Moderate intensity:	250 feet.
Low intensity:	200 feet.

2. Category II

High intensity:	200 feet.
Moderate intensity:	150 feet.
Low intensity:	100 feet.
3. Category III

High intensity:	100 feet.
Moderate intensity:	75 feet.
Low intensity:	50 feet.
4. Category IV

High intensity:	50 feet.
Moderate intensity:	35 feet.
Low intensity:	25 feet.

- F. Measurement of wetland buffers: All buffers shall be measured from the wetland boundary as surveyed in the field. Buffer width shall be determined according to wetland category and the type of proposed land use. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.
- G. Increased wetland buffers: The administrative official may require increased buffer widths in accordance with recommendations of a qualified professional biologist and the best available science when it is determined that a larger buffer is necessary to protect wetland functions and values due to site specific characteristics.
- H. Buffer reduction: The administrative official may allow a recommended buffer width to be reduced in accordance with a critical area report and the best available science if:
1. The critical area report provides a sound rationale for a reduced buffer based on the best available science.
  2. The existing buffer area is well-vegetated with native species and has less than 10% slope.



3. No direct or indirect, short-term or long-term, adverse impacts to wetlands will result from the proposed activity.
  4. In no case shall the standard buffer width be reduced by more than 25%, or the buffer width be less than 50 feet except for buffers between Category IV wetlands and low or moderate intensity land uses.
- I. Buffer width averaging: The administrative official may allow modification of the standard wetland buffer width in accordance with an approved critical area report and the best available science by averaging buffer widths. Averaging of buffer widths may only be allowed where it is demonstrated that:
1. It will not reduce wetland functions or values.
  2. The wetland contains variations in sensitivity due to existing physical or topographical conditions.
  3. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer.
  4. The buffer width is not reduced to less than 50% of the standard width or 50 feet, whichever is greater, except for buffers between Category IV wetlands and low or moderate land uses.
- J. Buffer uses: The following uses may be permitted within a wetland buffer provided they are not prohibited by other applicable laws and are implemented in a manner that minimizes impacts to the buffer and adjacent wetland:
1. Conservation and restoration activities: May include activities associated with conserving, restoring, or protecting soil, water, vegetation, or wildlife.
  2. Passive recreation: Includes walkways and trails, wildlife viewing structures, and fishing access areas. Pathways that generally parallel the perimeter of the wetland shall be located in the outer 25% of the buffer area.

3. Stormwater management facilities: Facilities limited to stormwater dispersion outfalls and bio-swales may be allowed within the outer 25% of the buffer of Category III or IV wetlands provided that no other location is feasible and that such facilities will not degrade the functions and values of the wetland.
  
- K. Signs: The administrative official may require the applicant to install temporary or permanent signs along the boundary of a wetland or buffer as a condition of any permit or approval. Sign material, size, and placement shall be determined by the administrative official based upon the nature of the project, activity, and use. Permanent signs shall be maintained by the property owner in perpetuity.
  
- L. Fencing: Permanent fencing shall be required around the wetland or buffer when domestic grazing animals are present or will be introduced to the site. Fencing shall be designed to not interfere with species migration, including fish runs, and be constructed to minimize impacts to the wetland and associated habitat.

#### **Section 05: Performance standards - mitigation**

- A. Mitigation for alterations: Mitigation for alterations shall achieve equivalent or greater biologic functions. Mitigation plans shall be consistent with the Department of Ecology Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals, 1994, as revised.
  
- B. No net loss: Wetland mitigation shall not result in a net loss of wetland area except when the following criteria are met:
  1. The lost wetland area provides minimal functions and action results in a net gain in wetland functions as determined by a site-specific function assessment; or,
  
  2. The lost wetland area provides minimal functions as determined by a site-specific function assessment and other replacement habitats provide greater benefits to the functioning of the watershed, such as riparian habitat restoration and enhancement.
  
- C. Mitigation for lost functions and values: Mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall

provide similar wetland functions as those lost except when:

1. The lost wetland provides minimum functions as determined by a site-specific function assessment and the proposed mitigation action will provide equal or greater functions, or will provide functions shown to be limiting within a watershed through a formal watershed assessment plan; or,
2. Out-of-kind replacement will best meet formally identified regional goals, such as replacement of historically diminished wetland types.

D. Mitigation actions - preference: Mitigation actions that require compensation by replacing, enhancing, or substitution, shall occur in the following order of preference:

1. Restoring wetlands on upland sites that were formally wetlands.
2. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting of primarily exotic introduced species.
3. Enhancing significantly degraded wetlands.
4. Preserving high-quality wetlands that are under imminent threat.

E. Mitigation timing: Where feasible, mitigation projects shall be completed prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to commencement of the use or development. Construction of mitigation projects shall be timed to reduce impacts to existing wildlife and flora.

F. Mitigation ratios - acreage replacement ratios:

1. The following ratios shall apply to creation or restoration that is in-kind, on-site, the same category, timed prior to or concurrent with alteration, with a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations whereby greater ratios shall apply. The first number specifies the acreage of replacement wetlands, the second number specifies the acreage of wetlands altered:

Category I	6 to 1
Category II	3 to 1
Category III	2 to 1
Category IV	1.5 to 1

2. Increased replacement ratio: The administrative official may increase the ratios under the following circumstances:
  - a. Uncertainty exists as to the probable success of the proposed restoration or creation; or,
  - b. A significant period of time will elapse between impact and replication of wetland functions; or,
  - c. Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or,
  - d. The impact was an unauthorized impact.
  
3. Decreased replacement ratio: The administrative official may decrease these ratios under the following circumstances:
  - a. Documentation by a qualified wetlands specialist demonstrates that the proposed mitigation has a very high likelihood of success.
  - b. Documentation by a qualified wetlands specialist demonstrates that the proposed mitigation will provide functions and values that are significantly greater than the wetland being impacted; or,
  - c. The proposed mitigation actions are conducted in advance of the impact and have been successful.
  
4. Ratios for mitigation - wetland enhancement: If an approved critical areas report includes mitigation through the enhancement of wetlands, at a minimum, enhancement acreage shall be double the acreage required for creation pursuant to this Chapter. The ratios shall be greater than double the required acreage where the enhancement proposal would result in minimal gain in the performance of wetland functions and/or result in the reduction of other wetland functions currently being provided in the wetland.

5. Ratios for mitigation - preservation of wetlands: If an approved critical areas report includes mitigation through preservation of wetlands, and preservation is the sole means of mitigation, the mitigation ratio shall be, at a minimum, 10 to 1. The administrative official may require a greater ratio depending on the quality of wetlands being mitigated and the wetlands being preserved.

G. Performance standards - subdivisions: The subdivision and short subdivision of land in wetlands and associated buffers shall be subject to the following:

1. Land that is located wholly within a wetland or its buffer may not be subdivided.
2. Land that is located partially within a wetland or its buffer may be subdivided provided that an accessible, buildable, and contiguous portion of each new lot is located outside of the wetland and its buffer.

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## **Chapter 8**

### **RESOURCE LANDS**

#### Section 01: Designation

The following land types shall be designated as "resource lands" as defined pursuant to Chapter 9 of this ordinance:

- A. Primary agricultural lands of long-term commercial significance.
- B. Secondary agricultural lands of long-term commercial significance.
- C. Forest land of long-term commercial significance.
- D. Mineral resource land.

#### Section 02: Conservation requirements

- A. Primary agricultural lands of long term commercial significance not characterized by urban growth at the effective date of this ordinance shall be conserved primarily for agricultural use including all accessory uses commonly associated with agricultural activities and other commercial or public or semi-public uses compatible with the primary agricultural use.
- B. Secondary agricultural lands of long term commercial significance not characterized by urban growth at the effective date of this ordinance within the A-1 and A-3 zoning districts shall be conserved for agricultural uses and common agricultural accessory uses, mineral land activities permitted as conditional uses within the underlying zone, and forestry activities. In addition, the siting of essential public facilities as defined pursuant to the Columbia County Zoning Ordinance and the Revised Code of Washington 36.60A.200 as are or are hereafter amended may also be permitted.
- C. Development within and adjacent to secondary agricultural lands of long term commercial significance within A-2, AR-1, AR-2, C-1, LI-1, HI-1, and R-1 zones shall not be allowed to interfere with the continued long term commercial use of other agricultural lands.
- D. Primary and secondary agricultural lands of long-term commercial significance having an area of ten acres or less, and surrounded by land predominately not characterized as primary or secondary agricultural land of long term commercial significance, may be converted to other permitted and conditional uses allowed within the applicable underlying zone.
- E. Forest lands of long term commercial significance on parcels larger than 160 acres shall be conserved for private commercial forestry and supporting forestry uses and shall be regulated by the permitted and conditional use provisions of the underlying zone pursuant to the Columbia County Zoning Ordinance.
- F. All proposed regulated uses adjacent to forest lands of long term commercial significance shall demonstrate the availability of fire protection suitable for the surrounding forest environment.
- G. Development proposals within and adjacent to mineral lands and forest lands of long -term commercial significance shall demonstrate that the proposed development and associated activities will not hinder or prevent the continued long-term commercial use of the mineral and forest lands of long term commercial significance.
- H. All long plats, short plats, development and building permits issued for development activities within 300 feet of designated agricultural lands, forest

lands, or mineral resource lands shall contain a notice that the subject property is within or near designated agricultural, forest, or mineral resource lands on which a variety of commercial activities may occur that are not compatible with residential development for certain periods of limited duration. The notice for mineral resource lands shall also inform that an application may be made for mining related activities including mining, extraction, washing, crushing, stockpiling, blasting, transporting, and recycling of minerals.

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## **Chapter 9**

### **DEFINITIONS**

#### **Section 01: Interpretation**

Words which are not defined within this Chapter shall be interpreted as defined within a commonly known dictionary such as Websters, or as they may be defined within the Revised Code of Washington (RCW) or Washington Administrative Code (WAC). For the purposes of this ordinance, the following meanings shall apply to the specified words or terms:

#### **Agricultural land**

Land primarily devoted to the commercial production of horticultural, viticultural, berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed under the Revised Code of Washington 84.33.100 through .140, or livestock, and has long-term commercial significance for agricultural production.

#### **Applicant**

A person who files a permit application for an action or use which is wholly or partially regulated under the provisions of this ordinance.

#### **Aquifer Recharge Areas**

Areas designated as high susceptibility for aquifer contamination are those areas which lie within the A Zone on the FEMA maps. All development and all uses which lie within



these areas shall be connected to the public sewer system. No new uses on a septic system are permitted in high susceptibility areas of critical aquifer recharge.

#### Aquifer, Sole Source

An area designated by the U.S. Environmental Protection Agency under the Safe Drinking Water Act of 1974, Section 1424(e). The aquifer(s) must supply fifty percent (50%) or more of the drinking water for an area without a sufficient replacement available.

#### Base Flood

The flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designation on maps always includes the letters A.

#### Best available science

Current scientific information used in the process to designate, protect, or restore critical areas, that is derived from a valid scientific process as defined pursuant to the WAC 365-195-900 - 925. Sources of best available sciences are included in "Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas" published by the state Office of Community Development.

#### Buffer area

An area contiguous to and which protects a critical area that is required for the continual maintenance, functioning, and/or structural stability of a critical area.

#### Building

An edifice which is built up or composed of parts joined together in a definite manner that requires location on the ground or which is attached to something located on the ground. For the purposes of this ordinance, the terms "building" and "structure" shall have the same meaning.

#### Critical Aquifer Recharge Area

Areas designated by WAC 365-190-080(2) that are determined to have a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

#### Critical Areas

Critical areas include any of the following areas or ecosystems: aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically

hazardous areas, and wetlands, as defined pursuant to RCW 36.70A and this ordinance.

### Development

Any activity upon the land consisting of construction or alteration of structures, earth movement, dredging, dumping, grading, filling, mining, removal of any sand, gravel, or minerals, driving of piles, drilling operations, bulkheading, clearing of vegetation, or other land disturbance. Development also includes approvals issued by the County that binds land to specific patterns of use including, but not limited to, subdivisions, short subdivisions, zone changes, conditional use permits, and binding site plans.

### Endangered species

Any fish or wildlife species that is threatened with extinction throughout all of a significant portion of its range and is listed by the state or federal government as an endangered species.

### Fish and wildlife habitat conservation areas

Areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated s1jbpopulations are not created as designated by WAC 365-190-080(5). These areas include:

- A. Areas with which the state or federally designated endangered, threatened, and sensitive species have a primary association.
- B. Habitats of local importance including, but not limited to, areas designated as priority habitat by the Department of Fish and Wildlife.
- C. Kelp and eelgrass beds, herring and smelt spawning areas.
- D. Commercial and recreational shellfish areas.
- E. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds.
- F. Waters of the state, including lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.
- G. Lakes, ponds, streams, and rivers planted with game fish by a government or tribal entity.

H. State natural area preserves and natural resource conservation areas.

I. Land essential for preserving connections between habitat blocks and open spaces.

#### Fish Habitat

Habitat that is used by fish at any life stage at any time of year, including potential habitat likely to be used by fish that could be recovered by restoration or management, including off-channel habitat.

#### Floodplain

The total land area adjoining a river, stream, watercourse, or lake subject to inundation by the base flood.

#### Floodway

The channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the surface water elevation more than one foot. The term "floodway" may be used interchangeably with the term "zero rise floodway".

#### Frequently flooded areas

Lands in the flood plain subject to a one percent (1%) or greater chance of flooding in any given year. Frequently flooded areas perform important hydrologic functions and may present a risk to persons and property as designated by WAC 365-190-080(3). Classifications of frequently flooded areas include, at a minimum, the 100-year flood plain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

#### Geologically hazardous areas

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

- Erosion hazard;
- Landslide hazard;
- Seismic hazard;

- Mine hazard;
- Volcanic hazard; and
- Other geological events including tsunamis, mass wasting, debris flows, rock falls, and differential settlement.

#### Habitat conservation areas

Areas designated as fish and wildlife habitat conservation areas.

#### Forestland

Land primarily useful for growing trees, including Christmas trees not subject to the excise tax imposed by the Revised Code of Washington 84.33.1 00 through 84.33.140 for commercial purposes, and that has long term commercial significance for growing trees commercially. Forest land of long-term commercial significance are those classified as having a predominance of private or private forest land grades six or higher as defined by the Forest Land Grades established by the Department of Revenue (WAC 458-40-530).

#### Mineral resource land

Land primarily devoted to the extraction of minerals having known or potential long term commercial significance, including gravel, sand, and metallic substances of value.

#### Mitigation

Avoiding, minimizing or compensating for adverse critical area impacts. Mitigation, in the following order of preference, is:

- A. Avoiding the impact altogether by not taking a certain action or parts of an action.
- B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps such as project re-design, relocation, or timing, to avoid or reduce impacts.
- C. Rectifying the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project.
- D. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods.
- E. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action.

- F. Compensating for the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by replacing, enhancing, or providing substitute resource or environments.
- G. Monitoring the hazard and taking remedial action when necessary.

#### Monitoring

Evaluating the impacts of development proposals on the biological, hydrological, and geological elements of such systems and assessing the performance of required mitigation measures through the collection and analysis of data for the purpose of understanding and documenting changes in natural ecosystems and features.

#### Ordinary high water mark

That mark which is found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, that the soil has a character distinct from that of the abutting upland in respect to vegetation.

#### Primary agricultural land of long term commercial significance

Lands classified as "prime" or "unique", or class 11 by the US Department of Agriculture Soil Conservation Service.

#### Priority habitat

Habitat type or elements with unique or significant value to one or more species as classified by the Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element (WAC 173-26020(34)).

#### Priority species

Any fish or wildlife species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels as classified by the Department of Fish and Wildlife, including endangered.

#### Qualified professional

A person with experience and training in the applicable critical area. A qualified professional (*usually*) must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or related field, and two years of related work experience.

- A qualified professional for habitats or wetlands must have a degree in biology and professional experience related to the subject species.
- A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the state of Washington.
- A qualified professional for critical aquifer recharge areas means a hydro-geologist, geologist, engineer, or other scientist with experience in preparing hydro-geologic assessments.

### Restoration

Measures taken to restore an altered or damaged natural feature including:

- A. Active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to unauthorized alteration.
- B. Actions performed to re-establish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.

### Riparian habitat

Areas adjacent to aquatic systems with flowing water that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife. Widths shall be measured from the ordinary high water mark or from the top of the bank if the ordinary high water mark cannot be identified. It includes the entire extent of the floodplain and the extent of vegetation adapted to wet conditions as well as adjacent upland plant communities that directly influence the stream system. Riparian habitat areas include those riparian areas severely altered or damaged due to human development activities.

### Scientific process

A valid scientific process is one that produces reliable information useful in understanding the consequences of a decision. The characteristics of a valid scientific process are as follows:

- A. Peer review. The information has been critically reviewed by other qualified scientific experts in the subject scientific discipline.

- B. Methods. The methods that were used are standardized in the pertinent scientific discipline or the methods have been appropriately peer-reviewed to assure their reliability and validity.
- C. Logical conclusions and reasonable inferences. The conclusions presented are based on reasonable assumptions supported by other studies and are logically and reasonably derived from the assumptions and supported by the data presented.
- D. Quantitative analysis. The data has been analyzed using appropriate statistical or quantitative methods.
- E. Context. The assumptions, analytical techniques, data and conclusions are appropriately framed with respect to pertinent existing information.
- F. References. The assumptions, techniques, and conclusions are well referenced with citations to pertinent existing information.

#### Secondary agricultural land of long-term commercial significance

Lands that are not primary or unique agricultural lands of long term commercial significance but are comprised of soils of local importance consisting of Class III through VII soils under the US Department of Agriculture Soil Conservation Service Land Capability System and have a minimum average annual winter wheat yield of 48 bushels per acre.

#### Seismic hazard areas

Areas that are subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, or soil liquefaction.

#### Start of Construction

Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means

the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

### Stream

Water contained within a channel, either perennial or intermittent, and classified according to WAC 222-16-030 or WAC 222-16-031 and as listed under "water typing system." Streams also include natural watercourses modified by man. Streams do not include irrigation ditches, waste ways, drains, outfalls, operational spillways, channels, storm water runoff facilities or other wholly artificial watercourses, except those that directly result from the modification to a natural watercourse.

### Well

A bored, drilled or driven shaft, or a dug hole whose depth is greater than the largest surface dimension for the purpose of withdrawing or injecting water or other liquids.

### Wellhead protection area

The portion of a zone of contribution for a well, wellfield or spring, as defined using criteria established by the state Department of Ecology.

### Wetlands

Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from 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. Emergent wetlands are regulated wetlands with at least thirty percent (30%) of the surface area covered by erect, rooted, herbaceous vegetation extending above the water surface as the uppermost vegetative strata, 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.



