



## Chelan County Planning Commission

Chair: Doug England

Vice Chair: Vicki Malloy

Commissioners District 1: Vicki Malloy, Ryan Kelso, James Wiggs  
Commissioners District 2: Cherié Warren, Ed Martinez, Joel Walinski  
Commissioners District 3: David Donovanick, Jesse Redell, Doug England

### **REVISED Meeting Agenda**

Wednesday, April 27, 2022 at 7:00 P.M.

Chelan County Community Development

In response to the [Governor's Proclamation 20-28](#), *the Planning Commission will hold all of their Regular and Special Meetings via Zoom Video Conference until further notice. Click the link below to join the meeting.*

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Dial by your location

+1 253 215 8782 US (Tacoma)

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Passcode: 739475

### **Call Meeting to Order**

#### **I. Administrative**

A. Review/Approval of Minutes from February 23, 2022

#### **II. Public Comment Period**

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

#### **III. Old Business**

A. Public Hearing ZTA 21-587 SMP Appendix B: Critical Areas

#### **IV. New Business**

#### **V. Discussion, at the Chair's discretion**

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

Materials available on the Community Development website

Any person may join this meeting via Zoom Video conference, of which the link is provided on the Chelan County Website. A Copy of the Agenda may be reviewed online <https://www.co.chelan.wa.us/community-development/pages/planning-commission> or requesting it by email at [CD.Director@co.chelan.wa.us](mailto:CD.Director@co.chelan.wa.us)

Chelan County has been recording Planning Commission meetings which will continue to be accessible on the Community Development Planning Commission web page shortly after the meeting takes place. If you need special accommodations to view the meetings while they take place, please contact us immediately at 509-667-6225 to set up a place for you to do so on the County Campus.

**Next Regular Meeting  
May 25, 2022 at 7:00 pm via Zoom**

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



# CHELAN COUNTY PLANNING COMMISSION MINUTES

Chelan County Planning Commission  
Chelan County Community Development VIA ZOOM  
Called to Order: 6:00 PM  
316 Washington St., Suite 301  
Wenatchee, WA 98801

Date: February 23, 2022

## CALL TO ORDER

Meeting was called to order at 6:00 pm

## COMMISSIONER PRESENT/ABSENT

<b>Doug England</b>	Present	<b>Ed Martinez</b>	Present
<b>Vicki Malloy</b>	Present	<b>Jesse Redell</b>	Present
<b>Ryan Kelso</b>	Present	<b>Cherié Warren</b>	Present
<b>James Wiggs</b>	Present	<b>David Donovanick</b>	Present
<b>Joel Walinski</b>	Present		

## STAFF PRESENT

Catherine Lorbeer, Assistant Director  
Wendy Lane, Permit Clerk

## PUBLIC PRESENT

## MINUTES

Chairman Doug England asked the Planning Commission if they had read the minutes from the January 26, 2022, meeting.

Commissioner Ed Martinez stated that the word “Motion” was misspelled in the template.

Chairman Doug England pointed out that the word “application:” was used instead of “hearing” when continuing the public hearing for ZTA 21-587.

Upon the correction of the minutes, they were approved.

## PUBLIC COMMENT PERIOD FOR ITEMS NOT ON THE AGENDA

None

## OLD BUSINESS:

## **Continued Public Hearing ZTA 21-587 SMP Appendix B: Critical Areas**

Assistant Director Catherine Lorbeer gave a brief recap of the application. Staff recommends approval.

Chairman Doug England opened the hearing for public comment.

Ryan Walker expressed his concerns about inconsistencies he found in the appendix. He gave arguments on where he believed the code should be tweaked.

Chairman Doug England closed the public comment portion of the hearing.

There was a discussion among the Commissioners concerning the appendix. Questions were asked of both Mr. Walker and Staff.

### **MOTION:**

Motion made by Commissioner Ed Martinez, seconded by Commissioner Joel Walinski, to continue the hearing until the April 27, 2022 Planning Commission meeting.

Vote – unanimous

Motion carries.

### **NEW BUSINESS:**

#### **Public Hearing CPA 22-027 CIP Text Amendment**

Assistant Director, Catherine Lorbeer, presented the application. Staff recommends approval.

County Administrator, Cathy Mulhall, provided additional information.

Questions and comments from the Commissioners were addressed by both Ms. Lorbeer and Ms. Mulhall.

Chairman Doug England opened the hearing for public comment. There were none.

Chairman Doug England closed the public portion of the hearing.

### **MOTION:**

Motion made by Commissioner Vicki Malloy, seconded by Commissioner Ryan Kelso, to approve CPA 22-027 CIP Text Amendment.

Vote – unanimous

Motion carries.

**DISCUSSION, at the CHAIR's DISCRETION:**

Interim Director Chris Young gave an update on the Short-term Rental Permits.

Chairman Doug England announced the departure of Assistant Director Catherine Lorbeer. Appreciation for her contribution, to the department, were expressed by fellow Commissioners.

**ADJOURNMENT**

**Meeting Adjourned at 7:00 pm.**

Next Planning Commission Meeting to be held on March 23, 2022, at 6:00 pm, – a Zoom meeting.

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

DRAFT

## APPENDIX B: CRITICAL AREAS



*Lake Chelan from Stehekin, unknown date*

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## **SECTION 1 PURPOSE AND OBJECTIVES**

The regulations of this chapter are intended to protect critical areas, and satisfy the requirements of the Shoreline Management Act for critical areas protection as provided in WAC 173-26-221 and through the application of the best available science, as determined according to WAC 365-195-900 through 365-195-925 and in consultation with qualified professionals. This chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards.

## **SECTION 2 ESTABLISHMENT OF CRITICAL AREAS**

### **2.1 List of Critical Areas**

Critical areas include (A) Wetlands, (B) Critical aquifer recharge areas, (C) Fish and wildlife conservation areas, (D) Frequently flooded areas, and (E) Geologically hazardous areas, defined in Chapter 8 of the Shoreline Master Program (SMP).

All areas within shoreline jurisdiction meeting the definition of one or more critical areas are hereby designated critical areas and are subject to the provisions of this SMP.

### **2.2 Data Maps**

Critical areas are hereby designated on a series of GIS data maps maintained by Chelan County Community Development. These maps contain the best available graphic depiction of critical areas and will be updated as reliable data becomes available. These maps are for information and illustrative purposes only and are not regulatory in nature.

The critical areas data maps are intended to alert the public of natural features/systems. The presence of a critical area on the data maps is sufficient foundation for the Administrator to require an analysis/report related to a proposed use or development.

## **SECTION 3 INTERPRETATION OF DATA MAPS**

### **3.1 Interpretation of Data Maps**

The Administrator of the Shoreline Master Program is hereby declared the Administrator of these regulations. An affected property owner or other party with standing has a right to appeal an Administrative Determination to the Hearing Examiner using the procedure for appeals found in Chapter 7 of this SMP.

The data maps are to be used as a general guide to the location and extent of critical areas. Critical areas indicated on the data maps are presumed to exist in the locations shown and these critical areas and any associated buffers are protected under the provisions of this chapter and all other applicable provisions of the SMP. The exact location of critical areas shall be determined by the applicant as a result of field investigations performed by qualified professionals using the standards and definitions found in this SMP. All development applications are required to show the boundary(s) of all critical areas and any applicable buffers on a scaled drawing prior to the development application being considered "complete" for processing purposes.

## SECTION 4 EFFECT OF DATA MAPS: APPLICABILITY

### 4.1 Reference maps and inventories

The conclusion by the Administrator that a parcel of land, or a part of parcel of land, proposed for development is within the boundary(s) of one or more designated critical areas, as shown on the data maps, shall serve as cause for additional investigation and analysis to be conducted by the applicant.

Development adjacent to an identified critical areas may require further investigation, analysis and/or review when there is information to determine a potential impact to or from the critical area.

### 4.2 Applicability

- A. When a chapter reference is used, it shall be inclusive of all of Appendix B.
- B. This chapter applies to all development and uses within Chelan County SMP jurisdiction. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the requirements of these regulations.
- C. This chapter classifies and designates critical areas and establishes a process to apply appropriate protection measures for these critical areas in concert with all applicable provisions of the SMP.
- D. Any development authorized to alter the condition of any land, water or vegetation; or to alter or construct any building, structure or improvement shall be in compliance with the requirements of this chapter and the SMP.
- E. Any individual critical area adjoined by another type of critical area shall apply the buffer standards and meet the requirements that provide the most protection of shoreline resources, when consistent with SMA policy.

## SECTION 5 GENERAL PROVISIONS

### 5.1 Permit Approval

- A. The Administrator of the SMP shall not approve any permit or issue any authorization to alter the condition of any land, water or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first ensuring compliance with the requirements of this chapter and the SMP.
- B. Critical area site analysis/reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat.
- C. Any action taken pursuant to this chapter shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. Applicants must first demonstrate an inability to avoid or reduce impacts, before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the ecological functions or values of critical areas.

### 5.2 Qualified Professional

No site analysis/report required by Section 6 of this chapter will be considered complete unless completed by a qualified professional, as defined in Chapter 8 of the SMP.



### 5.3 Surety

If a development proposal is subject to mitigation, maintenance or monitoring plans, an assurance device or surety may be required by the Administrator in accordance with Title 14 of the Chelan County Code.

### 5.4 Site Analysis/Reports

The preparation of site analysis/reports or information and materials required by this Chapter are the responsibility of the applicant.

### 5.5 Applications

The Administrator shall make available to applicants resources and information on the type(s) of critical areas and/or buffers that may be present. Information shall be provided to the applicant on the type of evaluation and site-specific analysis that will be required as a supplement to the application materials necessary to bring the application up to a standard that can be characterized as “complete” and eligible for processing.

If it is determined after the issuance of a permit that the site contains a critical area, the Administrator may revoke the permit pending appropriate review and possible modification of the application.

### 5.6 Fees

The County shall establish fees for filing a critical area review and other services provided by the County as required by this chapter. These fees shall be based on the anticipated sum of direct costs incurred for any individual development or action and may be established as a sliding scale that will recover all of the costs including the enforcement of these code provisions. Basis for these fees shall include, but not be limited to, the cost of engineering and planning review time, cost of inspection time, costs for administration, and any other special costs attributable to the critical area review process.

### 5.7 Administrative Procedures

The administrative procedures followed during the critical area review process shall conform to the standards and requirements of the associated application type provided in Chapter 7 of the SMP.

## 5.8 Critical Areas Overlay District General Provisions and Administration

### 5.8.1 Purpose

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

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

(1) Wetland Areas. Recognize and protect the beneficial functions performed by many wetlands, which include, but are not limited to, providing food, breeding, nesting and/or rearing habitat for fish and wildlife; recharging and discharging ground water; contributing to stream flow during low flow periods; stabilizing stream banks and shorelines; storing storm and flood waters to reduce flooding and erosion; and improving water quality through biofiltration, adsorption, and retention and transformation of

sediments, nutrients, and toxicants. This protection is achieved by regulating land use to avoid adverse effects on wetlands and to maintain the functions and values that wetlands provide to society and the environment.

(2) Frequently Flooded Areas. To protect the important hydrologic functions of the county's one hundred-year floodplains, which include floodways and floodway fringe areas, in order to protect human health and safety and minimize damage to property.

(3) Geologic Hazard Areas. Certain portions of the county are characterized by geologic hazards that may pose a risk to public and private property, human life and safety and the natural systems that make up the environment of the county. These lands are affected by natural processes that make them susceptible to landslides, erosion, earthquake, or snow avalanche. Some geological hazards can be reduced or mitigated by engineering, design, or modified construction so that risks to health and safety are acceptable. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided.

(4) Fish and Wildlife Habitat Conservation Areas. To identify, protect, and maintain the present high quality of Chelan County's fish and wildlife habitat conservation areas.

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

#### **5.8.2 General regulations**

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

- (A) The financial guarantee shall be in a form of a performance assurance surety bond, performance bond, assignment of funds, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the county attorney.
- (B) The financial guarantee shall be at one hundred fifty percent of the cost of uncompleted actions or the estimated cost of restoring the functions and values of the critical area, whichever is greater. The surety shall be based on estimated cost of the mitigation activity including but not limited to clearing and grading, plant materials, plant installation, irrigation, weed management, monitoring, adaptive management, and other costs.
- (C) The financial guarantee shall remain in effect until the county determines, in writing, that the standards bonded for have been met. The financial guarantee shall be held by the county for a minimum of the length of the time specified for monitoring in the plan and shall be released after a request by the applicant and a final inspection, but may be held for longer periods when necessary.
- (D) Public development proposals shall be relieved from having to comply with the financial guarantee requirements of this section if public funds have previously been committed for mitigation, maintenance, or monitoring.

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

(3) Marking and/or Fencing.

- (A) Temporary Markers or Fencing. The outer perimeter of a critical area or buffer, whichever is greater, and the clearing limits identified by an approved permit or authorization shall be marked or fenced in the field in a manner approved by the administrator to prevent unauthorized intrusion and to protect the critical area and buffer from construction activities. Fencing shall be a highly visible and durable protective barrier. The marking or fencing is subject to inspection by the administrator prior to the commencement of permitted land clearing or construction activities and shall be maintained throughout land clearing and construction and shall not be removed until directed by the administrator, or until permanent signs and/or
- (B) Permanent Markers. The administrator may require, as a condition of any permit or variance, that the perimeter of the critical area or buffer, whichever is greater, be permanently identified. If required, this identification shall include permanent metal signs affixed to nontreated wood or metal posts. Sign content and spacing shall be determined by the administrator as necessary to meet the purposes of this section.

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

Protected [specify type] Critical Area

Do Not Disturb

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

ii) The provisions of subsection (3)(B)(i) of this section may be modified as necessary to assure protection of sensitive features or wildlife.

- (C) Permanent Fencing. The administrator shall require permanent fencing where there is a substantial likelihood of intrusion into the critical area or buffer with the development proposal or when domestic grazing animals are present or may be introduced on site. The administrator may also require such fencing when, subsequent to approval of the development proposal, intrusions result in damage to critical areas. Fencing installed as part of a proposed activity or as required in this subsection shall be designed and constructed in a manner that does not interfere with species movements, including fish runs, and shall be constructed in a manner that minimizes impacts to the critical area and buffer functions.

**5.8.3 General critical areas report**

(1) If the administrator determines that the parcel(s) of a proposed land use action is within, likely to be within, or is adjacent to a critical area whose buffers may overlap the proposed action, a critical areas report prepared by a qualified professional specific to each critical area shall be required. The expense of preparing the critical area report shall be borne by the applicant.

(2) The county may retain independent qualified consultants, at the expense of the applicant, to assist in review of critical area reports.

(3) In addition to the requirements specified under each critical area, the written report and the accompanying figures, maps, and plan sheets shall contain the following information, at a minimum:

(A) A site map or set of maps of the project area, including:

- (i) Reference streets and tax parcel property lines (noting the source of the geographic data such as land survey, county GIS data, etc.;
- (ii) Existing and proposed project-related tracts, easements, rights-of-way, utility corridors, internal property/lot lines, and trail corridors;
- (iii) Existing and proposed final contour lines (at the smallest readily available intervals, preferably two-foot or better) if proposing land contour alterations;
- (iv) Existing and proposed built features of the project including structures, fences, roads, impervious surfaces, utilities, mechanical facilities, landscaping, and other built modifications to the existing land conditions;
- (v) Existing and proposed locations of stormwater management and discharge features;
- (vi) Project construction, land disturbance, and clearing limits;
- (vii) Temporary erosion and sediment control best management practices for all vegetation and soil disturbance areas, including utility corridors, stormwater discharge points, and critical areas mitigation sites;
- (viii) All delineated and surveyed critical areas, and their classification, occurring within or adjacent to the proposed project area or tax parcel(s);
- (ix) Standard buffers, proposed buffer modifications with area measurements, and building setback limits for critical areas illustrated in subsection (3)(A)(viii) of this section;
- (x) All existing and/or proposed critical areas mitigation sites; and
- (xi) Location of existing and/or proposed critical area tracts and/or easements.

(B) A written report, including:

- (i) The name and contact information of the landowner and applicant/agent (if different than the landowner);
- (ii) The name, qualifications, and contact information for the primary author(s) of the critical area report;
- (iii) Location information (parcel number(s), address(es), parcel acreages)
- (iv) Narrative of the proposed action and all project-related elements including, but not limited to, utility corridor improvements, stormwater discharge points, grazing and habitat changes, proposed mitigation, and/or other physical activities that will alter the critical areas existing habitat and functions.
- (v) Identification of all local, state, and/or federal permit(s) or regulatory review(s) required for the project;
- (vi) Vicinity map for the project;
- (vii) Description of the project area and surrounding landscape existing conditions;
- (viii) Description of the methodologies and techniques used to identify, delineate, and characterize critical areas, special status species, and the impacts analysis, and the dates of and who conducted the field studies;
- (ix) A statement specifying the accuracy of the report and all assumptions made and relied upon;

(x) Identification and characterization of all critical areas and buffers existing conditions, functions and values, including any functionally isolated conditions on or adjacent to the proposed project area;

(xi) Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc; and

(xii) Tabulated area quantities of each critical area(s) and associated buffers present in or adjacent to the proposed project area(s), and if proposed, the area quantities of proposed impacts and proposed mitigation for each critical area impacted.

#### **5.8.4 Subdivision notation**

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

#### **5.8.5 Noncompliance**

(1) When a critical area or its buffer has been altered in violation of this chapter, all ongoing activity shall stop and the critical area shall be restored. The administrator shall have the authority to issue a “stop-work” order pursuant to Chelan County Code Title 16 to cease all ongoing activity and order restoration, rehabilitation, replacement, or other measures at the owner’s or other responsible party’s expense to compensate for violation of provisions of this chapter. Activity shall not resume until such time as the violation has been corrected and the county determines that the same or similar violation is not likely to reoccur.

(2) If the county determines that a plan for restoration or other measures is required, all activity shall remain stopped until a plan is prepared and approved by the administrator. Such a plan shall be prepared by a qualified professional using the currently accepted scientific principles and shall describe how the actions proposed meet the minimum requirements described in subsection (3) of this section. The administrator may, at the applicant or other responsible party’s expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

(3) Minimum Performance Standards. All of the following minimum performance standards shall be met for the restoration or other required measures of a critical area:

(A) The historic structure, functions, and values of the affected critical area shall be restored, including water quality and habitat functions.

(B) The historic soil types and configuration shall be restored to the extent practicable.

(C) The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration.

(D) Information demonstrating compliance with other applicable provisions of this chapter shall be submitted to the administrator.

(E) All provisions for public health and safety have been addressed.

(4) Site Investigations. The administrator is authorized to make site inspections and take such actions as are necessary to enforce this chapter. The administrator shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

(5) Penalties. Civil fines for violations of these provisions shall be pursuant to Chelan County Code Chapter 16.16. If the wetland or fish and wildlife habitat area affected cannot be restored, monies collected as penalties shall be deposited in a dedicated account for the preservation or restoration of landscape processes and functions in the watershed in which the affected wetland is located. The county may coordinate its preservation or restoration activities with other agencies in the watershed to optimize the effectiveness of the restoration action.

**5.8.6 Incentives**

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

**5.8.7 Education**

- (1) A variety of educational materials are available through the Chelan County natural resource department for private landowners. Chelan County recognizes and encourages community-based educational and service organizations to participate in programs which rehabilitate and/or maintain the quality of streams and other environmentally sensitive areas.  
(2) Applicants have the opportunity of scheduling a preapplication conference through the Chelan County community development department to discuss pending development proposals with applicable reviewing agencies.  
(3) Chelan County supports and encourages training and educational opportunities for staff to facilitate the implementation of this section.

**5.9 FISH AND WILD LIFE HABITAT CONSERVATION AREAS OVERLAY DISTRICT (FWOD)**

**5.9.1 Designation and identification**

- (1) Designation. All areas within the county meeting one or more of the following designations, as identified pursuant to subsection (2) of this section, are considered fish and wildlife habitat conservation areas and are subject to the provisions of this chapter.  
(A) Areas where federal or state endangered, threatened, and sensitive species have a primary association;  
(B) Habitats and species of local importance, as determined locally. Currently, the county has determined that mule deer and elk winter range and migration corridors are habitats of local importance;  
(C) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat. This does not include ponds deliberately designed and created from dry sites, such as canals, stormwater detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation;  
(D) Waters of the state, as identified in subsection (2) of this section;  
(E) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; and

(F) State natural area preserves, natural resource conservation areas, and state wildlife areas.

(2) Identification. The Chelan County community development department will maintain maps to provide information to the public and aid in the administration of this section; however, maps showing known critical areas are only for information and illustrative purposes. Sites that include fish and wildlife habitat conservation areas not mapped shall be subject to the provisions of this section. In the event of a conflict between the information shown on the maps and information shown as a result of field investigations, the latter shall prevail. Maps utilized by Chelan County to identify fish and wildlife habitat conservation areas include the following maps and map databases:

(A) The Washington State Department of Fish and Wildlife Priority Habitats and Species (PHS) and Wildlife Heritage Maps and Database, as amended;

(B) Washington State Department of Fish and Wildlife Salmon Scape Map;

(C) National Wetlands Inventory Maps and Database, as amended;

(D) Chelan County shoreline master program, as amended;

(E) DNR Stream Type Maps for Type S, F, Np, and Ns waters per criteria as set forth in WAC 222-16-031, Interim water typing system, as amended;

(3) Site Assessment. The administrator may require the applicant to conduct a site assessment to confirm the presence or absence of a fish and wildlife habitat conservation area. A site assessment must be performed by a qualified professional biologist. If the field investigation concludes that the site is not within and/or would not impact a fish and wildlife habitat conservation area or buffer, compliance with this chapter is not required.

(4) Agency Referral. Referral may be necessary to determine if compliance with this chapter is required. The administrator may request assistance from pertinent agencies, including but not limited to Washington State Department of Fish and Wildlife, to review the results of a site assessment, designation, or other information as requested. If agency assistance is desired, the administrator will mail a specific notice to those agencies. Agencies must submit written comments to the administrator not later than thirty days from the date of the mailing of the notice in order to receive consideration.

(5) Habitats and Species of Local Importance Designation.

(A) In order to nominate an area, species, or corridor to the category of locally important, an individual or organization must:

(i) Demonstrate a need for special consideration based on:

(a) Declining population;

(b) Sensitivity to habitat manipulation;

(c) Commercial, recreational, cultural, or other special value; or

(d) Maintenance of connectivity between habitat areas.

(ii) Propose relevant management strategies considered effective and within the scope of this chapter;

(iii) Identify effects on property ownership and use; and

(iv) Provide a map showing the species or habitat location(s).

(B) Submitted proposals shall be reviewed by the county and may be forwarded to local, state, federal, and/or tribal agencies or experts for comments and recommendations regarding accuracy of data and effectiveness of proposed management strategies.

(C) If the proposal is found to be complete, accurate, and consistent with the purposes and intent of this chapter and the various goals and objectives of the Chelan County Comprehensive Plan, the Growth Management Act, the Shoreline Management Act, and the critical areas ordinance, the board of county commissioners will hold a public hearing to solicit comment. Approved nominations will then be processed as amendments to this ordinance in conformance with Chelan County Code Chapter 14.13, in

order to be considered as designated locally important habitats, species, or corridors, and if approved will be subject to the provisions of this chapter.

## **SECTION 6 CRITICAL AREAS & DEVELOPMENT STANDARDS**

Critical areas are subject to the following minimum requirements for classification, buffers and development requirements.

### **6.1 Wetlands**

Wetlands are defined within Chapter 8 of the SMP. They are mapped by Chelan County using best available science and data. The GIS maps do not provide a conclusive or definitive indication of wetland presence or extent. Other wetlands may exist that do not appear on the maps and some wetlands that appear on the maps may not meet all of the wetland designation criteria.

#### **6.1.1 WETLANDS OVERLAY DISTRICT (WOD)**

##### **6.1.2 Wetland designation and identification**

(1) All wetlands in Chelan County meeting the definition of wetlands in RCW 36.70A.030 are designated wetlands.

(2) Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements in accordance with Chapter 173-22 WAC. All areas within the county meeting wetland identification procedures are hereby designated critical areas and are subject to the provisions of this chapter. Wetland delineations are valid for five years.

(3) The approximate location and extent of wetlands in the county may be displayed on the National Wetlands Inventory (NWI) Maps and the Chelan County wetland inventory map, as it is developed. Wetland maps, along with other supportive documentation, are to be used as a guide only to the general location and extent of probable wetlands. NWI maps were prepared through photointerpretation of high-altitude aerial photography with limited ground truthing. Therefore, there are wetlands that are not shown on wetland inventory maps and also wetland areas mapped that may not meet wetland determination criteria. Each proposal application must be evaluated by the administrator to determine the requirement of a site-specific wetland delineation/characterization. In the event that wetland designations shown on resource maps conflict with the criteria set forth in this chapter, the criteria set forth shall take precedence.

(4) Wetland delineation/characterization shall be performed by a qualified professional wetland biologist/consultant and shall be prepared according to Chapter 173-22 WAC.

##### **6.1.3 Regulated activities**

(1) For any regulated activity, a critical areas report may be required to support the requested activity.

(2) The following activities are regulated if they occur in a regulated wetland and/or its buffer:

- (A) The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind.
- (B) The dumping of, discharging of, or filling with any material.
- (C) The draining, flooding, or disturbing the water level or water table.
- (D) Pile driving.
- (E) The placing of obstructions.
- (F) The construction, reconstruction, demolition, or expansion of any structure.



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

**6.1.4 Wetland classification and rating**

- (1) Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Eastern Washington: 2014 Update (Ecology Publication No. 14-06-030, or as revised and approved by Ecology), which contains the definitions and methods for determining whether the criteria below are met.
- (A) Category I wetlands are:
  - (i) alkali wetlands;
  - (ii) wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR;
  - (iii) bogs and calcareous fens;
  - (iv) mature and old-growth forested wetlands over one-quarter acre with slow-growing trees;
  - (v) forests with stands of aspen; and (vi) wetlands that perform many functions very well (scores between twenty-two and twenty-seven points).  
These wetlands are those that
    - (a) represent a unique or rare wetland type; or
    - (b) are more sensitive to disturbance than most wetlands; or
    - (c) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or
    - (d) provide a high level of function.
- (B) Category II wetlands are:
  - (i) forested wetlands in the floodplains of rivers;
  - (ii) mature and old-growth forested wetlands over one-quarter acre with fast-growing trees;
  - (iii) vernal pools; and
  - (iv) wetlands that perform functions well (scores between nineteen and twenty-one points). These wetlands are difficult, though not impossible, to replace and provide high

levels of some functions. These wetlands occur more commonly than Category I wetlands but still need a relatively high level of protection.

(C) Category III wetlands have a moderate level of functions (scores between sixteen and eighteen points). These wetlands can be often adequately replaced with a well-planned mitigation project. Wetlands scoring between sixteen and eighteen points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

(D) Category IV wetlands have the lowest level of functions (scores fewer than sixteen points) and are often heavily disturbed. These are wetlands that we should be able to replace, and in some cases be able to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions and also need to be protected.

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

**6.1.5 Wetland buffers**

(1) Wetland buffer zones shall be required for all activities contiguous to wetlands.

(2) Buffer Requirements. The following standard buffer widths in Table 1 have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional wetland biologist/consultant using the Washington State Wetland Rating System for Eastern Washington: 2014 Update (Ecology Publication No. 14-06-030, or as revised and approved by Ecology), and by the level of impact from the proposed land use (Table 2).

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

(4) The buffer widths in Table 1 assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided.

Table 1. Standard Wetland Buffer Requirements

<u>Wetland Category</u>	<u>Wetland Type</u>	<u>Level of Land Use Impact</u>	<u>Buffer Width (in feet) Based on Habitat Score</u>		
			<u>3—5</u>	<u>6—7</u>	<u>8—9</u>
<u>I</u>	<u>Based on Total Score; Forested Wetlands</u>	<u>Low</u>	<u>50</u>	<u>75</u>	<u>100</u>
		<u>Moderate</u>	<u>75</u>	<u>110</u>	<u>150</u>
		<u>High</u>	<u>100</u>	<u>150</u>	<u>200</u>
	<u>Bogs; Wetlands of High Conservation Value</u>	<u>Low</u>	<u>125</u>		
		<u>Moderate</u>	<u>190</u>		
		<u>High</u>	<u>250</u>		

<u>Wetland Category</u>	<u>Wetland Type</u>	<u>Level of Land Use Impact</u>	<u>Buffer Width (in feet) Based on Habitat Score</u>		
			<u>3—5</u>	<u>6—7</u>	<u>8—9</u>
II	<u>Alkali Wetlands</u>	<u>Low</u>	<u>100</u>		
		<u>Moderate</u>	<u>150</u>		
		<u>High</u>	<u>200</u>		
	<u>Based on Total Score; Riparian Forest Wetlands</u>	<u>Low</u>	<u>50</u>	<u>75</u>	<u>100</u>
		<u>Moderate</u>	<u>75</u>	<u>110</u>	<u>150</u>
		<u>High</u>	<u>100</u>	<u>150</u>	<u>200</u>
<u>Vernal Pools</u>	<u>Low</u>	<u>100</u>			
	<u>Moderate</u>	<u>150</u>			
	<u>High</u>	<u>200</u>			
III	<u>All Types of Wetlands</u>	<u>Low</u>	<u>40</u>	<u>75</u>	<u>Use Category II Buffer Widths</u>
		<u>Moderate</u>	<u>60</u>	<u>110</u>	
		<u>High</u>	<u>80</u>	<u>150</u>	
IV	<u>All Types of Wetlands</u>	<u>Low</u>	<u>25</u>		
		<u>Moderate</u>	<u>40</u>		
		<u>High</u>	<u>50</u>		

Table 2. Land Use Impact

<u>Level of Impact from Proposed Land Use</u>	<u>Types of Land Uses</u>
<u>High</u>	<ul style="list-style-type: none"> <li>• <u>Commercial</u></li> <li>• <u>Mixed-use developments</u></li> <li>• <u>Industrial</u></li> <li>• <u>Institutional</u></li> <li>• <u>Retail sales</u></li> <li>• <u>Residential (more than 1 unit/acre)</u></li> <li>• <u>Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, cannabis farms, outdoor cannabis production,</u></li> </ul>

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

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

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

(6) Buffer Modifications. The administrator may allow a one-time administrative buffer modification using one of the following tools:

(A) Impact Minimization Measures. The buffer widths for proposed high impact land uses can be reduced to the buffer widths for moderate impact land uses under the following conditions:

(i) For wetlands that score six points or more for habitat function:

(a) A relatively undisturbed, vegetated corridor at least one hundred feet wide is protected between the wetland and any other priority habitats as defined by the Washington State Department of Fish and Wildlife, where available. The corridor must be protected for the entire distance between the wetland and the priority habitat by some type of legal protection such as a conservation easement.

(b) Measures to minimize the impact of different land uses, such as the examples in Table 3, are applied.

(ii) For wetlands that score three to five habitat points, only application of the measures in Table 3 are required to reduce the buffer width to those required for moderate impact land uses.

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

Table 3. Examples of measures to minimize impacts to wetlands and reduce high impact buffer widths

<u>Examples of Measures to Minimize Impacts</u>	
<u>Lights</u>	<u>• Direct lights away from wetland</u>
<u>Noise</u>	<u>• Locate activity that generates noise away from wetland</u>
<u>Toxic runoff</u>	<u>• Route all new, untreated runoff away from wetland</u>

<u>Examples of Measures to Minimize Impacts</u>	
	<p><u>while ensuring wetland is not dewatered</u></p> <ul style="list-style-type: none"> <li>• <u>Establish covenants limiting use of pesticides within 150 ft of wetland</u></li> <li>• <u>Apply integrated pest management</u></li> </ul>
<u>Stormwater runoff</u>	<ul style="list-style-type: none"> <li>• <u>Retrofit stormwater detention and treatment for roads and existing adjacent development</u></li> <li>• <u>Prevent channelized flow from lawns that directly enters the buffer</u></li> </ul>
<u>Change in water regime</u>	<ul style="list-style-type: none"> <li>• <u>Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns</u></li> </ul>
<u>Pets and human disturbance</u>	<ul style="list-style-type: none"> <li>• <u>Use privacy</u></li> </ul>

<u>Examples of Measures to Minimize Impacts</u>	
	<p><u>fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion</u></p>
	<ul style="list-style-type: none"> <li>• <u>Place wetland and its buffer in a separate tract or within dedicated open space or easement in a subdivision, or protect with a conservation easement, where available</u></li> </ul>
<u>Dust</u>	<ul style="list-style-type: none"> <li>• <u>Use best management practices to control dust</u></li> </ul>

(B) Buffer Averaging for Wetland Protection. Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:

- (i) The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a “dual-rated” wetland with a Category I area adjacent to a lower-rated area;
- (ii) The buffer is increased adjacent to the higher-functioning area of habitat or more-sensitive portion of the wetland and decreased adjacent to the lower-functioning or

less-sensitive portion as demonstrated by a critical areas report from a qualified professional wetland biologist/consultant;

(iii) The total area of the buffer after averaging is equal to the area required without averaging; and

(iv) The buffer at its narrowest point is never less than seventy-five percent of the required buffer width.

(C) Buffer Averaging for Reasonable Use. Buffer averaging to allow reasonable use of a parcel may be permitted when all of the following are met:

(i) There are no feasible alternatives to the site design that could be accomplished without buffer averaging;

(ii) The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report from a qualified wetland professional;

(iii) The total buffer area after averaging is equal to the area required without averaging; and

(iv) The buffer at its narrowest point is never less than seventy-five percent of the required buffer width.

(D) Buffer Reduction. For those legally created lots, tracts, and parcels that satisfy the criteria outlined below, the administrator may allow a reduction to the standard buffer widths. The buffer widths may be reduced by no more than twenty-five percent, and in no case shall the buffer width be less than twenty-five feet. The buffer reduction granted shall be the minimum necessary to afford relief to address hardship issues. All of the following criteria must be satisfied:

(i) The strict application of the bulk, dimensional or performance standards set forth in these requirements significantly interferes with reasonable use of the property;

(ii) The hardship described in subsection (6)(D)(i) of this section is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of this title, and not, for example, from deed restrictions or the applicant's own actions;

(iii) There are no feasible alternatives to the site design that could be accomplished with the impact minimization measures or buffer averaging provisions above; and

(iv) The reduced buffer will not result in degradation of the wetland's functions and values, or includes mitigation measures to address all impacts, as demonstrated by a wetlands report from a qualified professional wetland biologist/consultant; and

(v) That the public interest will not suffer substantial detrimental effect.

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

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

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

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



(11) Impacts to Buffers. Requirements for the compensation for impacts to buffers are outlined in Section 6.1.7.

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

(A) Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

(B) Passive Recreation. Passive recreation facilities designed and in accordance with an approved critical area report, including:

(i) Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent of the wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five feet in width for pedestrian use only. Raised boardwalks utilizing nontreated pilings may be acceptable.

(ii) Wildlife-viewing structures.

(iii) Educational and scientific research activities.

(C) Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.

(D) The harvesting of wild crops, naturally existing within the wetland, in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

(E) Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.

(F) Enhancement of a wetland buffer through the removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

(G) Repair and maintenance of non-conforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.

#### **6.1.6 Wetland reports**

A wetlands report shall be prepared by a qualified professional wetland biologist/consultant when a development activity is proposed in or will impact a wetland or buffer. The expense of preparing the wetland report shall be borne by the applicant. The county may retain independent qualified consultants, at the expense of the applicant, to assist in review of reports. In addition to report elements required by Section 5.8.3, a written wetland report and the accompanying figures and/or plan sheets shall contain the following information, at a minimum:

(1) The written report shall include at a minimum:

(A) For each wetland identified on-site and within two hundred fifty feet of the project area, provide: the wetland rating, including a description of and score for each function, per Section 6.1.4; required buffers; hydrogeomorphic classification; wetland acreage from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Tabulate acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site. Methods for the location and mapping of wetland boundaries and wetland areas shall be consistent with common wetland delineation practice standards and meet the approval of the administrator.

(B) An evaluation of the existing functions and habitat value of each wetland and adjacent buffer. Include reference for the method used and data sheets.

(C) An explanation of the proposed impact actions, including tabulating the area quantity (square feet or acres) of direct impacts to wetlands and wetland buffers based on the field delineation and survey.

(D) A discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.

(2) A copy of the site plan sheet(s) for the project must be included with the written report and must include, at a minimum:

(A) Maps (to scale) overlaid on current aerial photos depicting delineated and surveyed wetlands and required buffers in the project area, including buffers for off-site critical areas that may extend into the project area; the development proposal; other critical areas; grading and clearing limits for all land disturbing project elements; areas of proposed impacts to wetlands and/or buffers (include square footage estimates); and areas of proposed mitigation.

(B) Hydrologic analysis and mapping showing patterns of surface water movement and known subsurface water movement into, through, and out of the project area.

(C) Location of all sample plots, test holes, and hydrologic monitoring stations, numbered to correspond with flagging in the field and field data sheets.

(D) A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including intrusion into the buffers of any critical areas. The written report shall contain an assessment of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project.

### **6.1.7 Wetland mitigation**

(1) Requirements for Compensatory Mitigation.

(A) Compensatory mitigation for alterations to wetlands or buffers shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State—Part 2: Developing Mitigation Plans--Version 1 (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised), and Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington) (Publication No. 10-06-07, November 2010).

(B) Mitigation ratios shall be consistent with subsection (7) of this section.

(C) Mitigation requirements may also be determined using the credit/debit tool described in Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report (Ecology Publication No. 11-06-015, August 2012 or as revised), consistent with subsection (9) of this section.

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

- (A) The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington state watershed assessment plan or protocol; or
- (B) Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the county, such as replacement of historically diminished wetland types.
- (C) Buffers shall be provided for wetland mitigation associated with the mitigated wetland category.

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

(A) Wetland Mitigation Banks. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the mitigation bank instrument. Use of credits from a wetland mitigation bank certified under Chapter 173-700 WAC is allowed if:

- (i) The administrator determines that it would provide appropriate compensation for the proposed impacts;
- (ii) The impact site is located in the service area of the bank;
- (iii) The proposed use of credits is consistent with the terms and conditions of the certified mitigation bank instrument; and
- (iv) Replacement ratios for projects using bank credits is consistent with replacement ratios specified in the certified mitigation bank instrument.

(B) In-Lieu Fee Mitigation. Credits from an approved in-lieu fee program may be used when all of the following apply:

- (i) The approval authority determines that it would provide environmentally appropriate compensation for the proposed impacts;
- (ii) The proposed use of credits is consistent with the terms and conditions of the approved in-lieu fee program instrument;
- (iii) Projects using in-lieu fee credits shall have debits associated with the proposed impacts calculated by the applicant's qualified professional wetland biologist/consultant using the credit assessment method specified in the approved instrument for the in-lieu fee program; and
- (iv) The impacts are located within the service area specified in the approved in-lieu fee instrument.

(C) Permittee-Responsible Mitigation. In this situation, the permittee performs the mitigation after the permit is issued and is ultimately responsible for implementation and success of the mitigation. Permittee-responsible mitigation may occur at the site of the permitted impacts or at an off-site location within the same watershed. Permittee-responsible mitigation shall be used only if the applicant's qualified professional wetland biologist/consultant demonstrates to the approval authority's satisfaction that the proposed approach is ecologically preferable to use of a bank or in-lieu fee program, consistent with the criteria in this section.

(4) Types of Compensatory Mitigation. Mitigation for lost or diminished wetland and buffer functions shall rely on a type listed below in order of preference. A lower-preference form of mitigation shall be used only if the applicant's qualified professional wetland biologist/consultant demonstrates to the

approval authority's satisfaction that all higher-ranked types of mitigation are not viable, consistent with the criteria in this section.

(A) Restoration. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into:

(i) Reestablishment. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Reestablishment results in a gain in wetland acres (and functions). Activities could include removing fill material, plugging ditches, or breaking drain tiles.

(ii) Rehabilitation. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain.

(B) Establishment (Creation). The manipulation of the physical, chemical, or biological characteristics of a site to develop a wetland on an upland or deepwater site where a wetland did not previously exist. Establishment results in a gain in wetland acres. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species.

(i) If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the approval authority may authorize creation of a wetland and buffer upon demonstration by the applicant's qualified professional wetland biologist/consultant that:

(a) The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that creation of a wetland at the site will not likely cause hydrologic problems elsewhere;

(b) Adjacent land uses and site conditions do not jeopardize the viability of the proposed wetland and buffer (e.g., due to the presence of invasive plants or noxious weeds, stormwater runoff, noise, light, or other impacts); and

(c) The proposed wetland and buffer will eventually be self-sustaining with little or no long-term maintenance.

(C) Enhancement. The manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Activities typically consist of planting vegetation, controlling non-native or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these activities. Applicants proposing to enhance wetlands or associated buffers shall demonstrate how the proposed enhancement will increase the wetland's and buffer's functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.

(D) Protection/Maintenance (Preservation). Removing a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This includes the purchase of land or easements, or repairing water control structures or fences. This term also includes activities commonly associated with the term preservation. Preservation does not result in a gain of

wetland acres. Permanent protection of a Category I or II wetland and associated buffer at risk of degradation can be used only if:

(i) The approval authority determines that the proposed preservation is the best mitigation option;

(ii) The proposed preservation site is under threat of undesirable ecological change due to permitted, planned, or likely actions that will not be adequately mitigated under existing regulations;

(iii) The area proposed for preservation is of high quality or critical for the health of the watershed or basin due to its location. Some of the following features may be indicative of high-quality sites:

(a) Category I or II wetland rating (using the wetland rating system for western Washington);

(b) Rare or irreplaceable wetland type (for example, bogs, mature forested wetlands, estuarine wetlands) or aquatic habitat that is rare or a limited resource in the area;

(c) The presence of habitat for priority or locally important wildlife species;

(d) Provides biological and/or hydrological connectivity; or

(e) Priority sites in an adopted watershed plan;

(iv) Permanent preservation of the wetland and buffer will be provided through a conservation easement or tract held by an appropriate natural land resource manager, such as a land trust;

(v) The approval authority may approve other legal and administrative mechanisms in lieu of a conservation easement if it determines they are adequate to protect the site;

(vi) Ratios for preservation in combination with other forms of mitigation generally range from 10:1 to 20:1, as determined on a case-by-case basis, depending on the quality of the wetlands being impacted and the quality of the wetlands being preserved. Ratios for preservation as the sole means of mitigation generally start at 20:1.

(5) Location of Compensatory Mitigation. Compensatory mitigation actions shall generally be conducted within the same sub-drainage basin and on the site of the alteration except when the applicant can demonstrate that off-site mitigation is ecologically preferable. The following criteria will be evaluated when determining whether the proposal is ecologically preferable. When considering off-site mitigation, preference should be given to using alternative mitigation, such as a mitigation bank, an in-lieu-fee program, or advance mitigation.

(A) There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);

(B) On-site mitigation would require elimination of high-quality upland habitat.

(C) Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the altered wetland.

(D) Off-site locations shall be in the same sub-drainage basin unless:

(i) Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the county and strongly justify location of mitigation at another site; or

(ii) Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;

(iii) Fees are paid to an approved in-lieu fee program to compensate for the impacts.

(E) The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland.

(6) Timing of Compensatory Mitigation. It is preferred that compensatory mitigation projects be completed prior to activities that will disturb wetlands. At the least, it is preferred that compensatory mitigation construction shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

(A) The administrator may authorize a one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified professional wetland biologist/consultant as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the administrator.

(B) Bonding according to the provisions of Section 5.8.2 for the cost of uncompleted activities is an acceptable alternative to completion where a contract to complete the work is in force.

(7) Wetland Mitigation Ratios.

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

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

(9) Credit/Debit Method. To more fully protect functions and values, and as an alternative to the mitigation ratios found in the joint guidance "Wetland Mitigation in Washington State Parts I and II" (Ecology Publication No. 06-06-011a-b, Olympia, WA, March, 2006), the administrator may allow mitigation based on the "credit/debit" method developed by the Department of Ecology in "Calculating

Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report” (Ecology Publication No. 11-06-015, August 2012, or as revised).

**6.1.8 Compensatory mitigation plan and monitoring**

(1) Compensatory Mitigation Plan. When a project involves wetland and/or buffer impacts, a compensatory mitigation plan prepared by a qualified professional wetland biologist/consultant shall be required. The expense of preparing the mitigation plan shall be borne by the applicant. The county may retain independent qualified consultants, at the expense of the applicant, to assist in review of the plan. The plan shall meet the following minimum standards:

(A) Wetland Critical Area Report. A critical area report for wetlands must accompany or be included in the compensatory mitigation plan and include the minimum parameters described in Section 6.1.5.

(B) Compensatory Mitigation Report. The report must include a written report and plan sheets that must contain, at a minimum, the following elements. Full guidance can be found in Wetland Mitigation in Washington State—Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised).

(C) The written report must contain, at a minimum:

(i) The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the compensatory mitigation report; a description of the proposal; a summary of the impacts and proposed compensation concept; identification of all the local, state, and/or federal wetland-related permit(s) required for the project; and a vicinity map for the project.

(ii) Description of how the project design has been modified to avoid, minimize, or reduce adverse impacts to wetlands.

(iii) Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding lands uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on Section 6.1.6.

(iv) Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are NOT undertaken (i.e., how would this site progress through natural succession?).

(v) Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas.

(vi) Include illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions.

(vii) A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands.

(viii) A description of the proposed mitigation construction activities and timing of activities.

(ix) Performance standards (measurable standards for years post-installation) for upland and wetland communities, a monitoring schedule, and a maintenance schedule and actions proposed by year.

(x) A discussion of ongoing management practices that will protect wetlands after the development project has been implemented, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands).

(xi) Pursuant to Section 5.8.2 (1), a financial guarantee of the entire compensatory mitigation project, including the following elements, is required: site preparation, plant materials, construction materials, installation oversight, maintenance twice per year for up to five years, annual monitoring field work and reporting, and contingency actions for a maximum of the total required number of years for monitoring. The financial guarantee shall run concurrent with the prescribed monitoring period.

(xii) Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas. Also, existing cross-sections of on-site wetland areas that are proposed to be impacted, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation.

(iii) Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes.

(iv) Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter.

(v) A planting plan for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species by community type, and timing of installation.

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

(A) The project does not meet the performance standards identified in the mitigation plan;

(B) The project does not provide adequate replacement for the functions and values of the impacted critical area;

(C) The project results in unanticipated changes to hydrology of the impacted and/or mitigated wetland;

(D) The project involves establishment of mixed scrub-shrub and forested plant communities, which require longer time for establishment; or

(E) The project involves wetland creation.

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



(4) Advance Mitigation. Mitigation for projects with preidentified impacts to wetlands may be constructed in advance of the impacts if the mitigation is implemented according to federal rules, state policy on advance mitigation, and state water quality regulations consistent with Interagency Regulatory Guide: Advance Permittee—Responsible Mitigation (Ecology Publication No. 12-06-015, Olympia, WA, December 2012).

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

(A) The proposal uses a watershed approach consistent with Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington) (Ecology Publication No. 10-06-07, November 2010).

(B) Creation or enhancement of a larger system of natural areas and open space is preferable to the preservation of many individual habitat areas.

(C) Mitigation according to Section 6.1.7 (4) is not feasible due to site constraints such as parcel size, stream type, wetland category, or geologic hazards.

(D) There is clear potential for success of the proposed mitigation at the proposed mitigation site.

(E) The plan shall contain clear and measurable standards for achieving compliance with the specific provisions of the plan. A monitoring plan shall, at a minimum, meet the provisions in subsection (1) of this section.

(F) The plan shall be reviewed and approved as part of overall approval of the proposed use.

(G) A wetland of a different type may be justified based on regional needs or functions and values; the replacement ratios may not be reduced or eliminated unless the reduction results in a preferred environmental alternative.

(H) Mitigation guarantees shall meet the minimum requirements as outlined in subsection (1)(C)(xi) of this section.

(I) Qualified professionals in each of the critical areas addressed shall prepare the plan.

(J) The county may consult with agencies with expertise and jurisdiction over the critical areas during the review to assist with analysis and identification of appropriate performance measures that adequately safeguard critical areas.

### **6.1.1 Wetland Delineations**

Wetlands shall be identified and delineated by a qualified wetlands professional in accordance with the most current approved federal wetland delineation manual and applicable regional supplements. All areas within the County meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this Chapter. Wetland delineations are valid for five years; after such date the County shall determine whether a revision or additional assessment is necessary. The Administrator may require the onsite wetland boundary to be surveyed by a qualified professional. This professional shall field stake, flag or mark the onsite wetland boundary to aid in reviewing and finalization of the development proposal. The Administrator may also require an applicant to identify the approximate location or presence of any wetlands within three hundred (300) feet of a proposed development site. Wetlands that occur or extend beyond the boundaries of the development site, onto adjoining properties, do not need to be flagged or formally delineated but their general location must be disclosed in order to assess wetland buffer impacts.

**6.1.2 Categorization and rating**

Wetlands shall be rated based on categories that reflect the functions and values of each wetland. Wetlands shall be identified, rated, categorized, and delineated by a qualified wetland professional in accordance with the current version of the Washington State Wetland Rating System for Eastern Washington, the procedure outlined in WAC 173-22-035, and the appropriate rating forms approved by the Washington State Department of Ecology.

These categories are generally defined as follows:

A. Category I wetlands: Category I wetlands are those that represent a unique or rare wetland type, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible or too difficult to replace within a human lifetime, and provide a high level of functions. The following types of wetlands are Category I: (i) Alkali wetlands; (ii) Wetlands that are identified by scientists of the Washington Department of Natural Resources Natural Heritage Program as high quality, relatively undisturbed wetlands, or wetlands that support state Threatened or Endangered plant species; (iii) Bogs; (iv) Mature and old growth forested wetlands; (v) Forest wetlands with stands of Aspen; and, (vi) Wetland scoring between twenty two and twenty seven (22-27) points in the Eastern Washington Wetland Rating System.

B. Category II wetlands: Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection. Category II wetlands include: (i) Forested wetlands in the floodplains of rivers; (ii) Mature and old growth forested wetlands with native fast growing trees; (iii) Vernal pools; and, iv. Wetlands scoring between nineteen and twenty one (19-21) points in the Eastern Washington Wetland Rating System.

C. Category III wetlands are often smaller, less diverse and/or more isolated from other natural resources in the landscape than Category II wetlands. Category III wetlands include: i. Vernal pools that are isolated; and ii. Wetlands scoring between sixteen and eighteen (16-18) points in the Eastern Washington Wetland Rating System.

D. Category IV wetlands have the lowest levels of functions, scoring between nine and fifteen (9-15) points in the Eastern Washington Wetland Rating System, and are often heavily disturbed. These are wetlands that should be able to be replaced, and in some cases improved. These wetlands may provide some important functions, and also need to be protected.

**6.1.3 Wetland Buffers and Regulations**

**6.1.3.1 Buffer widths**

Buffers shall be established and maintained to protect all regulated wetlands. The minimum buffers for wetlands are listed below. The buffer shall not be altered except as authorized by this Program; provided that such alterations meet all other standards for the protection of regulated wetlands. Buffers are measured horizontally in all directions from the regulated wetland edge as marked in the field.

The following buffer widths have been established in accordance with the best available science. They are based on the category of wetland and the intensity of the impacts from proposed land use. Different land uses that can cause these levels of impact are listed in Table XX.

Table 1

Category of Wetland	Land Use with Low Impact	Land Use with Moderate Impact	Land Use with High Impact
I	125 ft	190 ft	250 ft

<u>II</u>	<u>100 ft</u>	<u>150 ft</u>	<u>200 ft</u>
<u>III</u>	<u>75 ft</u>	<u>110 ft</u>	<u>150 ft</u>
<u>IV</u>	<u>25 ft</u>	<u>40 ft</u>	<u>50 ft</u>

Table 2

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

**6.1.3.2. ~~Wetland buffer condition~~**

Wetland buffer areas shall be retained in a natural condition or may be improved to enhance buffer functions and values. Where buffer disturbance is allowed pursuant to this Chapter, revegetation with native vegetation shall be required. Alterations of the buffer that are not associated with an allowed shoreline use or development shall be prohibited.

**6.1.3.3. Multiple buffers**

In the event that buffers for any shorelines and/or critical areas are contiguous or overlapping, the landward most edge of all such buffers shall apply.

**6.1.3.4. ~~Interrupted buffer~~**

When a wetland buffer contains an existing legally established public road or private access road, the Administrator may allow development on the landward side of the road provided that the development will not have a detrimental impact to the wetland. The applicant may be required to provide a wetland critical areas report to describe the potential impacts. In determining whether a critical areas report is

necessary, the Administrator may consider the hydrologic, geologic, and/or biological habitat connection potential and the extent and permanence of the buffer interruption.

#### **6.1.3.5. ~~Buffers of restored wetlands~~**

~~The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.~~

#### **6.1.3.6. ~~Buffer averaging~~**

~~The Administrator may allow averaging of the standard wetland buffer widths when necessary to accommodate a single family residence or residential development subdivision. With buffer averaging, the buffer width is reduced in one location and increased in another location to maintain the same overall buffer area and level of function.~~

Proposals for buffer averaging or reduction shall meet the following conditions:

- A. ~~The buffer has not been averaged or reduced by any prior actions administered; and,~~
- B. ~~No feasible site design could be accomplished without buffer averaging; and,~~
- C. ~~The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and that wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places; and,~~
- D. ~~An approved critical area report demonstrates that the averaging or reduction will not adversely impact wetland function and values; and,~~
- E. ~~The minimum width of the buffer at any given point is at least fifty percent (25%) of the required buffer or twenty five (25) feet, whichever is greater; and~~
- F. ~~Any area that is added to the buffer is well vegetated and, when appropriate, separated and screened from incompatible land uses such as parking lots, commercial or industrial uses or high intensity uses. The Administrator may require vegetation enhancement if needed to ensure this criterion is met.~~

#### **6.1.3.7 Permitted buffer uses**

The following uses may be permitted within a wetland buffer without a variance; provided they are not prohibited by any other applicable law, are consistent with the provisions of this SMP, and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland, including wetland functions and values:

- A. ~~Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.~~
- B. ~~Trails associated with a residential use.~~
- C. ~~Passive recreation facilities designed in accordance with an approved ~~critical area report,~~ including:
 
  - ~~1. Walkways and trails constructed with a surface that is not ~~impermeable to water. Raised boardwalks utilizing non-treated pilings may be acceptable; and~~~~
  - ~~2. Wildlife viewing structures.~~~~
- D. ~~Stormwater management facilities, limited to stormwater dispersion ~~facilities, outfalls and bioswales, may be provided that:~~
  - ~~1. No other location is feasible; and~~
  - ~~2. The location of such facilities will not degrade the functions or values of the wetland.~~~~

### **6.1.3.8 Wetland compensatory mitigation**

Proposed activities or uses that would impact a wetland must follow the mitigation sequencing requirements of Section 4.2 of the SMP. Wetland impacts may be allowed when there is no reasonable alternative site design that would result in less adverse impact to a wetland or its buffer. When a project involves wetland and/or buffer impacts, a compensatory mitigation report, prepared by a qualified professional, shall be required. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State—Part 2: Developing Mitigation Plans—Version 1, (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised), and Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington) (Publication #10-06-07, November 2010). All wetland impacts shall comply with these compensatory mitigation requirements:

- A. Department of Ecology's Debit/Credit tool; or
- B. Compensatory mitigation is required for all alterations to wetlands or their buffers, except for buffer averaging when done in accordance with this Section.
- C. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:
  1. Restoring and/or rehabilitating filled or altered wetlands to their original or near-original condition.
  2. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.
  3. Enhancing significantly degraded wetlands in combination with restoration or creation.
- D. Activities and uses within Category I wetland shall be limited to the following:
  1. An existing public facility that must be expanded or extended into the wetland;
  2. Utility construction or maintenance, where there is no other site that can serve the utility's function; or
  3. Development associated with an approved variance that allows the impact.
- E. Mitigation for lost or affected functions shall replace functions affected by the alteration and shall provide equal or greater functions compared to the impacted wetland.
- F. Mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
- G. The Administrator may authorize a one-time temporary delay, up to one hundred twenty calendar days, in completing minor construction and landscaping when environmental conditions could produce a high probability of failure or significant construction difficulties. The request for the temporary delay must include a written justification that documents the environmental constraints which preclude implementation of the mitigation plan. The justification must be verified and approved by the Administrator and include a financial guarantee.
- H. Mitigation ratios shall be used when impacts to wetlands cannot be avoided and under the following criteria:

- 1. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.
- 2. Compensatory mitigation shall restore, create, rehabilitate or enhance equivalent or greater wetland functions.
- 3. The ratios shall apply to mitigation that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success.
- 4. Remedial actions resulting from unauthorized alterations are restoration.
- 5. These ratios do not apply to the use of credits from a certified wetland mitigation bank or in-lieu fee program. When credits from a certified bank or in-lieu fee program are used, replacement ratios should be consistent with the requirements of the bank's/program's certification.

**Compensatory mitigation ratios**

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

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

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

<sup>3</sup> Actions which provide gains in only a few functions. Enhancement actions often focus on structural or superficial improvements to a site and generally do not address larger scale environmental processes.

<sup>3</sup> Compensatory mitigation for vernal pool impacts must be seasonally ponded wetland area(s).

**6.2 Critical Aquifer Recharge Areas**

**6.2.1 Aquifer Recharge Areas Overlay District (AROD)**

**6.2.2 Classification**

(1) Classification is based on an evaluation of the aquifer vulnerability defined as the combination of potential for contaminant loading of a proposed land use, and the susceptibility of aquifer to contamination at the proposed site.

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

**6.2.3 Designation**

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

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

**6.2.4 Procedure.**

(1) An applicant seeking to develop property which requires a development permit, not otherwise exempted from the requirements of this chapter, shall submit with the application a certified statement, on a form provided by the Chelan County community development department, which lists criteria (5)(A) through (5)(D), (6), and (7) as set forth in Section 6.2.5 and indicate whether the criteria apply or do not apply to the site or development. Any development application that fails to contain this statement or fails to indicate whether any one of the criteria apply or do not apply shall be rejected and only accepted upon resubmission of the completed statement. "Unknown" or similar responses will not be accepted.

(2) If the administrator determines the development meets one or more of criteria (1) through (4) of Section 6.2.5, or if the administrator determines the development meets criterion (5) of Section 6.2.5 and the applicant indicates the development meets one or more of criteria (5)(A) through (5)(D) of Section 6.2.5, or if the applicant indicates the development meets one or more of criteria (6) or (7) of Section 6.2.5, the department shall require a hydrogeologic evaluation as described in Section 6.2.6. If the development has a medium or high vulnerability rating, the development shall be subject to the performance standards of Section 6.2.7.

(3) If the administrator determines that criteria (1) through (5) of Section 6.2.5 do not apply to the development and an applicant's statement asserts that criteria (6) and (7) of Section 6.2.7 do not apply to the development, the administrator will accept the statement and proceed with the permitting or approval process, except if the administrator has or obtains information prior to the permit or approval being finalized, which clearly establishes the applicant's statement is incorrect. In which case, the applicant will be advised in writing of the inconsistent information and advised to either (A) provide an amended statement adding the evaluation criteria as being applicable and complete a hydrogeologic evaluation of the development pursuant to Section 6.2.6, or (B) present sufficient countering information clearly establishing that the basis for the department's concern is incorrect. If the applicant selects to proceed under (B), upon receipt of the applicant's information, the administrator shall review the information and obtain whatever additional assistance may be required to resolve the issue. The final determination as to whether a determination of vulnerability is required shall be made by the administrator.

(4) Development proposals for a single-family residential dwelling, accessory dwelling unit, or accessory building that is connected to a public sewer system or has a septic permit approved by the Chelan-Douglas health district shall be exempt from hydrogeologic evaluation under Section 6.2.6.

**6.2.5 Evaluation criteria.**

The administrator shall require an aquifer vulnerability evaluation for any development permit, not otherwise exempted from this chapter, if the site or development meets one of criteria (1) through (7) below:

- (1) Within a wellhead protection area designated under WAC 246-290-135;
- (2) Within a critical aquifer recharge area mapped and identified by a qualified groundwater professional;
- (3) Within a sole source aquifer recharge area designated pursuant to the Federal Safe Drinking Water Act;
- (4) Within an area established for special protection pursuant to a groundwater management program, Chapters 90.44, 90.48 and 90.54 RCW, and Chapters 173-100 and 173-200 WAC;
- (5) The site contains highly permeable soils, which include soil types 1, 2 and 3 under WAC 246-272A-0220, Table V or soils mapped by U.S. Department of Agriculture Natural Resources Conservation Service as having saturated hydraulic conductivity (Ksat) classification of Moderately High or identified as Hydrologic Soil Group "A" and:
  - (A) The site will be utilized for hazardous substance (defined in Chapter 70.105 RCW) processing, storage or handling in applications or quantities larger than is typical of household use; or
  - (B) The site is currently or will be utilized for commercial or industrial activities listed in the U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index that can be found in Appendix A to Department of Ecology's Critical Aquifer Recharge Area Guidance Document; or
  - (C) The development involves a major subdivision and includes present or future plans to construct dwelling units that will not be connected to a public sewer system and any of the lots are less than one net acre in size; or
  - (D) The proposed commercial and industrial site is not on a public sewer system and the main structure exceeds four thousand square feet;
- (6) The proposed use is as a commercial feedlot, landfill, junkyard, salvage yard, or auto wrecking yard;  
or
- (7) The site will be used for above ground application of sewage or sludge.

**6.2.6 Hydrogeologic evaluation.**

- (1) Development proposals meeting any one of the evaluation criteria under Section 6.2.5 will require hydrogeologic evaluation completed by a qualified groundwater professional in accordance with this section, unless the administrator determines an evaluation is not necessary. A minimum of a tier-one evaluation shall be completed. When required, tier-one and tier-two evaluations may be combined in a single report completed by the same qualified groundwater professional.
- (2) Tier-One Hydrogeologic Evaluation. A tier-one evaluation comprises the first step to determine aquifer vulnerability by providing an assessment of aquifer susceptibility to contamination. A tier-one evaluation report shall include the following:
  - (A) A summary of readily available existing information for the site vicinity, including hydrogeological and other groundwater reports. Cite all references and information used in the evaluation preparation;
  - (B) Hydrogeologic characterization of the aquifer based on readily available existing information including permeability and thickness of the vadose zone, depth to groundwater, presence of confining layers and bedrock, estimated hydraulic conductivity of the saturated zone, and groundwater flow direction and gradient;
  - (C) Review of readily available existing groundwater quality information to characterize existing water quality conditions;



- (D) Confirmation of the applicability of evaluation criteria (1) through (5) under Section 6.2.5 to the site proposed for development;
  - (E) Determination of a rating of low, medium, or high aquifer susceptibility to contamination based on properties of the aquifer as determined by the qualified groundwater professional;
  - (F) Recommendations for further study, including a specific recommendation for a tier-two evaluation when aquifer susceptibility is rated as high, or whether more information is needed to complete an aquifer susceptibility rating;
  - (G) If, in the opinion of the groundwater professional, a tier-two evaluation is not necessary, the tier-one evaluation shall provide recommendations for best management practices and other measures to mitigate probable worse-case scenario release of contaminants.
- (3) Tier-Two Hydrogeologic Evaluation. A tier-two evaluation addresses aquifer vulnerability for subject development proposals. A tier-two evaluation shall be completed for developments meeting criteria (6) or (7) under Section 6.2.5, for sites determined as having an aquifer susceptibility rating of high, as otherwise recommended by a qualified groundwater professional in a tier-one evaluation report, or as directed by the administrator to resolve uncertainty following completion of a tier-one evaluation. A tier-two evaluation report shall include the following:
- (A) All elements of a tier-one evaluation or confirmation of findings from a tier-one evaluation if the evaluations are completed by different qualified groundwater professionals or if five years have passed since the tier-one evaluation was completed;
  - (B) Locations of known land-use activities listed in the U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index located within one thousand feet of the proposed development;
  - (C) Locations of releases of contaminants to the environment reported to Department of Ecology within one thousand feet of the proposed development;
  - (D) Locations of public water supply wells and wellhead protection areas within one half mile of the development proposal and locations of permit-exempt wells within one thousand feet of the proposed development;
  - (E) Locations of surface water bodies and springs within one thousand feet of proposed development;
  - (F) Determination of a rating of low, medium, or high aquifer vulnerability based on aquifer susceptibility and potential for contamination loading resulting from the proposed development as determined by the qualified groundwater professional;
  - (G) For development proposals having medium or high aquifer vulnerability ratings:
    - (i) Discussion of potential impacts to groundwater quality resulting from spills or acute releases of contaminants and long-term loading resulting from proposed activities, including evaluation of probable worse case spill scenario;
    - (ii) Recommendations for further study, including cumulative contaminant loading evaluation and groundwater monitoring;
    - (iii) Recommendations for mitigating measures, including BMPs and spill response planning.
  - (H) Recommendations for further study, or whether more information is needed to complete a vulnerability rating.

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

(1) General. All development regulated by this chapter which has a medium or high aquifer vulnerability rating, as determined by this chapter, shall be required to meet the requirements of this section. These

are considered minimum requirements and additional requirements may be required by the administrator based on review of the tier- one or tier-two hydrogeologic report or other available information.

(2) Application of Aquifer Recharge Area Performance Standards.

(A) Certain residential dwelling units and their accessory uses are exempt under Section 6.2.4 (4).

New residential subdivisions are subject to the provisions of subsection (9) of this section.

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

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

(i) Appropriate standards for approval as applied to development regulated by this chapter shall be the responsibility of the Chelan County community development department and hearing examiner as otherwise described in agency rules.

(ii) Appropriate safeguards, to be included in the design of buildings newly constructed or remodeled, shall be the responsibility of the Chelan County community development department.

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

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

(v) When the occupancy of a building changes, any new commercial or industrial occupant shall not operate without a certificate of occupancy as issued by the Chelan County community development department; such certificate of occupancy is subject to review pursuant to subsection (2)(C) of this section.

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

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

(3) Agricultural Activities. Agricultural activities shall incorporate best management practices concerning waste disposal, fertilizer use, pesticide use, and stream corridor management.

(4) Prohibited Uses. Landfills, junkyards, salvage yards, auto wrecking yards, and feedlots that cannot be mitigated to a low vulnerability are prohibited within designated critical aquifer recharge areas. Landfills are subject to Chapter 173-351 WAC.

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

(6) Commercial, Industrial and Mining Uses.

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

(B) Contingency Plans.

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

- (a) Types of hazardous substances (defined in Chapter 70.105 RCW) and contaminants listed in U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index that would be stored or used for the proposed land use;
  - (b) On-site containment facilities designed to handle accidental releases of materials identified in subsection (6)(B)(i)(a) of this section;
  - (c) Spill response and notification procedures.
- (C) Changes in occupancy of an existing site and/or expansions of existing activities are subject to complete evaluation by the county under the provisions of this chapter.
- (D) All activities listed in U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index shall only be approved as conditioned so that:
  - (i) Facilities will be designed and built so that any spilled or leaked materials are contained on-site; and
  - (ii) Facilities will be designed and built so that any spilled or leaked materials cannot infiltrate into the ground; and
  - (iii) No permanent disposal of any waste containing critical materials shall be allowed on-site.
- (E) Commercial or industrial activities listed in U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index shall have specially designed and installed storm runoff drainage facilities in areas where spills might occur. Such facilities shall be designed and installed to:
  - (i) Prevent the commingling of storm runoff and critical materials spills; and
  - (ii) Enhance spill cleanup procedures.
- (F) All mining activities shall comply with current Washington Department of Natural Resources requirements for surface mining and Washington Department of Ecology's Sand and Gravel General Permit. Mining activities in areas determined to have a medium or high vulnerability shall submit a study completed by a qualified groundwater professional demonstrating that the proposed activity will not cause contaminants to enter the aquifer and that the proposed activity will not adversely affect the recharging of the aquifer. The administrator shall determine whether these conditions are adequately addressed in the tier-two hydrogeologic evaluation and require additional reporting as needed.
- (7) Utilities. Utility facilities shall be reviewed and approved consistent with the requirements of subsection (6) of this section.
- (8) Aboveground Application of Sewage or Sludge. Projects which involve application of sewage or sludge in areas determined to have a medium or high susceptibility to groundwater contamination shall provide hydrologic information and a management plan that identifies measures that effectively mitigate the threat to contamination; and shall conform to all other applicable state regulations.
- (9) Residential Land Subdivisions. Residential land subdivisions regulated by this section shall be evaluated for their impact on groundwater quality. One or more of the following measures shall be required upon recommendation of the Chelan-Douglas health district:
  - (A) An analysis of the potential nitrate loading to the groundwater may be required to assess the impact on groundwater quality;
  - (B) Alternative site designs, phased development and/or groundwater quality monitoring will be required to reduce contaminant loading where site conditions indicate that the proposed action will measurably degrade groundwater quality;
  - (C) Open spaces may be required on development proposals overlying areas highly susceptible for contamination of groundwater resources;

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

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

(F) Known contaminants shall be removed from stormwater runoff prior to their point of entry into surface or groundwater resources using available and reasonable best management practices consistent with the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chelan County Code Chapter 13.16.

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

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

### **6.3 Frequently Flooded Areas**

#### **6.3.1 FREQUENTLY FLOODED AREAS OVERLAY DISTRICT (FFOD)**

##### **6.3.2 Classification**

Those areas located within the one percent chance floodplain, also known as the one-hundred-year floodplain and the special flood hazard area, as defined by the Federal Emergency Management Agency and adopted by the board of county commissioners, are classified as frequently flooded areas. These areas are specified in Chelan County Code Section 3.20.090, Flood hazard areas established.

##### **6.3.3 Designation**

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

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

**6.3.4 Protection measures**

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

**6.3.2 Designation**

Best available science will be used in the designation of the county's frequently flooded areas. The flood insurance rate maps (FIRM) and floodway maps along with the Flood Insurance Study—Chelan County prepared by the National Flood Insurance Program (NFIP) are adopted as the formal designation for frequently flooded areas. Upon review and approval by the county, subsequent studies delineating the boundaries of the floodways and floodway fringe areas of the one-hundred-year floodplains for the county, or portion thereof, shall constitute the best available science and be utilized as the official designation information for frequently flooded areas. A review committee comprised of the directors of the department of building, fire safety and planning, and the public works department shall review each set of new information to make a recommendation to the Chelan County board of commissioners whether it should be adopted as new designation criteria. Before final adoption, this will be distributed for public and agency review.

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

**6.3.3 Protection measures.**

(1) New lots may be created within frequently flooded areas, provided:

- (A) A designated buildable area in each lot is provided for outside the floodway and is identified on the face of the final plat, short plat or binding site plan mylar;
- (B) All improvements, including parking areas, are located outside the floodway;
- (C) Roads necessary to access permitted improvements may cross the floodway if no reasonable route exists outside the floodway;
- (D) Open space lots may be located within the one-hundred-year floodplain; and

(2) No residential structures may be built or placed within a designated floodway;

**6.3.4 Anchoring.**

All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure. All manufactured homes shall be anchored to resist flotation, collapse, or lateral movement by providing over the top and frame ties to ground anchors; provided however, that double-wide units having a width of seventeen feet or more from end to end, and any units manufactured since 1976 that have been certified in compliance with the construction standards of the Department of Housing and Urban Development, require only frame ties.

Anchoring requirements for manufactured homes are as follows:

- (1) Over the top ties shall be provided at the end of each manufactured home. Two additional over the top ties shall be provided at intermediate locations for manufactured homes greater than fifty feet in length while those units less than fifty feet in length shall require one additional over the top tie.
- (2) Frame ties shall be provided at each corner of a manufactured home. Five additional frame ties shall be provided at intermediate locations for manufactured homes greater than fifty feet in length while those units less than fifty feet in length shall require four additional frame ties.
- (3) All components of the anchoring system shall be capable of carrying a force of four thousand eight hundred pounds as certified by a registered professional engineer or manufacturer's specifications.
- (4) Any additions to a manufactured home shall be similarly anchored.

### **6.3.5 Construction materials and methods.**

All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage and shall be constructed with materials and utility equipment resistant to flood damage. Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding. The following standards shall apply to all utilities within the flood hazard area:

- (1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system. The proposed water well should be located on high ground that is not in the floodway;
- (2) Manhole covers shall be designated so as to seal themselves, thereby preventing infiltration of floodwaters;
- (3) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration by floodwaters into the system and prevent the discharge from the sewage systems into floodwaters and contamination during flooding. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. The compliance with these requirements shall be as directed by the Chelan Douglas Health District.
- (4) All utility systems shall be underground except where the presence of bedrock or other obstructions makes undergrounding prohibitive; provided, that electric transmission lines in excess of fifteen KV are exempt from undergrounding.

### **6.3.7 Use of other base flood data.**

When base flood elevation data has not been provided in accordance with Section 4.020, Designation, the administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer Chapter 4 of Appendix B of this SMP.

### **6.3.8 Construction activities.**

- (1) Residential Construction. New construction or substantial improvement of any residential structure shall require the lowest floor including basement to be elevated to three feet or higher above the base flood elevation (BFE). Where new construction or substantial improvement is to occur in a flood hazard area designated as an AO zone, the lowest floor including basement shall be elevated above the highest adjacent grade of the building site, to one foot or more above the depth number specified on the FIRM

(at least two feet if no depth number is specified). Where hazardous velocities are noted on the FIRM consideration shall be given to mitigating the effects of these velocities in proper construction techniques and methods. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

- \_\_\_\_\_ (A) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
- \_\_\_\_\_ (B) The bottom of all openings shall be no higher than one foot above grade.
- \_\_\_\_\_ (C) Openings may be equipped with screens, louvers or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.
- \_\_\_\_\_ (D) In an AO zone adequate drainage paths shall be provided on slopes to guide floodwaters around and away from proposed structures. \_\_\_\_\_

(2) Nonresidential Construction. New construction or the substantial improvement of any commercial, industrial or other nonresidential structure shall require the lowest floor, including basement, to be elevated to or above one foot higher than the base flood elevation (BFE). Where new construction or substantial improvement is to occur in a flood hazard area designated as an AO zone, the lowest floor including basement shall be elevated above the highest adjacent grade of the building site, to one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified). Where hazardous velocities are noted on the FIRM consideration shall be given to mitigating the effects of these velocities in proper construction techniques and methods. As an alternative to the elevation of nonresidential structures, such structures, with attendant utility and sanitary facilities, shall:

- \_\_\_\_\_ (A) Be floodproofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- \_\_\_\_\_ (B) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- \_\_\_\_\_ (C) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this section based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to and maintained by the administrator;
- \_\_\_\_\_ (D) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as provided in subsection (1)(A) through (C) of this section.

### **6.3.9 Grading and filling.**

No fill, including fill for roads, and levees; grading; or excavating that unduly affects the efficiency or the capacity of the channel or floodway, or unduly decreases flood storage or increases flood heights, shall be permitted. Any fill proposed to be deposited in a flood hazard area shall not be contrary to the need for storage of floodwater nor shall the amount of fill proposed be greater than is necessary to achieve the purpose for which the fill is intended. Fill materials shall be clean with a minimum potential for degrading water quality. All fill materials shall be protected against erosion with retaining walls or other mechanisms to deter erosions. If vegetative cover is chosen, the side slopes of the fill should not exceed two units of horizontal distance to one unit of vertical distance.

**6.3.10 — Manufactured homes and recreational vehicles.**

The following standards shall be applicable for all new or replacement manufactured home installations and for any existing manufactured home which has incurred substantial damage as the result of flood.

(1) Manufactured homes in designated zones A1 through A30, AH, AE and AO shall be elevated on a permanent foundation consisting of a minimum of reinforced concrete footings and piers such that the lowest flood of the manufactured home is elevated to at least three feet above the base flood elevation and adequately anchored to resist flotation, collapse and lateral movement. In flood hazard areas designated as an AO zone the lowest floor of the manufactured home shall be elevated above the highest adjacent grade of the building site, to one foot or more above the depth number specified on the FIRM. Where hazardous velocities are noted on the FIRM, consideration shall be given to mitigating the effects of these velocities through engineering design.

(2) All recreational vehicles located in designated zones A1 through A30, AH, AE and AO shall not be located in the flood hazard area for more than one hundred eighty consecutive days unless parked at an occupied single family residence and must be licensed and ready for highway use.

**6.3.11 — Regulatory floodways.**

Development within a regulatory floodway is prohibited as follows:

(1) Encroachments are prohibited, including fill, new construction, substantial improvements, or other development unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge.

(2) Construction or reconstruction of residential structures is prohibited within designated floodways, except for (A) repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and (B) repairs, reconstruction or improvements to a structure, the cost of which does not exceed fifty percent of the market value of the structure either (i) before the repair or reconstruction is started, or (ii) if the structure has been damaged, and is being restored, before the damage occurred. Work done on structures to comply with existing health, sanitary, or safety codes or to structures identified as historic places may be excluded in the fifty percent.

(3) If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Chapter 6.3 of Appendix B of this SMP.

**6.3.12 — Critical facilities.**

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the base floodplain. Construction of new critical facilities shall be permissible within the base floodplain if no feasible alternative site is available. Critical facilities constructed within the base floodplain shall have the lowest floor elevated to three feet or more above the level of the same flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base floodplain shall be provided to all critical facilities to the extent possible. Compliance with these requirements must be certified by a registered professional engineer or architect.

**6.3.13 — Subdivision.**



~~(1) In the event the applicant is dividing property through the short subdivision, major subdivision, binding site plan, or plat alteration process, a notation shall appear on the face of the final plat referencing the requirements of this chapter, as amended, and the delineated floodway and floodway fringe of the one hundred year floodplain shall be shown.~~

~~(2) All subdivision proposals shall be consistent with the need to minimize flood damage;~~

~~(3) All subdivision proposals shall locate and construct public/private utilities to minimize flood damage;~~

~~(4) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and~~

~~(5) Where base flood elevation data has not been provided or is not available from another authorized source, it shall be generated for subdivision proposals and other proposed developments.~~

~~(6) No subdivision or part thereof shall be approved if related improvements such as levees, fills, or other features will individually or collectively significantly increase flood flows, heights, velocities or potential for damage. All subdivisions shall be consistent with and in conformance with the requirements of this chapter.~~

~~(7) If a subdivision or portion thereof lies within the one hundred year floodplain, conformance with all applicable local, state and federal requirements shall be required including, but not limited to, this chapter, the Chelan County zoning resolution, the Chelan County subdivision resolution, and the Chelan County shoreline master program.~~

#### **~~6.3.14 Reasonable use.~~**

~~Nothing in this chapter is intended to preclude reasonable use of property, or to effect a taking in violation of the U.S. Constitution, the State of Washington Constitution and substantive due process. Where project proponents would seek a "Reasonable Use" exception to their proposal, they shall seek relief through the SMP Shoreline Conditional Use or Shoreline Variance Permit process. Shoreline Variances may be granted by the hearing examiner as set forth in Section 7.8, Shoreline Variance Permits of this SMP.~~

### **6.4 Geologically Hazardous Area**

#### **6.4.1 GEOLOGICALLY HAZARDOUS AREAS OVERLY DISTRICT (GHOD)**

##### **6.4.2 Purpose**

The purpose of the geologically hazardous overlay district is to reduce the risk to the health and safety of citizens by designating and regulating geologically hazardous critical areas consistent with the Growth Management Act and Chapter 365-190 WAC, Minimum Guidelines to Classify Agricultural, Forest, Mineral Lands, and Critical Areas.

##### **6.4.3 Classification**

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

(1) Known or Suspected Risk. Areas that are susceptible to one or more of the following types of hazards shall be classified as a geologically hazardous area with a known or suspected risk and shall require a geologic site assessment as described in Section 6.4.9:

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- (A) Erosion hazard areas identified by the U.S. Department of Agriculture Natural Resources Conservation Service Chelan County Soil Survey as either:
- (i) Areas with a “very severe” erosion hazard; or
  - (ii) Areas with a “severe” erosion hazard where slopes are fifteen percent or steeper.
- (B) Landslide hazard areas shall include areas potentially subject to mass wasting based on a combination of geologic, topographic and hydrologic factors. They include any areas susceptible to mass movement because of any combination of bedrock or soil characteristics, slope (gradient), slope aspect, rock or soil bedding and inclination or fractures or other geologic structure, hydrology, damage or removal of vegetative cover, or other factors. Examples of these may include, but are not limited to, the following:
- (i) Sites that are located on or within two hundred fifty feet of areas of documented or historic landslides, including areas identified in geotechnical/geological reports, such as:
    - (a) Those areas delineated by the United States Department of Agriculture Natural Resources Conservation Service as having a “severe” limitation for building site development.
    - (b) Areas designated as landslides or mass wasting deposits on maps published by the United States Geological Survey or the Washington Department of Natural Resources Division of Geology and Earth Resources.
    - (c) Areas located on a landslide feature which has shown movement during the past ten thousand years or which is underlain or covered by mass wastage debris of that period.
  - (ii) Sites that are located on or within two hundred fifty feet from areas with all three of the following characteristics:
    - (a) Slopes steeper than fifteen percent; and
    - (b) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
    - (c) Springs or groundwater seepage.
  - (iii) Areas potentially unstable as a result of rapid stream incision, stream or channel migration, stream bank erosion, or undercutting by wave action.
  - (iv) Areas located in bottoms of narrow drainages and other confined channels including canyons, ravines, and gullies, and areas located on an alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding.
  - (v) Steep Slopes. Areas located within two hundred fifty feet from the base of any slope of forty percent or steeper with ten feet of relief or a talus slope or a distance equal to the vertical height of the slope, whichever is greater.

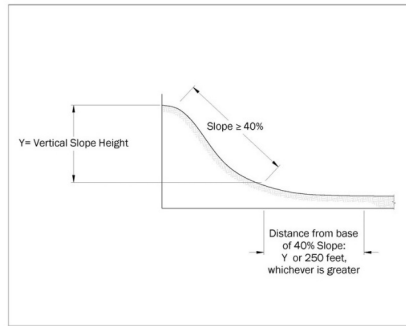


Figure 1. Steep slope classification.

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

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

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

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

(E) Upon examination of the subject property by a qualified professional pursuant to Section 6.4.8, if a determination is made that none of the foregoing conditions are present on or adjacent to the property, the qualified professional may state in letter form the circumstances under which the site assessment or report may be waived.

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

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

#### 6.4.4 Classification challenge

An applicant may challenge the geologically hazardous area classification determination made by the administrator. Said challenge shall be in the form of a geologic site assessment or a geotechnical report under the provisions of Section 6.4.9. If the geologic site assessment or a geotechnical report indicates that the geologically hazardous area does not exist or should be classified as no risk or low risk, the administrator may find that the performance standards outlined in this chapter do not apply to the site or project.

#### **6.4.5 Administrative review**

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

#### **6.4.6 Designation**

Areas classified as geologically hazardous areas pursuant to Section 6.4.3 are designated as geologically hazardous areas.

#### **6.4.7 Performance standards**

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

- (A) Construction methods should be used which minimize risks to structures and do not increase the risk to the site, or to adjacent properties and their structures, from the geologic hazard. Development shall not increase instability or create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion.
- (B) Site planning should minimize disruption of existing topography and vegetation, and should incorporate opportunities for phased clearing.
- (C) Disturbed areas shall be replanted within one year of project completion, in accordance with an approved revegetation plan, and be appropriately bonded for.
- (D) Impervious surface coverage shall be minimized.
- (E) Excavation and grading shall be minimized. A clearing and grading schedule shall consider limitations based upon seasonal weather conditions.
- (F) Detailed drainage plans may be required for projects affecting areas of geologic hazard. These plans shall indicate the effect the project may have on the hazard areas and adjacent properties and mitigating measures, with stormwater detention standards based upon the technical studies required under this document.
- (G) Any limitations to site disturbance, such as clearing restrictions, imposed as a condition of development approval should be marked in the field and approved by the county prior to undertaking the project.
- (H) A monitoring program should be prepared for construction activities occurring in geologic hazard areas and be marked on the face of the building permit.
- (I) All authorized clearing for roads, utilities, etc., should be limited to the minimum necessary to accomplish engineering design. Alternatives should meet the following requirements:
  - (i) Clearing, grading, or filling of sloped sites containing erosion hazard areas shall be limited by weather conditions and an approved erosion control plan.

- (ii) The face of cut and fill on slopes shall be prepared and maintained to control against erosion.
- (J) Unless otherwise directed by the administrator or recommended in the site assessment or geotechnical report pursuant to Section 6.4.9, temporary erosion and sedimentation control shall be consistent with best management practices (BMPs) in the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chelan County Code Chapter 13.16.
- (K) To maintain the natural integrity of landslide hazard areas and to protect the environment, and the public health and safety, adequate vegetation shall be maintained around all sides of the landslide hazard area.
- (L) Development proposals that involve altering land upon areas identified as landslide or avalanche hazard areas must demonstrate the following for approval:
- (i) There is no evidence of recent landslides or avalanches in the vicinity of the proposed development and quantitative analysis of slope stability and/or other pertinent factors indicate no significant risk to the proposed development or nearby areas.
- (ii) The landslide or avalanche hazard areas can be modified or the project can be designed so that the landslide or avalanche hazard to the project is eliminated.
- (iii) Unless otherwise directed by the administrator or recommended in the geotechnical report pursuant to Section 6.4.9, surface water discharge from the site shall comply with requirements in the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chelan County Code Chapter 13.16, and natural surface water drainages including water discharging from springs or seeps and shall be maintained.
- (iv) Disturbance of trees and vegetation shall be the minimum necessary in order to prevent erosion and/or an increase in avalanche hazard, to stabilize slopes, and preserve the natural character of the area.
- (v) Structures and improvements shall be located to preserve the most sensitive portion of the site and its natural landforms and vegetation.
- (M) Projects in snow avalanche hazard areas shall provide technical studies, which identify the location and extent of the potential avalanche area and include mitigation measures, which ensure that the proposed activity will not increase the potential for an avalanche on the subject property and adjacent properties.
- (2) Performance standards or mitigation measures outlined in a geologic site assessment or geotechnical report shall be implemented and incorporated into conditions of approval, if applicable.
- (3) If performance standards or mitigation measures are outlined in a geologic site assessment or geotechnical report, an engineer or geologist shall verify that said measures/standards have been adequately completed and provide written notification of completion to the department.

**6.4.8 Report preparer qualifications and criteria.**

- (1) A geologic site assessment, when required, shall be prepared by either a geologist licensed by the state of Washington; an engineering geologist licensed by the state of Washington; or a professional civil engineer with geologic expertise licensed by the state of Washington.
- (2) A geotechnical report, when required, shall be prepared by either an engineering geologist licensed by the state of Washington or a professional civil engineer with geologic expertise licensed by the state of Washington. A civil engineer must also have the following experience and background.
- (A) Five years of geotechnical experience evaluating geologically hazardous conditions and site development activities, such as landform recognition; unstable geologic units; roads; structural footings, foundations and retaining walls; swimming pools and sport courts; and other activities such as timber removal, site disturbance and mining.

#### **6.4.9 Geologic site assessment and geotechnical report requirements.**

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

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

- (A) Evaluate the actual presence of geologically hazardous areas within or in the vicinity of the site and the need for a geotechnical report. Specifically mention the circumstances or conditions which require the report to be prepared (steep slopes, erodible soils, suspected landslide or avalanche hazard, adverse hydrologic or flood risk, etc.).
- (B) Evaluate safety issues related to proposed activities. Address issues that could involve personal injury, worksite safety, or property damage.
- (C) Address existing geologic, topographic, and hydrologic conditions on the site, including an evaluation of the ability of the site to accommodate the proposed activity. Describe the proposed development, including property size and location, nature and extent of the planned development (i.e., house, garage, shop, swimming pool, etc.), and its specific location on the property. Include evidence of prior grading, excavation, cut banks, fill areas, or mining activity, and their potential impact on the project. Note and evaluate any features that could adversely affect development such as drainage gullies, erosion channeling, alluvial fans, evidence for debris flow or avalanche, surface creep and landslides observed or suspected spring activity and flood risk potential.
- (D) A discussion of the surface and subsurface geological and engineering properties of the soils, sediments, and/or rocks on the subject property and adjacent properties and their effect on the stability of the slope. Note any areas of modified ground or fill. Where known from field inspection or reference maps and literature, include bedrock identification and age, bedding and joint attitude with respect to slope inclination, fracturing, faults and shear zones, hydrothermal alteration, weathering characteristics, presence of landslide deposits and its age and consolidation, etc. Use cross-sections if necessary for better representation of subsurface character.
- (E) A description of the soils in accordance with the Unified Soil Classification System. Give general soil characteristics that could affect site development (i.e., frost action and shrink/swell potential, permeability, compressibility, density or consistency, plasticity and wet/dry behavior, erodibility, etc.). Especially note the presence or suspected presence of clay-rich horizons and their position/location in the soil profile, and any indication that a building site could be subjected to soil compression or differential setting.
- (F) Evidence and history of avalanches, faults, significant geologic contacts, springs or seeps, landslides or other downslope soil movement, or sedimentation and alluviation, stream or channel or shoreline incision, migration, or erosion, on the subject property and adjacent properties not detailed in subsection (1)(C) of this section.
- (G) A discussion of seismic hazards including seismic class, liquefaction susceptibility including probable depth to groundwater, fault rupture, ground shaking, slope failure, and settlement or subsidence.
- (H) A summary of the site assessment and its conclusions, mentioning the presence or absence of geological hazards and site suitability. Determine the appropriate hazard category according to the classification of the geologically hazardous area consistent with Section 6.4.3. Include any recommendations for mitigation of potential hazards that can be dealt with without requiring a complete geotechnical report (control measures such as footing or intercept drainage systems, erosion control, debris catchment, vegetative management and restoration, and the probable

need for engineering consultation and design). Include a recommendation whether additional study, including a geotechnical report pursuant to Section 6.4.9, is required.

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

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

(2) The geotechnical report determined to be required by the geologic site assessment shall include the following:

All of the information required for a geologic site assessment as well as the following:

(A) Determine the appropriate hazard category according to the classification of the geologically hazardous area consistent with Section 6.4.3.

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

(C) Determine the appropriate application of the performance standards of Section 6.4.7 and/or alternative mitigation measures that provide an equal or greater level of protection.

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

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

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

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

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

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

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

(K) Recommendations for vegetation management or restoration or whether a vegetation specialist is required for a management plan.

(3) Geologic site assessments and geotechnical reports, when completed in accordance with this chapter, shall be valid for a period of five years. A qualified professional, as outlined in Section 6.4.8 (2), may extend the applicability of a valid geologic site assessment or geotechnical report by five years by submittal of a letter stating the validity of the existing document and its application for the extension; provided, that such letter must address any changes in surrounding land use activity or site conditions.

## **6.4 Geologically Hazardous Areas**

### **6.4.1 Purpose.**

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

#### **6.4.2 Applicability.**

~~The provisions of this chapter shall apply to any land use or development under county shoreline jurisdiction that is proposed to be located within designated geologically hazardous areas with the exception of~~

- ~~(1) residential footprint expansions less than fifty percent of the square footage of the primary structure to be expanded, including any attached nonhabitable space, and~~
- ~~(2) accessory structures that do not contain habitable space. Designated geologically hazardous areas include all areas classified as geologically hazardous areas under Section 5.030.~~

#### **6.4.3 Classification.**

~~Classification of each geologically hazardous area (which include areas susceptible to erosion, sliding, earthquake, or other geological events that may pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard) will be based upon the risk to development. The following categories shall be used:~~

~~(1) Known or Suspected Risk. Areas that are susceptible to one or more of the following types of hazards shall be classified as a geologically hazardous area with a known or suspected risk and shall require a geologic site assessment as described in Section 5.090.~~

~~(A) Erosion hazard areas identified by the U.S. Department of Agriculture Natural Resources Conservation Service and Chelan County Soil Survey Manual which may experience significant erosion. Erosion hazard areas also include channel migration zones.~~

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

~~\_\_\_\_\_ (i) Sites that are located on or within two hundred fifty feet of areas of documented or historic \_\_\_\_\_ failures, such as:~~

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

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

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

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



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

~~(a) Slopes steeper than fifteen percent; and~~

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

~~(c) Springs or groundwater seepage.~~

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

~~(iv) Areas located on or within two hundred fifty feet from an alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding.~~

~~(v) Steep Slopes. Any slope of forty percent or steeper with ten feet of relief or areas adjacent to these slopes, of which shall cover a distance equal to the vertical height of the slope or two hundred fifty feet, whichever is less.~~

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

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

~~(D) Sites that are located on or within seismic hazard areas. Seismic hazard areas include areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, surface faulting, or tsunamis. Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow groundwater table. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington, and ground settlement may occur with shaking. The strength of ground shaking is primarily affected by:~~

~~(i) The magnitude of an earthquake;~~

~~(ii) The distance from the source of an earthquake;~~

~~(iii) The type or thickness of geologic materials at the surface; and~~

~~(iv) The type of subsurface geologic structure.~~

~~(E) Other geologically hazardous areas:~~

~~(i) Volcanic hazard areas must include areas subject to pyroclastic flows, lava flows, debris avalanche, or inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.~~

~~(ii) Mine hazard areas are those areas underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or air shafts. Factors which should be considered include: Proximity to development, depth from ground surface to the mine working, and geologic material.~~

~~(F) Upon examination of the subject property by a qualified professional pursuant to Section 5.080, if a determination is made that none of the foregoing conditions are present on or adjacent to the property, the qualified professional may state in letter form the circumstances under which the site assessment or report may be waived.~~

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

~~(3) Unknown Risk. Geologically hazardous areas may be present in the county that cannot readily be identified based upon the criteria of subsection (1) of this section. Geologically hazardous areas of unknown risk include areas where data is not available to determine the presence or absence of a~~

~~geological hazard. The administrator may require a geologic site assessment and/or geotechnical report to determine the actual presence or absence of a geologically hazardous area.~~

~~**6.4.4 Classification challenge.**~~

~~An applicant may challenge the geologically hazardous area classification determination made by the administrator. Said challenge shall be in the form of a geotechnical report under the provisions of Section 5.090. If the geotechnical report indicates that the geologically hazardous area does not exist or should be classified as no risk, the administrator may find that the performance standards outlined in this chapter do not apply to the site or project.~~

~~**6.4.5 Administrative review.**~~

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

~~**6.4.6 Designation.**~~

~~Areas classified as geologically hazardous areas pursuant to Section 5.030 are designated as geologically hazardous areas.~~

~~**6.4.7 Performance standards.**~~

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

~~(A) Construction methods should be used which minimize risks to structures and do not increase the risk to the site, or to adjacent properties and their structures, from the geologic hazard. Development shall not increase instability or create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion.~~

~~(B) Site planning should minimize disruption of existing topography and vegetation, and should incorporate opportunities for phased clearing.~~

~~(C) Disturbed areas shall be replanted within one year of project completion, in accordance with an approved revegetation plan, and be appropriately bonded for.~~

~~(D) Impervious surface coverage shall be minimized.~~

~~(E) Excavation and grading shall be minimized. A clearing and grading schedule shall consider limitations based upon seasonal weather conditions.~~

~~(F) Detailed drainage plans may be required for projects affecting areas of geologic hazard. These plans shall indicate the effect the project may have on the hazard areas and adjacent properties and~~

mitigating measures, with stormwater detention standards based upon the technical studies required under this document.

(G) Any limitations to site disturbance, such as clearing restrictions, imposed as a condition of development approval should be marked in the field and approved by the county prior to undertaking the project.

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

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

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

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

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

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

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

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

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

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

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

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

(M) Projects in snow avalanche hazard areas shall provide technical studies, which identify the location and extent of the potential avalanche area and include mitigation measures, which ensure that the proposed activity will not increase the potential for an avalanche on the subject property and adjacent properties. (2) Performance standards or mitigation measures outlined in a geologic site assessment or geotechnical report shall be implemented and incorporated into conditions of approval, if applicable. (3)

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

**6.4.8 Report preparer qualifications and criteria.**

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

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

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

**6.4.9 Site assessment and report requirements.**

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

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

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

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

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

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

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

(F) Evidence and history of avalanches, faults, significant geologic contacts, landslides, or downslope soil movement on the subject property and adjacent properties not detailed in subsection (1)(C) of this section.

(G) A summary of the site assessment and its conclusions, mentioning the presence or absence of geohazards and site suitability. Include any recommendations for mitigation of potential hazards that can be dealt with without requiring a complete geotechnical report (control measures such as footing or intercept drainage systems, retaining walls, erosion control, vegetative management and restoration, and the probable need for engineering consultation and design).

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

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(1) Cite all references and information used in the assessment preparation, such as United States Geologic Survey (USGS) and Department of Natural Resources Geologic Maps and Bulletins, soil studies, surveys and previous reports. (2) The geotechnical report determined to be required by the geologic site assessment shall include the following: All of the information required for a geologic site assessment as well as the following:

(A) Determine the appropriate hazard category according to the classification of the geologically hazardous area consistent with Section 5.030.

(B) Determine the appropriate application of the performance standards of Section 5.070 and/or alternative mitigation measures that provide an equal or greater level of protection.

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

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

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

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

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

(H) An identification of all existing fill areas.

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

(J) A vegetation management and restoration plan or other means for maintaining long term stability of slopes.

(3) Geologic site assessments and geotechnical reports, when completed in accordance with this chapter, shall be valid for a period of five years. A qualified professional, as outlined in Section 5.080(2), may extend the applicability of a valid geologic site assessment or geotechnical report by five years by submittal of a letter stating the validity of the existing document and its application for the five year extension; provided, that such letter must address any changes in surrounding land use activity or site conditions.

#### **6.4.10 Subdivision notation.**

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

All or part of this area may be located within a suspected or known geologically hazardous area, and development proposals proposed within this area will be subject to the requirements of Chapter 5: Geologically Hazardous Areas Overlay District (GHOD) of the County's Shoreline Master Program. Geologic site assessments and technical reports completed for subdivision approval may not be adequate for site development and additional assessment may be necessary.

## **6.5 Fish and Wildlife Habitat Conservation Areas**

### **6.5.1 Purpose**

It is the purpose of this chapter to designate and classify fish and wildlife conservation areas and to protect, restore where practical, and enhance fish and wildlife populations and their associated habitats.

### **6.5.2 Applicability**

The provisions of this chapter shall apply to development that is proposed to be located within fish and wildlife habitat conservation areas by definition or within a review area of one thousand feet from a mapped point location (den or nest site) of a priority species. "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company. Fish and wildlife protection is not intended to preclude reasonable use of property, nor is it intended to authorize public use of private property or prevent trespassing laws from being enforced.

### **6.5.3 Fish and wildlife habitat conservation areas classification and designation.**

(1) Classification. The following classifications shall be used in designating fish and wildlife conservation areas:

- \_\_\_\_\_ (A) Class I Fish and Wildlife Habitat Conservation Areas.
  - \_\_\_\_\_ (i) State natural area preserves and natural resource conservation areas; and
  - \_\_\_\_\_ (ii) Habitat which have a primary association with species listed by federal agencies as endangered or threatened under the Federal Register for the Endangered Species Act of 1973, or species listed by state agencies as endangered (WAC232-12-014), threatened (WAC232-12-011) or sensitive (WAC232-12-011).

(2) Class II Fish and Wildlife Habitat Conservation Areas.

- \_\_\_\_\_ (A) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;
- \_\_\_\_\_ (B) Waters of the state;
- \_\_\_\_\_ (C) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;
- \_\_\_\_\_ (D) Priority habitats and species as identified by the Washington State Department of Fish and Wildlife Priority Habitats and Species Program;
- \_\_\_\_\_ (E) Mule deer and/or elk winter range and migration corridors.

(3) Designation. All lands and shorelands classified as fish and wildlife habitat conservation areas are designated as fish and wildlife habitat conservation areas. The Chelan County department of building, fire safety and planning will maintain maps to provide information to the public and aid in the administration of this section. Sites that include fish and wildlife habitat conservation areas not mapped shall be subject to the provisions of this section. In the event of a conflict between the information shown on the maps and information shown as a result of field investigations, the latter shall prevail. Maps utilized by Chelan County to identify fish and wildlife habitat conservation areas include the following maps and map databases:

- \_\_\_\_\_ (A) The Washington State Department of Fish and Wildlife Priority Habitats and Species and Wildlife Heritage Maps and Database, as amended;
- \_\_\_\_\_ (B) Washington Rivers Information System Maps and Database, as amended;

- \_\_\_\_\_ (C) National Wetlands Inventory Maps and Database, as amended;
- \_\_\_\_\_ (D) Chelan County shoreline master program, as amended;
- \_\_\_\_\_ (E) DNR Stream Type Maps for Type S, F, Np, and Ns waters per criteria as set forth in WAC222-16-031, Interim water typing system, as amended;
- \_\_\_\_\_ (F) Mule deer and/or elk winter range and migration corridors in Chelan County identified on the Chelan County mule deer and elk winter range maps in the community development department.

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**6.5.4 Class I wildlife habitat conservation area standards.**

(1) Major Development Within Class I Wildlife Habitat Conservation Areas. A review area of one thousand feet of a mapped point location of a den or nest site or a polygon of a species listed as endangered, threatened, or sensitive by the state of Washington, or registered as endangered or threatened by the federal government, shall be subject to the following standards:

\_\_\_\_\_ (A) Pertinent agencies including but not limited to the Washington State Department of Fish and Wildlife shall be given written notice of the development proposal. In order for agency comments to be considered, the agencies shall have thirty days from the date of mailing of the notice to submit written comments to the county. The referral is necessary to determine the accuracy of mapping, presence of habitat, and potential impacts of the development.

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\_\_\_\_\_ (B) If the site does contain wildlife habitat regulated by this chapter, the applicant must meet the requirements outlined in this section. A habitat management and mitigation plan, pursuant to Section 6.5.6, shall be required for major developments in Class I wildlife habitat conservation areas. In the case of bald eagles, an approved bald eagle management plan by the Washington State Department of Fish and Wildlife meeting the requirement and guidelines of the bald eagle protection rules (WAC232-12-292, as amended) will satisfy the requirements for a habitat management and mitigation plan.

(2) Minor Development Within Class I Wildlife Conservation Areas. A review area of one thousand feet of a mapped point location of a den or nest site, or a polygon of a species listed as endangered, threatened, or sensitive by the state of Washington, or registered as endangered or threatened by the federal government, shall be subject to the following standards:

\_\_\_\_\_ (A) Pertinent agencies, including but not limited to the Washington State Department of Fish and Wildlife, shall be given written notice of the development proposal. In order for agency comments to be considered, the agencies shall have thirty days from the date of mailing of the notice to submit written comments to the county. The referral is necessary to determine the accuracy of mapping, presence of habitat, and potential impacts of the development.

\_\_\_\_\_ (B) If the site does contain wildlife habitat regulated by this section, the applicant shall meet the requirements outlined in subsections (2)(C) and (D) of this section.

\_\_\_\_\_ (C) The administrator shall review comments from pertinent agencies and the following criteria to determine if the standards outlined in subsection (2)(D) of this section are adequate to protect wildlife habitat:

- \_\_\_\_\_ (i) Published guidelines regarding the protection and management of the affected species, including but not necessarily limited to those published by the Washington State Department of Fish and Wildlife;
- \_\_\_\_\_ (ii) Physical characteristics of the subject parcel and vicinity, including topography and vegetation;
- \_\_\_\_\_ (iii) Historic, current and proposed uses, proposed density of the development site, and development characteristics in the vicinity of the site;
- \_\_\_\_\_ (iv) Is the site within an urban growth area, rural area or resource land?

\_\_\_\_\_ (v) What are the potential land uses for the site as identified by the comprehensive plan and zoning code?

\_\_\_\_\_ (vi) Is the site's habitat fragmented or is it connected to significant habitat blocks or open spaces?

\_\_\_\_\_ (vii) Consider the habitat located on the site and in the surrounding area. Would impacts of the development be site-specific or have the potential to be cumulative with existing and potential future developments in the area? If it is determined by the administrator that the standards outlined in subsection (2)(D) of this section are not adequate to protect the wildlife habitat, a habitat management and mitigation plan, pursuant to Section 6.5.6, shall be required. In the case of bald eagles, an approved bald eagle management plan by the Washington State Department of Fish and Wildlife meeting the requirements and guidelines of the bald eagle protection rules (WAC232-12-292, as amended) will satisfy the requirements for a habitat management and mitigation plan, pursuant to Section 6.5.6. The administrator shall base his or her decision on written findings of fact and conclusions.

\_\_\_\_\_ (D) Minor development within Class I wildlife habitat conservation areas shall be subject to the following standards:

\_\_\_\_\_ (i) Disturbed areas shall be revegetated with native vegetation within one growing season of project completion in accordance with an approved revegetation plan, where appropriate.

\_\_\_\_\_ (ii) Site planning shall minimize disruption of existing topography and vegetation, and shall incorporate opportunities for phased clearing.

\_\_\_\_\_ (iii) Any limitations to site disturbance, such as clearing restrictions, imposed as a condition of development approval shall be marked in the field and approved by the county prior to undertaking the project.

\_\_\_\_\_ (iv) Fencing requirements as outlined in Section 6.5.6.

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

\_\_\_\_\_ (vi) Building sites are encouraged to be located away from critical wildlife habitat corridors as feasibly as possible.

#### **6.5.5 Class II wildlife habitat conservation area standards**

(1) Major development within Class II wildlife habitat conservation areas within a review area of one thousand feet from a mapped point location of a nest or den site or polygon of a priority species shall be subject to the following standards:

\_\_\_\_\_ (A) Pertinent agencies, including but not limited to the Washington State Department of Fish and Wildlife, shall be given written notice of the development proposal. In order for agency comments to be considered, the agencies shall have fourteen days from the date of mailing of the notice to submit written comments to the county. The referral is necessary to determine the accuracy of mapping, presence of habitat, and potential impacts of the development.

\_\_\_\_\_ (B) If the site does contain wildlife habitat regulated by this section, the applicant shall meet the requirements outlined in subsections (1)(C) and (D) of this section.

\_\_\_\_\_ (C) The administrator shall review written comments from the agencies and the following criteria to determine if the standards outlined in Section 11.78.070(2)(D) are adequate to protect wildlife habitat:



- \_\_\_\_\_ (i) Published guidelines regarding the protection and management of the affected species, including but not necessarily limited to those published by the Washington State Department of Fish and Wildlife;
- \_\_\_\_\_ (ii) Physical characteristics of the subject parcel and vicinity, including topography and vegetation;
- \_\_\_\_\_ (iii) Historic, current and proposed uses, proposed density of the development site, and development characteristics in the vicinity of the site;
- \_\_\_\_\_ (iv) Is the site within an urban growth area, rural area or resource land?
- \_\_\_\_\_ (v) What are the potential land uses for the site as identified by the comprehensive plan and zoning code?
- \_\_\_\_\_ (vi) Is the site's habitat fragmented or is it connected to significant habitat blocks or open spaces?
- \_\_\_\_\_ (vii) Consider the habitat located on the site and in the surrounding area. Would impacts of the development be site-specific or have the potential to be cumulative with existing and potential future developments in the area? The administrator will have up to thirty days after the end of the comment period to determine if the standards outlined in Section 11.78.070(2)(D) provide adequate protection to wildlife habitat. If it is determined that the standards of Section 11.78.070(2)(D) are not adequate to protect wildlife habitat, a habitat management and mitigation plan shall be required pursuant to Section 11.78.100. The administrator shall base his or her decision on written findings of fact and conclusions.

\_\_\_\_\_ (D) Major development within Class II wildlife habitat conservation areas shall be subject to the standards outlined in Section 11.78.070(2)(D).

(2) Minor development within Class II wildlife habitat conservation areas within a review area of one thousand feet from a mapped point location of a nest or den site or polygon of a priority species shall be subject to the following standards:

\_\_\_\_\_ (A) If the site does contain fish and wildlife habitat regulated by this chapter, the applicant must meet the requirements outlined in subsection (2)(B) of this section.

\_\_\_\_\_ (B) The administrator shall review written comments from the agencies and the following criteria to determine if the standards outlined in Section 11.78.070(2)(D) are adequate to protect wildlife habitat:

- \_\_\_\_\_ (i) Published guidelines regarding the protection and management of the affected species, including but not necessarily limited to those published by the Washington State Department of Fish and Wildlife;
- \_\_\_\_\_ (ii) Physical characteristics of the subject parcel and vicinity, including topography and vegetation;
- \_\_\_\_\_ (iii) Historic, current and proposed uses, proposed density of the development site, and development characteristics in the vicinity of the site;
- \_\_\_\_\_ (iv) Is the site within an urban growth area, rural area or resource land?
- \_\_\_\_\_ (v) What are the potential land uses for the site as identified by the comprehensive plan and zoning code?
- \_\_\_\_\_ (vi) Is the site's habitat fragmented or is it connected to significant habitat blocks or open spaces?
- \_\_\_\_\_ (vii) Consider the habitat located on the site and in the surrounding area. Would impacts of the development be site-specific or have the potential to be cumulative with existing and potential future developments in the area?

The administrator will have up to thirty days after the end of the comment period to determine if the standards outlined in Section 6.5.4 (2)(d) provide adequate protection to wildlife habitat. If it is

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determined that the standards of Section 11.78.070(2)(D) are not adequate to protect wildlife habitat, a habitat management and mitigation plan shall be required pursuant to Section 11.78.100. The administrator shall base his or her decision on written findings of fact and conclusions.

(3) Minor development within Class II wildlife habitat conservation areas shall have the following standards:

(A) Minor development within Class II wildlife habitat conservation areas may be subject to the minimum standards, all or in part, of Section 6.5.4 (2)(d), as determined by the administrator utilizing the following criteria:

- (i) Is the site's habitat fragmented or is it connected to significant habitat blocks or open spaces?
- (ii) What is the level of human activity in the area and what are the surrounding land uses?
- (iii) Is the site within an urban growth area, rural area or resource land?
- (iv) What are the potential land uses for the site as identified by the comprehensive plan and zoning code?
- (v) What are the potential impacts of the development to wildlife habitat and species?
- (vi) Can a reasonable balance be achieved between wildlife habitat protection and the reasonable use of private property?

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**6.5.6 Habitat management and mitigation plan.**

(1) If required, this plan shall identify how the impacts from the proposed use or activity will be avoided or mitigated consistent with the purposes of this section. The Washington Priority Habitat and Species data as now or hereafter amended, other priority habitat and species publications, and consultation with a habitat biologist from the Washington State Department of Fish and Wildlife may be used as the basis for the plan.

(2) The habitat management and mitigation plan shall be approved or denied in writing by the administrator and shall contain but not be limited to the following information:

(A) A map(s) prepared at an easily readable scale (at least one inch equals two hundred feet) showing:

- (i) The location of the proposed site;
- (ii) The relationship of the site to surrounding topographic and built features;
- (iii) The nature and density of the proposed use or activity;
- (iv) Proposed building locations and arrangements;
- (v) A legend which includes:
  - (a) A complete and accurate legal description. The description shall include the total acreage of the parcel;
  - (b) Title, scale and north arrow;
  - (c) Date;
- (vi) Existing structures, improvements and landscape features including the name and location of all water bodies;
- (vii) Location of priority habitat types and priority species point locations, including nesting, roosting and den sites, winter range areas, riparian zones and migration corridors.

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(B) A report which contains:

- (i) A description of the nature, density and intensity of the proposed use or activity in sufficient detail to allow analysis of such a land use change upon identified wildlife habitat including the proposed amounts of excavation, grading, and vegetation disturbance.
- (ii) An analysis of the effect of the proposed use or activity upon fish and wildlife species and their habitats, identified within the priority habitat and species program.
- (iii) A plan which explains how the applicant will avoid, minimize or mitigate adverse impacts to fish and/or wildlife habitats created by the proposed use or activity. Mitigation measures within the plan may include, but are not limited to:
  - (a) Establishment of buffer areas;
  - (b) Preservation of critically important plants and trees, preferably in consolidated areas;
  - (c) Limitation of access to habitat area;
  - (d) Seasonal restriction of construction activities;
  - (e) Clustering of development and preservation of open space, if permitted by the underlying zoning district;
  - (f) Signs marking habitats or habitat buffer areas;
  - (g) Title notice or plat dedication warning statements;
  - (h) Conservation easements;
  - (i) Preserve and introduce native plant species which serve as food and shelter from climatic extremes and predators and structure and cover for reproduction and rearing of young for critical wildlife;
  - (j) The use of native species or species recommended by the Washington State Department of Fish and Wildlife in the revegetation or landscaping of disturbed or developed areas and in any enhancement of habitat or buffers.
  - (iv) Review comments by a habitat biologist from the Washington State Department of Fish and Wildlife will be required.

The administrator shall have the authority to approve or deny habitat management and mitigation plans or require additional information based upon criteria within this section and review comments from relevant agencies. The administrator shall base his or her decision on written findings of fact and conclusions. The administrator's written decision shall be forwarded to the Washington State Department of Fish and Wildlife, other agencies or tribal entities which provided comments to the department and to any other agency/individual(s) who request a copy of the written decision.

(C) Mitigation shall be completed prior to granting of final occupancy, or the completion of final approval of any development activity for which mitigation measures have been required. Bonding at one hundred fifty percent of the cost of uncompleted activities is an acceptable alternative to completion where a contract to complete the work is in force. Bonding shall be in effect for a maximum of two years.

**SECTION 7 WARNING AND DISCLAIMER OF LIABILITY**

**7.1 Warning and Disclaimer of Liability**

The degree of hazard protection required by this chapter is considered reasonable for regulatory

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Appendix B

purposes and is based on scientific and engineering considerations. Catastrophic natural disasters can, and will, occur on rare occasions. This chapter does not imply that land outside the critical areas or activities permitted within such areas will be free from exposure or damage. This chapter shall not create liability on the part of the County, and officers or employees thereof, for any damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

## APPENDIX B: CRITICAL AREAS



*Lake Chelan from Stehekin, unknown date*

SECTION 1 PURPOSE AND OBJECTIVES

SECTION 2 ESTABLISHMENT OF CRITICAL AREAS

SECTION 3 INTERPRETATION OF DATA MAPS

SECTION 4 EFFECT OF DATA MAPS: APPLICABILITY

SECTION 5 GENERAL PROVISIONS

SECTION 6 CRITICAL AREAS & DEVELOPMENT STANDARDS

SECTION 7 WARNING AND DISCLAIMER OF LIABILITY

## **SECTION 1 PURPOSE AND OBJECTIVES**

The regulations of this chapter are intended to protect critical areas, and satisfy the requirements of the Shoreline Management Act for critical areas protection as provided in WAC 173-26-221 and through the application of the best available science, as determined according to WAC 365-195-900 through 365-195-925 and in consultation with qualified professionals. This chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards.

## **SECTION 2 ESTABLISHMENT OF CRITICAL AREAS**

### **2.1 List of Critical Areas**

Critical areas include (A) Wetlands, (B) Critical aquifer recharge areas, (C) Fish and wildlife conservation areas, (D) Frequently flooded areas, and (E) Geologically hazardous areas, defined in Chapter 8 of the Shoreline Master Program (SMP).

All areas within shoreline jurisdiction meeting the definition of one or more critical areas are hereby designated critical areas and are subject to the provisions of this SMP.

### **2.2 Data Maps**

Critical areas are hereby designated on a series of GIS data maps maintained by Chelan County Community Development. These maps contain the best available graphic depiction of critical areas and will be updated as reliable data becomes available. These maps are for information and illustrative purposes only and are not regulatory in nature.

The critical areas data maps are intended to alert the public of natural features/systems. The presence of a critical area on the data maps is sufficient foundation for the Administrator to require an analysis/report related to a proposed use or development.

## **SECTION 3 INTERPRETATION OF DATA MAPS**

### **3.1 Interpretation of Data Maps**

The Administrator of the Shoreline Master Program is hereby declared the Administrator of these regulations. An affected property owner or other party with standing has a right to appeal an Administrative Determination to the Hearing Examiner using the procedure for appeals found in Chapter 7 of this SMP.

The data maps are to be used as a general guide to the location and extent of critical areas. Critical areas indicated on the data maps are presumed to exist in the locations shown and these critical areas and any associated buffers are protected under the provisions of this chapter and all other applicable provisions of the SMP. The exact location of critical areas shall be determined by the applicant as a result of field investigations performed by qualified professionals using the standards and definitions found in this SMP. All development applications are required to show the boundary(s) of all critical areas and any applicable buffers on a scaled drawing prior to the development application being considered "complete" for processing purposes.

## SECTION 4 EFFECT OF DATA MAPS: APPLICABILITY

### 4.1 Reference maps and inventories

The conclusion by the Administrator that a parcel of land, or a part of parcel of land, proposed for development is within the boundary(s) of one or more designated critical areas, as shown on the data maps, shall serve as cause for additional investigation and analysis to be conducted by the applicant.

Development adjacent to an identified critical areas may require further investigation, analysis and/or review when there is information to determine a potential impact to or from the critical area.

### 4.2 Applicability

- A. When a chapter reference is used, it shall be inclusive of all of Appendix B.
- B. This chapter applies to all development and uses within Chelan County SMP jurisdiction. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the requirements of these regulations.
- C. This chapter classifies and designates critical areas and establishes a process to apply appropriate protection measures for these critical areas in concert with all applicable provisions of the SMP.
- D. Any development authorized to alter the condition of any land, water or vegetation; or to alter or construct any building, structure or improvement shall be in compliance with the requirements of this chapter and the SMP.
- E. Any individual critical area adjoined by another type of critical area shall apply the buffer standards and meet the requirements that provide the most protection of shoreline resources, when consistent with SMA policy.

## SECTION 5 GENERAL PROVISIONS

### 5.1 Permit Approval

- A. The Administrator of the SMP shall not approve any permit or issue any authorization to alter the condition of any land, water or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first ensuring compliance with the requirements of this chapter and the SMP.
- B. Critical area site analysis/reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat.
- C. Any action taken pursuant to this chapter shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. Applicants must first demonstrate an inability to avoid or reduce impacts, before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the ecological functions or values of critical areas.

### 5.2 Qualified Professional

No site analysis/report required by Section 6 of this chapter will be considered complete unless completed by a qualified professional, as defined in Chapter 8 of the SMP.

### **5.3 Surety**

If a development proposal is subject to mitigation, maintenance or monitoring plans, an assurance device or surety may be required by the Administrator in accordance with Title 14 of the Chelan County Code.

### **5.4 Site Analysis/Reports**

The preparation of site analysis/reports or information and materials required by this Chapter are the responsibility of the applicant.

### **5.5 Applications**

The Administrator shall make available to applicants resources and information on the type(s) of critical areas and/or buffers that may be present. Information shall be provided to the applicant on the type of evaluation and site-specific analysis that will be required as a supplement to the application materials necessary to bring the application up to a standard that can be characterized as “complete” and eligible for processing.

If it is determined after the issuance of a permit that the site contains a critical area, the Administrator may revoke the permit pending appropriate review and possible modification of the application.

### **5.6 Fees**

The County shall establish fees for filing a critical area review and other services provided by the County as required by this chapter. These fees shall be based on the anticipated sum of direct costs incurred for any individual development or action and may be established as a sliding scale that will recover all of the costs including the enforcement of these code provisions. Basis for these fees shall include, but not be limited to, the cost of engineering and planning review time, cost of inspection time, costs for administration, and any other special costs attributable to the critical area review process.

### **5.7 Administrative Procedures**

The administrative procedures followed during the critical area review process shall conform to the standards and requirements of the associated application type provided in Chapter 7 of the SMP.

### **5.8 Critical Areas Overlay District General Provisions and Administration**

#### **5.8.1 Purpose**

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

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

(1) Wetland Areas. Recognize and protect the beneficial functions performed by many wetlands, which include, but are not limited to, providing food, breeding, nesting and/or rearing habitat for fish and wildlife; recharging and discharging ground water; contributing to stream flow during low flow periods; stabilizing stream banks and shorelines; storing storm and flood waters to reduce flooding and erosion; and improving water quality through biofiltration, adsorption, and retention and transformation of



sediments, nutrients, and toxicants. This protection is achieved by regulating land use to avoid adverse effects on wetlands and to maintain the functions and values that wetlands provide to society and the environment.

(2) Frequently Flooded Areas. To protect the important hydrologic functions of the county's one hundred-year floodplains, which include floodways and floodway fringe areas, in order to protect human health and safety and minimize damage to property.

(3) Geologic Hazard Areas. Certain portions of the county are characterized by geologic hazards that may pose a risk to public and private property, human life and safety and the natural systems that make up the environment of the county. These lands are affected by natural processes that make them susceptible to landslides, erosion, earthquake, or snow avalanche. Some geological hazards can be reduced or mitigated by engineering, design, or modified construction so that risks to health and safety are acceptable. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided.

(4) Fish and Wildlife Habitat Conservation Areas. To identify, protect, and maintain the present high quality of Chelan County's fish and wildlife habitat conservation areas.

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

### **5.8.2 General regulations**

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

- (A) The financial guarantee shall be in a form of a performance assurance surety bond, performance bond, assignment of funds, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the county attorney.
- (B) The financial guarantee shall be at one hundred fifty percent of the cost of uncompleted actions or the estimated cost of restoring the functions and values of the critical area, whichever is greater. The surety shall be based on estimated cost of the mitigation activity including but not limited to clearing and grading, plant materials, plant installation, irrigation, weed management, monitoring, adaptive management, and other costs.
- (C) The financial guarantee shall remain in effect until the county determines, in writing, that the standards bonded for have been met. The financial guarantee shall be held by the county for a minimum of the length of the time specified for monitoring in the plan and shall be released after a request by the applicant and a final inspection, but may be held for longer periods when necessary.
- (D) Public development proposals shall be relieved from having to comply with the financial guarantee requirements of this section if public funds have previously been committed for mitigation, maintenance, or monitoring.

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

**(3) Marking and/or Fencing.**

- (A) Temporary Markers or Fencing. The outer perimeter of a critical area or buffer, whichever is greater, and the clearing limits identified by an approved permit or authorization shall be marked or fenced in the field in a manner approved by the administrator to prevent unauthorized intrusion and to protect the critical area and buffer from construction activities. Fencing shall be a highly visible and durable protective barrier. The marking or fencing is subject to inspection by the administrator prior to the commencement of permitted land clearing or construction activities and shall be maintained throughout land clearing and construction and shall not be removed until directed by the administrator, or until permanent signs and/or
- (B) Permanent Markers. The administrator may require, as a condition of any permit or variance, that the perimeter of the critical area or buffer, whichever is greater, be permanently identified. If required, this identification shall include permanent metal signs affixed to nontreated wood or metal posts. Sign content and spacing shall be determined by the administrator as necessary to meet the purposes of this section.

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

Protected [specify type] Critical Area  
Do Not Disturb  
Contact Chelan County Community Development Department Regarding Uses, Restrictions, and  
Opportunities for Stewardship

- ii) The provisions of subsection (3)(B)(i) of this section may be modified as necessary to assure protection of sensitive features or wildlife.
- (C) Permanent Fencing. The administrator shall require permanent fencing where there is a substantial likelihood of intrusion into the critical area or buffer with the development proposal or when domestic grazing animals are present or may be introduced on site. The administrator may also require such fencing when, subsequent to approval of the development proposal, intrusions result in damage to critical areas. Fencing installed as part of a proposed activity or as required in this subsection shall be designed and constructed in a manner that does not interfere with species movements, including fish runs, and shall be constructed in a manner that minimizes impacts to the critical area and buffer functions.

**5.8.3 General critical areas report**

(1) If the administrator determines that the parcel(s) of a proposed land use action is within, likely to be within, or is adjacent to a critical area whose buffers may overlap the proposed action, a critical areas report prepared by a qualified professional specific to each critical area shall be required. The expense of preparing the critical area report shall be borne by the applicant.

(2) The county may retain independent qualified consultants, at the expense of the applicant, to assist in review of critical area reports.

(3) In addition to the requirements specified under each critical area, the written report and the accompanying figures, maps, and plan sheets shall contain the following information, at a minimum:

(A) A site map or set of maps of the project area, including:

- (i) Reference streets and tax parcel property lines (noting the source of the geographic data such as land survey, county GIS data, etc.);
- (ii) Existing and proposed project-related tracts, easements, rights-of-way, utility corridors, internal property/lot lines, and trail corridors;
- (iii) Existing and proposed final contour lines (at the smallest readily available intervals, preferably two-foot or better) if proposing land contour alterations;
- (iv) Existing and proposed built features of the project including structures, fences, roads, impervious surfaces, utilities, mechanical facilities, landscaping, and other built modifications to the existing land conditions;
- (v) Existing and proposed locations of stormwater management and discharge features;
- (vi) Project construction, land disturbance, and clearing limits;
- (vii) Temporary erosion and sediment control best management practices for all vegetation and soil disturbance areas, including utility corridors, stormwater discharge points, and critical areas mitigation sites;
- (viii) All delineated and surveyed critical areas, and their classification, occurring within or adjacent to the proposed project area or tax parcel(s);
- (ix) Standard buffers, proposed buffer modifications with area measurements, and building setback limits for critical areas illustrated in subsection (3)(A)(viii) of this section;
- (x) All existing and/or proposed critical areas mitigation sites; and
- (xi) Location of existing and/or proposed critical area tracts and/or easements.

(B) A written report, including:

- (i) The name and contact information of the landowner and applicant/agent (if different than the landowner);
- (ii) The name, qualifications, and contact information for the primary author(s) of the critical area report;
- (iii) Location information (parcel number(s), address(es), parcel acreages)
- (iv) Narrative of the proposed action and all project-related elements including, but not limited to, utility corridor improvements, stormwater discharge points, grazing and habitat changes, proposed mitigation, and/or other physical activities that will alter the critical areas existing habitat and functions.
- (v) Identification of all local, state, and/or federal permit(s) or regulatory review(s) required for the project;
- (vi) Vicinity map for the project;
- (vii) Description of the project area and surrounding landscape existing conditions;
- (viii) Description of the methodologies and techniques used to identify, delineate, and characterize critical areas, special status species, and the impacts analysis, and the dates of and who conducted the field studies;
- (ix) A statement specifying the accuracy of the report and all assumptions made and relied upon;

- (x) Identification and characterization of all critical areas and buffers existing conditions, functions and values, including any functionally isolated conditions on or adjacent to the proposed project area;
- (xi) Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc; and
- (xii) Tabulated area quantities of each critical area(s) and associated buffers present in or adjacent to the proposed project area(s), and if proposed, the area quantities of proposed impacts and proposed mitigation for each critical area impacted.

#### **5.8.4 Subdivision notation**

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

#### **5.8.5 Noncompliance**

(1) When a critical area or its buffer has been altered in violation of this chapter, all ongoing activity shall stop and the critical area shall be restored. The administrator shall have the authority to issue a “stop-work” order pursuant to Chelan County Code Title 16 to cease all ongoing activity and order restoration, rehabilitation, replacement, or other measures at the owner’s or other responsible party’s expense to compensate for violation of provisions of this chapter. Activity shall not resume until such time as the violation has been corrected and the county determines that the same or similar violation is not likely to reoccur.

(2) If the county determines that a plan for restoration or other measures is required, all activity shall remain stopped until a plan is prepared and approved by the administrator. Such a plan shall be prepared by a qualified professional using the currently accepted scientific principles and shall describe how the actions proposed meet the minimum requirements described in subsection (3) of this section. The administrator may, at the applicant or other responsible party’s expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

(3) Minimum Performance Standards. All of the following minimum performance standards shall be met for the restoration or other required measures of a critical area:

- (A) The historic structure, functions, and values of the affected critical area shall be restored, including water quality and habitat functions.
- (B) The historic soil types and configuration shall be restored to the extent practicable.
- (C) The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration.
- (D) Information demonstrating compliance with other applicable provisions of this chapter shall be submitted to the administrator.
- (E) All provisions for public health and safety have been addressed.

(4) Site Investigations. The administrator is authorized to make site inspections and take such actions as are necessary to enforce this chapter. The administrator shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

(5) Penalties. Civil fines for violations of these provisions shall be pursuant to Chelan County Code Chapter 16.16. If the wetland or fish and wildlife habitat area affected cannot be restored, monies collected as penalties shall be deposited in a dedicated account for the preservation or restoration of landscape processes and functions in the watershed in which the affected wetland is located. The county may coordinate its preservation or restoration activities with other agencies in the watershed to optimize the effectiveness of the restoration action.

#### **5.8.6 Incentives**

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

#### **5.8.7 Education**

- (1) A variety of educational materials are available through the Chelan County natural resource department for private landowners. Chelan County recognizes and encourages community-based educational and service organizations to participate in programs which rehabilitate and/or maintain the quality of streams and other environmentally sensitive areas.
- (2) Applicants have the opportunity of scheduling a preapplication conference through the Chelan County community development department to discuss pending development proposals with applicable reviewing agencies.
- (3) Chelan County supports and encourages training and educational opportunities for staff to facilitate the implementation of this section.

### **5.9 FISH AND WILD LIFE HABITAT CONSERVATION AREAS OVERLAY DISTRICT (FWOD)**

#### **5.9.1 Designation and identification**

- (1) Designation. All areas within the county meeting one or more of the following designations, as identified pursuant to subsection (2) of this section, are considered fish and wildlife habitat conservation areas and are subject to the provisions of this chapter.
- (A) Areas where federal or state endangered, threatened, and sensitive species have a primary association;
  - (B) Habitats and species of local importance, as determined locally. Currently, the county has determined that mule deer and elk winter range and migration corridors are habitats of local importance;
  - (C) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat. This does not include ponds deliberately designed and created from dry sites, such as canals, stormwater detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation;
  - (D) Waters of the state, as identified in subsection (2) of this section;
  - (E) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; and

(F) State natural area preserves, natural resource conservation areas, and state wildlife areas.

(2) Identification. The Chelan County community development department will maintain maps to provide information to the public and aid in the administration of this section; however, maps showing known critical areas are only for information and illustrative purposes. Sites that include fish and wildlife habitat conservation areas not mapped shall be subject to the provisions of this section. In the event of a conflict between the information shown on the maps and information shown as a result of field investigations, the latter shall prevail. Maps utilized by Chelan County to identify fish and wildlife habitat conservation areas include the following maps and map databases:

- (A) The Washington State Department of Fish and Wildlife Priority Habitats and Species (PHS) and Wildlife Heritage Maps and Database, as amended;
- (B) Washington State Department of Fish and Wildlife Salmon Scape Map;
- (C) National Wetlands Inventory Maps and Database, as amended;
- (D) Chelan County shoreline master program, as amended;
- (E) DNR Stream Type Maps for Type S, F, Np, and Ns waters per criteria as set forth in WAC 222-16-031, Interim water typing system, as amended;

(3) Site Assessment. The administrator may require the applicant to conduct a site assessment to confirm the presence or absence of a fish and wildlife habitat conservation area. A site assessment must be performed by a qualified professional biologist. If the field investigation concludes that the site is not within and/or would not impact a fish and wildlife habitat conservation area or buffer, compliance with this chapter is not required.

(4) Agency Referral. Referral may be necessary to determine if compliance with this chapter is required. The administrator may request assistance from pertinent agencies, including but not limited to Washington State Department of Fish and Wildlife, to review the results of a site assessment, designation, or other information as requested. If agency assistance is desired, the administrator will mail a specific notice to those agencies. Agencies must submit written comments to the administrator not later than thirty days from the date of the mailing of the notice in order to receive consideration.

(5) Habitats and Species of Local Importance Designation.

- (A) In order to nominate an area, species, or corridor to the category of locally important, an individual or organization must:
  - (i) Demonstrate a need for special consideration based on:
    - (a) Declining population;
    - (b) Sensitivity to habitat manipulation;
    - (c) Commercial, recreational, cultural, or other special value; or
    - (d) Maintenance of connectivity between habitat areas.
  - (ii) Propose relevant management strategies considered effective and within the scope of this chapter;
  - (iii) Identify effects on property ownership and use; and
  - (iv) Provide a map showing the species or habitat location(s).

(B) Submitted proposals shall be reviewed by the county and may be forwarded to local, state, federal, and/or tribal agencies or experts for comments and recommendations regarding accuracy of data and effectiveness of proposed management strategies.

(C) If the proposal is found to be complete, accurate, and consistent with the purposes and intent of this chapter and the various goals and objectives of the Chelan County Comprehensive Plan, the Growth Management Act, the Shoreline Management Act, and the critical areas ordinance, the board of county commissioners will hold a public hearing to solicit comment. Approved nominations will then be processed as amendments to this ordinance in conformance with Chelan County Code Chapter 14.13, in

order to be considered as designated locally important habitats, species, or corridors, and if approved will be subject to the provisions of this chapter.

## **SECTION 6 CRITICAL AREAS & DEVELOPMENT STANDARDS**

Critical areas are subject to the following minimum requirements for classification, buffers and development requirements.

### **6.1 Wetlands**

Wetlands are defined within Chapter 8 of the SMP. They are mapped by Chelan County using best available science and data. The GIS maps do not provide a conclusive or definitive indication of wetland presence or extent. Other wetlands may exist that do not appear on the maps and some wetlands that appear on the maps may not meet all of the wetland designation criteria.

#### **6.1.1 WETLANDS OVERLAY DISTRICT (WOD)**

##### **6.1.2 Wetland designation and identification**

(1) All wetlands in Chelan County meeting the definition of wetlands in RCW [36.70A.030](#) are designated wetlands.

(2) Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements in accordance with Chapter [173-22](#) WAC. All areas within the county meeting wetland identification procedures are hereby designated critical areas and are subject to the provisions of this chapter. Wetland delineations are valid for five years.

(3) The approximate location and extent of wetlands in the county may be displayed on the National Wetlands Inventory (NWI) Maps and the Chelan County wetland inventory map, as it is developed. Wetland maps, along with other supportive documentation, are to be used as a guide only to the general location and extent of probable wetlands. NWI maps were prepared through photointerpretation of high-altitude aerial photography with limited ground truthing. Therefore, there are wetlands that are not shown on wetland inventory maps and also wetland areas mapped that may not meet wetland determination criteria. Each proposal application must be evaluated by the administrator to determine the requirement of a site-specific wetland delineation/characterization. In the event that wetland designations shown on resource maps conflict with the criteria set forth in this chapter, the criteria set forth shall take precedence.

(4) Wetland delineation/characterization shall be performed by a qualified professional wetland biologist/consultant and shall be prepared according to Chapter [173-22](#) WAC.

##### **6.1.3 Regulated activities**

(1) For any regulated activity, a critical areas report may be required to support the requested activity.

(2) The following activities are regulated if they occur in a regulated wetland and/or its buffer:

- (A) The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind.
- (B) The dumping of, discharging of, or filling with any material.
- (C) The draining, flooding, or disturbing the water level or water table.
- (D) Pile driving.
- (E) The placing of obstructions.
- (F) The construction, reconstruction, demolition, or expansion of any structure.

- (G) The destruction or alteration of wetland vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland.
  - (H) “Class IV—General Forest Practices” under the authority of the “1992 Washington State Forest Practices Act Rules and Regulations,” WAC 222-12-030, or as thereafter amended.
  - (I) Activities that result in:
    - (i) A significant change of water temperature;
    - (ii) A significant change of physical or chemical characteristics of the sources of water to the wetland;
    - (iii) A significant change in the quantity, timing or duration of the water entering the wetland; or
    - (iv) The introduction of pollutants.
- (3) Subdivisions. The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:
- (A) Land that is located wholly within a wetland or its buffer may not be subdivided, unless the lot or tract will be protected by a conservation easement.
  - (B) Land that is located partially within a wetland or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is:
    - (i) Located outside of the wetland and its buffer; and
    - (ii) Meets the minimum lot size requirements of this title.

#### **6.1.4 Wetland classification and rating**

(1) Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Eastern Washington: 2014 Update (Ecology Publication No. 14-06-030, or as revised and approved by Ecology), which contains the definitions and methods for determining whether the criteria below are met.

- (A) Category I wetlands are:
  - (i) alkali wetlands;
  - (ii) wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR;
  - (iii) bogs and calcareous fens;
  - (iv) mature and old-growth forested wetlands over one-quarter acre with slow-growing trees;
  - (v) forests with stands of aspen; and (vi) wetlands that perform many functions very well (scores between twenty-two and twenty-seven points).

These wetlands are those that

  - (a) represent a unique or rare wetland type; or
  - (b) are more sensitive to disturbance than most wetlands; or
  - (c) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or
  - (d) provide a high level of function.
- (B) Category II wetlands are:
  - (i) forested wetlands in the floodplains of rivers;
  - (ii) mature and old-growth forested wetlands over one-quarter acre with fast-growing trees;
  - (iii) vernal pools; and
  - (iv) wetlands that perform functions well (scores between nineteen and twenty-one points). These wetlands are difficult, though not impossible, to replace and provide high



levels of some functions. These wetlands occur more commonly than Category I wetlands but still need a relatively high level of protection.

(C) Category III wetlands have a moderate level of functions (scores between sixteen and eighteen points). These wetlands can be often adequately replaced with a well-planned mitigation project. Wetlands scoring between sixteen and eighteen points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

(D) Category IV wetlands have the lowest level of functions (scores fewer than sixteen points) and are often heavily disturbed. These are wetlands that we should be able to replace, and in some cases be able to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions and also need to be protected.

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

### 6.1.5 Wetland buffers

(1) Wetland buffer zones shall be required for all activities contiguous to wetlands.

(2) Buffer Requirements. The following standard buffer widths in Table 1 have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional wetland biologist/consultant using the Washington State Wetland Rating System for Eastern Washington: 2014 Update (Ecology Publication No. 14-06-030, or as revised and approved by Ecology), and by the level of impact from the proposed land use (Table 2).

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

(4) The buffer widths in Table 1 assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided.

Table 1. Standard Wetland Buffer Requirements

Wetland Category	Wetland Type	Level of Land Use Impact	Buffer Width (in feet) Based on Habitat Score		
			3—5	6—7	8—9
I	Based on Total Score; Forested Wetlands	Low	50	75	100
		Moderate	75	110	150
		High	100	150	200
	Bogs; Wetlands of High Conservation Value	Low	125		
		Moderate	190		
		High	250		

Wetland Category	Wetland Type	Level of Land Use Impact	Buffer Width (in feet) Based on Habitat Score		
			3—5	6—7	8—9
II	Alkali Wetlands	Low	100		
		Moderate	150		
		High	200		
	Based on Total Score; Riparian Forest Wetlands	Low	50	75	100
		Moderate	75	110	150
		High	100	150	200
Vernal Pools	Low	100			
	Moderate	150			
	High	200			
III	All Types of Wetlands	Low	40	75	Use Category II Buffer Widths
		Moderate	60	110	
		High	80	150	
IV	All Types of Wetlands	Low	25		
		Moderate	40		
		High	50		

Table 2. Land Use Impact

Level of Impact from Proposed Land Use	Types of Land Uses
High	<ul style="list-style-type: none"> <li>• Commercial</li> <li>• Mixed-use developments</li> <li>• Industrial</li> <li>• Institutional</li> <li>• Retail sales</li> <li>• Residential (more than 1 unit/acre)</li> <li>• Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, cannabis farms, outdoor cannabis production,</li> </ul>

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

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

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

(6) Buffer Modifications. The administrator may allow a one-time administrative buffer modification using one of the following tools:

- (A) Impact Minimization Measures. The buffer widths for proposed high impact land uses can be reduced to the buffer widths for moderate impact land uses under the following conditions:
  - (i) For wetlands that score six points or more for habitat function:
    - (a) A relatively undisturbed, vegetated corridor at least one hundred feet wide is protected between the wetland and any other priority habitats as defined by the Washington State Department of Fish and Wildlife, where available. The corridor must be protected for the entire distance between the wetland and the priority habitat by some type of legal protection such as a conservation easement.
  - (b) Measures to minimize the impact of different land uses, such as the examples in Table 3, are applied.
    - (ii) For wetlands that score three to five habitat points, only application of the measures in Table 3 are required to reduce the buffer width to those required for moderate impact land uses.
    - (iii) If an applicant chooses not to apply the measures in Table 3, or is unable to provide a protected corridor where available, then high impact buffer widths must be applied.

Table 3. Examples of measures to minimize impacts to wetlands and reduce high impact buffer widths

<b>Examples of Measures to Minimize Impacts</b>	
Lights	<ul style="list-style-type: none"> <li>• Direct lights away from wetland</li> </ul>
Noise	<ul style="list-style-type: none"> <li>• Locate activity that generates noise away from wetland</li> </ul>
Toxic runoff	<ul style="list-style-type: none"> <li>• Route all new, untreated runoff away from wetland</li> </ul>

Examples of Measures to Minimize Impacts	
	<p>while ensuring wetland is not dewatered</p> <ul style="list-style-type: none"> <li>• Establish covenants limiting use of pesticides within 150 ft of wetland</li> <li>• Apply integrated pest management</li> </ul>
Stormwater runoff	<ul style="list-style-type: none"> <li>• Retrofit stormwater detention and treatment for roads and existing adjacent development</li> <li>• Prevent channelized flow from lawns that directly enters the buffer</li> </ul>
Change in water regime	<ul style="list-style-type: none"> <li>• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns</li> </ul>
Pets and human disturbance	<ul style="list-style-type: none"> <li>• Use privacy</li> </ul>

<b>Examples of Measures to Minimize Impacts</b>	
	fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion
	<ul style="list-style-type: none"> <li>• Place wetland and its buffer in a separate tract or within dedicated open space or easement in a subdivision, or protect with a conservation easement, where available</li> </ul>
Dust	<ul style="list-style-type: none"> <li>• Use best management practices to control dust</li> </ul>

- (B) Buffer Averaging for Wetland Protection. Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:
- (i) The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a “dual-rated” wetland with a Category I area adjacent to a lower-rated area;
  - (ii) The buffer is increased adjacent to the higher-functioning area of habitat or more-sensitive portion of the wetland and decreased adjacent to the lower-functioning or

less-sensitive portion as demonstrated by a critical areas report from a qualified professional wetland biologist/consultant;

(iii) The total area of the buffer after averaging is equal to the area required without averaging; and

(iv) The buffer at its narrowest point is never less than seventy-five percent of the required buffer width.

(C) Buffer Averaging for Reasonable Use. Buffer averaging to allow reasonable use of a parcel may be permitted when all of the following are met:

(i) There are no feasible alternatives to the site design that could be accomplished without buffer averaging;

(ii) The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report from a qualified wetland professional;

(iii) The total buffer area after averaging is equal to the area required without averaging; and

(iv) The buffer at its narrowest point is never less than seventy-five percent of the required buffer width.

(D) Buffer Reduction. For those legally created lots, tracts, and parcels that satisfy the criteria outlined below, the administrator may allow a reduction to the standard buffer widths. The buffer widths may be reduced by no more than twenty-five percent, and in no case shall the buffer width be less than twenty-five feet. The buffer reduction granted shall be the minimum necessary to afford relief to address hardship issues. All of the following criteria must be satisfied:

(i) The strict application of the bulk, dimensional or performance standards set forth in these requirements significantly interferes with reasonable use of the property;

(ii) The hardship described in subsection (6)(D)(i) of this section is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of this title, and not, for example, from deed restrictions or the applicant's own actions;

(iii) There are no feasible alternatives to the site design that could be accomplished with the impact minimization measures or buffer averaging provisions above; and

(iv) The reduced buffer will not result in degradation of the wetland's functions and values, or includes mitigation measures to address all impacts, as demonstrated by a wetlands report from a qualified professional wetland biologist/consultant; and

(v) That the public interest will not suffer substantial detrimental effect.

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

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

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

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

(11) Impacts to Buffers. Requirements for the compensation for impacts to buffers are outlined in Section 6.1.7.

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

- (A) Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.
- (B) Passive Recreation. Passive recreation facilities designed and in accordance with an approved critical area report, including:
  - (i) Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent of the wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five feet in width for pedestrian use only. Raised boardwalks utilizing nontreated pilings may be acceptable.
  - (ii) Wildlife-viewing structures.
  - (iii) Educational and scientific research activities.
- (C) Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.
- (D) The harvesting of wild crops, naturally existing within the wetland, in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.
- (E) Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.
- (F) Enhancement of a wetland buffer through the removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.
- (G) Repair and maintenance of non-conforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.

#### **6.1.6 Wetland reports**

A wetlands report shall be prepared by a qualified professional wetland biologist/consultant when a development activity is proposed in or will impact a wetland or buffer. The expense of preparing the wetland report shall be borne by the applicant. The county may retain independent qualified consultants, at the expense of the applicant, to assist in review of reports. In addition to report elements required by Section 5.8.3, a written wetland report and the accompanying figures and/or plan sheets shall contain the following information, at a minimum:

- (1) The written report shall include at a minimum:



(A) For each wetland identified on-site and within two hundred fifty feet of the project area, provide: the wetland rating, including a description of and score for each function, per Section 6.1.4; required buffers; hydrogeomorphic classification; wetland acreage from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Tabulate acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site. Methods for the location and mapping of wetland boundaries and wetland areas shall be consistent with common wetland delineation practice standards and meet the approval of the administrator.

(B) An evaluation of the existing functions and habitat value of each wetland and adjacent buffer. Include reference for the method used and data sheets.

(C) An explanation of the proposed impact actions, including tabulating the area quantity (square feet or acres) of direct impacts to wetlands and wetland buffers based on the field delineation and survey.

(D) A discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.

(2) A copy of the site plan sheet(s) for the project must be included with the written report and must include, at a minimum:

- (A) Maps (to scale) overlaid on current aerial photos depicting delineated and surveyed wetlands and required buffers in the project area, including buffers for off-site critical areas that may extend into the project area; the development proposal; other critical areas; grading and clearing limits for all land disturbing project elements; areas of proposed impacts to wetlands and/or buffers (include square footage estimates); and areas of proposed mitigation.
- (B) Hydrologic analysis and mapping showing patterns of surface water movement and known subsurface water movement into, through, and out of the project area.
- (C) Location of all sample plots, test holes, and hydrologic monitoring stations, numbered to correspond with flagging in the field and field data sheets.
- (D) A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including intrusion into the buffers of any critical areas. The written report shall contain an assessment of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project.

### **6.1.7 Wetland mitigation**

(1) Requirements for Compensatory Mitigation.

- (A) Compensatory mitigation for alterations to wetlands or buffers shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State—Part 2: Developing Mitigation Plans--Version 1 (Ecology Publication No. 06-06- 011b, Olympia, WA, March 2006 or as revised), and Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington) (Publication No. 10-06-07, November 2010).
- (B) Mitigation ratios shall be consistent with subsection (7) of this section.
- (C) Mitigation requirements may also be determined using the credit/debit tool described in Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report (Ecology Publication No. 11-06-015, August 2012 or as revised), consistent with subsection (9) of this section.

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

- (A) The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington state watershed assessment plan or protocol; or
- (B) Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the county, such as replacement of historically diminished wetland types.
- (C) Buffers shall be provided for wetland mitigation associated with the mitigated wetland category.

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

- (A) Wetland Mitigation Banks. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the mitigation bank instrument. Use of credits from a wetland mitigation bank certified under Chapter 173-700 WAC is allowed if:
    - (i) The administrator determines that it would provide appropriate compensation for the proposed impacts;
    - (ii) The impact site is located in the service area of the bank;
    - (iii) The proposed use of credits is consistent with the terms and conditions of the certified mitigation bank instrument; and
    - (iv) Replacement ratios for projects using bank credits is consistent with replacement ratios specified in the certified mitigation bank instrument.
  - (B) In-Lieu Fee Mitigation. Credits from an approved in-lieu fee program may be used when all of the following apply:
    - (i) The approval authority determines that it would provide environmentally appropriate compensation for the proposed impacts;
    - (ii) The proposed use of credits is consistent with the terms and conditions of the approved in-lieu fee program instrument;
    - (iii) Projects using in-lieu fee credits shall have debits associated with the proposed impacts calculated by the applicant's qualified professional wetland biologist/consultant using the credit assessment method specified in the approved instrument for the in-lieu fee program; and
    - (iv) The impacts are located within the service area specified in the approved in-lieu fee instrument.
  - (C) Permittee-Responsible Mitigation. In this situation, the permittee performs the mitigation after the permit is issued and is ultimately responsible for implementation and success of the mitigation. Permittee-responsible mitigation may occur at the site of the permitted impacts or at an off-site location within the same watershed. Permittee-responsible mitigation shall be used only if the applicant's qualified professional wetland biologist/consultant demonstrates to the approval authority's satisfaction that the proposed approach is ecologically preferable to use of a bank or in-lieu fee program, consistent with the criteria in this section.
- (4) Types of Compensatory Mitigation. Mitigation for lost or diminished wetland and buffer functions shall rely on a type listed below in order of preference. A lower-preference form of mitigation shall be used only if the applicant's qualified professional wetland biologist/consultant demonstrates to the

approval authority's satisfaction that all higher-ranked types of mitigation are not viable, consistent with the criteria in this section.

- (A) Restoration. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into:
- (i) Reestablishment. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Reestablishment results in a gain in wetland acres (and functions). Activities could include removing fill material, plugging ditches, or breaking drain tiles.
  - (ii) Rehabilitation. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain.
- (B) Establishment (Creation). The manipulation of the physical, chemical, or biological characteristics of a site to develop a wetland on an upland or deepwater site where a wetland did not previously exist. Establishment results in a gain in wetland acres. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species.
- (i) If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the approval authority may authorize creation of a wetland and buffer upon demonstration by the applicant's qualified professional wetland biologist/consultant that:
    - (a) The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that creation of a wetland at the site will not likely cause hydrologic problems elsewhere;
    - (b) Adjacent land uses and site conditions do not jeopardize the viability of the proposed wetland and buffer (e.g., due to the presence of invasive plants or noxious weeds, stormwater runoff, noise, light, or other impacts); and
    - (c) The proposed wetland and buffer will eventually be self-sustaining with little or no long-term maintenance.
- (C) Enhancement. The manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Activities typically consist of planting vegetation, controlling non-native or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these activities. Applicants proposing to enhance wetlands or associated buffers shall demonstrate how the proposed enhancement will increase the wetland's and buffer's functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.
- (D) Protection/Maintenance (Preservation). Removing a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This includes the purchase of land or easements, or repairing water control structures or fences. This term also includes activities commonly associated with the term preservation. Preservation does not result in a gain of

wetland acres. Permanent protection of a Category I or II wetland and associated buffer at risk of degradation can be used only if:

- (i) The approval authority determines that the proposed preservation is the best mitigation option;
- (ii) The proposed preservation site is under threat of undesirable ecological change due to permitted, planned, or likely actions that will not be adequately mitigated under existing regulations;
- (iii) The area proposed for preservation is of high quality or critical for the health of the watershed or basin due to its location. Some of the following features may be indicative of high-quality sites:
  - (a) Category I or II wetland rating (using the wetland rating system for western Washington);
  - (b) Rare or irreplaceable wetland type (for example, bogs, mature forested wetlands, estuarine wetlands) or aquatic habitat that is rare or a limited resource in the area;
  - (c) The presence of habitat for priority or locally important wildlife species;
  - (d) Provides biological and/or hydrological connectivity; or
  - (e) Priority sites in an adopted watershed plan;
- (iv) Permanent preservation of the wetland and buffer will be provided through a conservation easement or tract held by an appropriate natural land resource manager, such as a land trust;
- (v) The approval authority may approve other legal and administrative mechanisms in lieu of a conservation easement if it determines they are adequate to protect the site;
- (vi) Ratios for preservation in combination with other forms of mitigation generally range from 10:1 to 20:1, as determined on a case-by-case basis, depending on the quality of the wetlands being impacted and the quality of the wetlands being preserved. Ratios for preservation as the sole means of mitigation generally start at 20:1.

(5) Location of Compensatory Mitigation. Compensatory mitigation actions shall generally be conducted within the same sub-drainage basin and on the site of the alteration except when the applicant can demonstrate that off-site mitigation is ecologically preferable. The following criteria will be evaluated when determining whether the proposal is ecologically preferable. When considering off-site mitigation, preference should be given to using alternative mitigation, such as a mitigation bank, an in-lieu-fee program, or advance mitigation.

- (A) There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);
- (B) On-site mitigation would require elimination of high-quality upland habitat.
- (C) Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the altered wetland.
- (D) Off-site locations shall be in the same sub-drainage basin unless:
  - (i) Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the county and strongly justify location of mitigation at another site; or

- (ii) Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;
  - (iii) Fees are paid to an approved in-lieu fee program to compensate for the impacts.
- (E) The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland.
- (6) **Timing of Compensatory Mitigation.** It is preferred that compensatory mitigation projects be completed prior to activities that will disturb wetlands. At the least, it is preferred that compensatory mitigation construction shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
- (A) The administrator may authorize a one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified professional wetland biologist/consultant as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the administrator.
- (B) Bonding according to the provisions of Section 5.8.2 for the cost of uncompleted activities is an acceptable alternative to completion where a contract to complete the work is in force.

(7) **Wetland Mitigation Ratios.**

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

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

(9) **Credit/Debit Method.** To more fully protect functions and values, and as an alternative to the mitigation ratios found in the joint guidance “Wetland Mitigation in Washington State Parts I and II” (Ecology Publication No. 06-06-011a-b, Olympia, WA, March, 2006), the administrator may allow mitigation based on the “credit/debit” method developed by the Department of Ecology in “Calculating

Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report” (Ecology Publication No. 11-06-015, August 2012, or as revised).

### **6.1.8 Compensatory mitigation plan and monitoring**

(1) Compensatory Mitigation Plan. When a project involves wetland and/or buffer impacts, a compensatory mitigation plan prepared by a qualified professional wetland biologist/consultant shall be required. The expense of preparing the mitigation plan shall be borne by the applicant. The county may retain independent qualified consultants, at the expense of the applicant, to assist in review of the plan. The plan shall meet the following minimum standards:

- (A) Wetland Critical Area Report. A critical area report for wetlands must accompany or be included in the compensatory mitigation plan and include the minimum parameters described in Section 6.1.5.
- (B) Compensatory Mitigation Report. The report must include a written report and plan sheets that must contain, at a minimum, the following elements. Full guidance can be found in Wetland Mitigation in Washington State—Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised).
- (C) The written report must contain, at a minimum:
  - (i) The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the compensatory mitigation report; a description of the proposal; a summary of the impacts and proposed compensation concept; identification of all the local, state, and/or federal wetland-related permit(s) required for the project; and a vicinity map for the project.
  - (ii) Description of how the project design has been modified to avoid, minimize, or reduce adverse impacts to wetlands.
  - (iii) Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding lands uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on Section 6.1.6.
  - (iv) Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are NOT undertaken (i.e., how would this site progress through natural succession?).
  - (v) Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas.
  - (vi) Include illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions.
  - (vii) A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands.
  - (viii) A description of the proposed mitigation construction activities and timing of activities.

(ix) Performance standards (measurable standards for years post-installation) for upland and wetland communities, a monitoring schedule, and a maintenance schedule and actions proposed by year.

(x) A discussion of ongoing management practices that will protect wetlands after the development project has been implemented, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands).

(xi) Pursuant to Section 5.8.2 (1), a financial guarantee of the entire compensatory mitigation project, including the following elements, is required: site preparation, plant materials, construction materials, installation oversight, maintenance twice per year for up to five years, annual monitoring field work and reporting, and contingency actions for a maximum of the total required number of years for monitoring. The financial guarantee shall run concurrent with the prescribed monitoring period.

(xii) Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas. Also, existing cross-sections of on-site wetland areas that are proposed to be impacted, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation.

(iii) Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes.

(iv) Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter.

(v) A planting plan for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species by community type, and timing of installation.

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

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

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



- (4) **Advance Mitigation.** Mitigation for projects with preidentified impacts to wetlands may be constructed in advance of the impacts if the mitigation is implemented according to federal rules, state policy on advance mitigation, and state water quality regulations consistent with Interagency Regulatory Guide: Advance Permittee—Responsible Mitigation (Ecology Publication No. 12-06-015, Olympia, WA, December 2012).
- (5) **Alternative Mitigation Plans.** The administrator may approve alternative wetland mitigation plans that are based on best available science, such as priority restoration plans that achieve restoration goals identified in the SMP. Alternative mitigation proposals must provide an equivalent or better level of protection of wetland functions and values than would be provided by the strict application of this chapter. The administrator shall consider the following for approval of an alternative mitigation proposal:
- (A) The proposal uses a watershed approach consistent with *Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington)* (Ecology Publication No. 10-06-07, November 2010).
  - (B) Creation or enhancement of a larger system of natural areas and open space is preferable to the preservation of many individual habitat areas.
  - (C) Mitigation according to Section 6.1.7 (4) is not feasible due to site constraints such as parcel size, stream type, wetland category, or geologic hazards.
  - (D) There is clear potential for success of the proposed mitigation at the proposed mitigation site.
  - (E) The plan shall contain clear and measurable standards for achieving compliance with the specific provisions of the plan. A monitoring plan shall, at a minimum, meet the provisions in subsection (1) of this section.
  - (F) The plan shall be reviewed and approved as part of overall approval of the proposed use.
  - (G) A wetland of a different type may be justified based on regional needs or functions and values; the replacement ratios may not be reduced or eliminated unless the reduction results in a preferred environmental alternative.
  - (H) Mitigation guarantees shall meet the minimum requirements as outlined in subsection (1)(C)(xi) of this section.
  - (I) Qualified professionals in each of the critical areas addressed shall prepare the plan.
  - (J) The county may consult with agencies with expertise and jurisdiction over the critical areas during the review to assist with analysis and identification of appropriate performance measures that adequately safeguard critical areas.

~~Table 1~~

~~Table 2~~



## **6.2 Critical Aquifer Recharge Areas**

### **6.2.1 Aquifer Recharge Areas Overlay District (AROD)**

#### **6.2.2 Classification**

(1) Classification is based on an evaluation of the aquifer vulnerability defined as the combination of potential for contaminant loading of a proposed land use, and the susceptibility of aquifer to contamination at the proposed site.

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

#### **6.2.3 Designation**

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

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

#### **6.2.4 Procedure.**

(1) An applicant seeking to develop property which requires a development permit, not otherwise exempted from the requirements of this chapter, shall submit with the application a certified statement, on a form provided by the Chelan County community development department, which lists criteria (5)(A) through (5)(D), (6), and (7) as set forth in Section 6.2.5 and indicate whether the criteria apply or do not apply to the site or development. Any development application that fails to contain this statement or fails to indicate whether any one of the criteria apply or do not apply shall be rejected and only accepted upon resubmission of the completed statement. "Unknown" or similar responses will not be accepted.

(2) If the administrator determines the development meets one or more of criteria (1) through (4) of Section 6.2.5, or if the administrator determines the development meets criterion (5) of Section 6.2.5 and the applicant indicates the development meets one or more of criteria (5)(A) through (5)(D) of Section 6.2.5, or if the applicant indicates the development meets one or more of criteria (6) or (7) of Section 6.2.5, the department shall require a hydrogeologic evaluation as described in Section 6.2.6. If the development has a medium or high vulnerability rating, the development shall be subject to the performance standards of Section 6.2.7.

(3) If the administrator determines that criteria (1) through (5) of Section 6.2.5 do not apply to the development and an applicant's statement asserts that criteria (6) and (7) of Section 6.2.7 do not apply to the development, the administrator will accept the statement and proceed with the permitting or approval process, except if the administrator has or obtains information prior to the permit or approval being finalized, which clearly establishes the applicant's statement is incorrect. In which case, the

applicant will be advised in writing of the inconsistent information and advised to either (A) provide an amended statement adding the evaluation criteria as being applicable and complete a hydrogeologic evaluation of the development pursuant to Section 6.2.6, or (B) present sufficient countering information clearly establishing that the basis for the department's concern is incorrect. If the applicant selects to proceed under (B), upon receipt of the applicant's information, the administrator shall review the information and obtain whatever additional assistance may be required to resolve the issue. The final determination as to whether a determination of vulnerability is required shall be made by the administrator.

(4) Development proposals for a single-family residential dwelling, accessory dwelling unit, or accessory building that is connected to a public sewer system or has a septic permit approved by the Chelan-Douglas health district shall be exempt from hydrogeologic evaluation under Section 6.2.6.

#### **6.2.5 Evaluation criteria.**

The administrator shall require an aquifer vulnerability evaluation for any development permit, not otherwise exempted from this chapter, if the site or development meets one of criteria (1) through (7) below:

- (1) Within a wellhead protection area designated under WAC [246-290-135](#);
- (2) Within a critical aquifer recharge area mapped and identified by a qualified groundwater professional;
- (3) Within a sole source aquifer recharge area designated pursuant to the Federal Safe Drinking Water Act;
- (4) Within an area established for special protection pursuant to a groundwater management program, Chapters [90.44](#), [90.48](#) and [90.54](#) RCW, and Chapters [173-100](#) and [173-200](#) WAC;
- (5) The site contains highly permeable soils, which include soil types 1, 2 and 3 under WAC [246-272A-0220](#), Table V or soils mapped by U.S. Department of Agriculture Natural Resources Conservation Service as having saturated hydraulic conductivity (Ksat) classification of Moderately High or identified as Hydrologic Soil Group "A" and:
  - (A) The site will be utilized for hazardous substance (defined in Chapter [70.105](#) RCW) processing, storage or handling in applications or quantities larger than is typical of household use; or
  - (B) The site is currently or will be utilized for commercial or industrial activities listed in the U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index that can be found in Appendix A to Department of Ecology's Critical Aquifer Recharge Area Guidance Document; or
  - (C) The development involves a major subdivision and includes present or future plans to construct dwelling units that will not be connected to a public sewer system and any of the lots are less than one net acre in size; or
  - (D) The proposed commercial and industrial site is not on a public sewer system and the main structure exceeds four thousand square feet;
- (6) The proposed use is as a commercial feedlot, landfill, junkyard, salvage yard, or auto wrecking yard; or
- (7) The site will be used for above ground application of sewage or sludge.

#### **6.2.6 Hydrogeologic evaluation.**

(1) Development proposals meeting any one of the evaluation criteria under Section 6.2.5 will require hydrogeologic evaluation completed by a qualified groundwater professional in accordance with this section, unless the administrator determines an evaluation is not necessary. A minimum of a tier-one evaluation shall be completed. When required, tier-one and tier-two evaluations may be combined in a single report completed by the same qualified groundwater professional.

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

- (A) A summary of readily available existing information for the site vicinity, including hydrogeological and other groundwater reports. Cite all references and information used in the evaluation preparation;
- (B) Hydrogeologic characterization of the aquifer based on readily available existing information including permeability and thickness of the vadose zone, depth to groundwater, presence of confining layers and bedrock, estimated hydraulic conductivity of the saturated zone, and groundwater flow direction and gradient;
- (C) Review of readily available existing groundwater quality information to characterize existing water quality conditions;
- (D) Confirmation of the applicability of evaluation criteria (1) through (5) under Section 6.2.5 to the site proposed for development;
- (E) Determination of a rating of low, medium, or high aquifer susceptibility to contamination based on properties of the aquifer as determined by the qualified groundwater professional;
- (F) Recommendations for further study, including a specific recommendation for a tier-two evaluation when aquifer susceptibility is rated as high, or whether more information is needed to complete an aquifer susceptibility rating;
- (G) If, in the opinion of the groundwater professional, a tier-two evaluation is not necessary, the tier-one evaluation shall provide recommendations for best management practices and other measures to mitigate probable worst-case scenario release of contaminants.

(3) Tier-Two Hydrogeologic Evaluation. A tier-two evaluation addresses aquifer vulnerability for subject development proposals. A tier-two evaluation shall be completed for developments meeting criteria (6) or (7) under Section 6.2.5, for sites determined as having an aquifer susceptibility rating of high, as otherwise recommended by a qualified groundwater professional in a tier-one evaluation report, or as directed by the administrator to resolve uncertainty following completion of a tier-one evaluation. A tier-two evaluation report shall include the following:

- (A) All elements of a tier-one evaluation or confirmation of findings from a tier-one evaluation if the evaluations are completed by different qualified groundwater professionals or if five years have passed since the tier-one evaluation was completed;
- (B) Locations of known land-use activities listed in the U.S. Environmental Protection Agency's Potential Sources of Drinking Water Contamination Index located within one thousand feet of the proposed development;
- (C) Locations of releases of contaminants to the environment reported to Department of Ecology within one thousand feet of the proposed development;
- (D) Locations of public water supply wells and wellhead protection areas within one half mile of the development proposal and locations of permit-exempt wells within one thousand feet of the proposed development;
- (E) Locations of surface water bodies and springs within one thousand feet of proposed development;
- (F) Determination of a rating of low, medium, or high aquifer vulnerability based on aquifer susceptibility and potential for contamination loading resulting from the proposed development as determined by the qualified groundwater professional;
- (G) For development proposals having medium or high aquifer vulnerability ratings:
  - (i) Discussion of potential impacts to groundwater quality resulting from spills or acute releases of contaminants and long-term loading resulting from proposed activities, including evaluation of probable worst case spill scenario;

- (ii) Recommendations for further study, including cumulative contaminant loading evaluation and groundwater monitoring;
  - (iii) Recommendations for mitigating measures, including BMPs and spill response planning.
- (H) Recommendations for further study, or whether more information is needed to complete a vulnerability rating.

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

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

(2) Application of Aquifer Recharge Area Performance Standards.

- (A) Certain residential dwelling units and their accessory uses are exempt under Section 6.2.4 (4). New residential subdivisions are subject to the provisions of subsection (9) of this section.
  - (B) The standards for approval of development regulated by this chapter shall be defined in subsequent subsections.
  - (C) The assurance that these standards are applied to development regulated by this chapter is the responsibility of the administrator.
    - (i) Appropriate standards for approval as applied to development regulated by this chapter shall be the responsibility of the Chelan County community development department and hearing examiner as otherwise described in agency rules.
    - (ii) Appropriate safeguards, to be included in the design of buildings newly constructed or remodeled, shall be the responsibility of the Chelan County community development department.
    - (iii) Site planning and other considerations for areas outside of buildings shall be the responsibility of the appropriate office or agency as may be elsewhere described in agency rules.
    - (iv) Appropriate sanitary, industrial and solid waste disposal practices employed shall be the responsibility of the Chelan-Douglas health district or other appropriate agency (e.g., Washington State Department of Health or Ecology).
    - (v) When the occupancy of a building changes, any new commercial or industrial occupant shall not operate without a certificate of occupancy as issued by the Chelan County community development department; such certificate of occupancy is subject to review pursuant to subsection (2)(C) of this section.
  - (D) If the applicant does not have a specific proposal, the department shall recommend that the action be conditioned, or shall so condition a license/permit, with the performance criteria of subsections (3) through (11) of this section.
  - (E) Even though an activity is permitted in the underlying zone classification, any activity which, following review in accordance with this chapter, is determined to have a medium or high vulnerability rating shall be required to conform to the conditions set forth in subsections (3) through (11) of this section.
- (3) Agricultural Activities. Agricultural activities shall incorporate best management practices concerning waste disposal, fertilizer use, pesticide use, and stream corridor management.

(4) Prohibited Uses. Landfills, junkyards, salvage yards, auto wrecking yards, and feedlots that cannot be mitigated to a low vulnerability are prohibited within designated critical aquifer recharge areas. Landfills are subject to Chapter 173-351 WAC.

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

(6) Commercial, Industrial and Mining Uses.

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

(B) Contingency Plans.

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

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

(b) On-site containment facilities designed to handle accidental releases of materials identified in subsection (6)(B)(i)(a) of this section;

(c) Spill response and notification procedures.

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

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

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

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

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

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

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

(ii) Enhance spill cleanup procedures.

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

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

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

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

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

- (A) An analysis of the potential nitrate loading to the groundwater may be required to assess the impact on groundwater quality;
- (B) Alternative site designs, phased development and/or groundwater quality monitoring will be required to reduce contaminant loading where site conditions indicate that the proposed action will measurably degrade groundwater quality;
- (C) Open spaces may be required on development proposals overlying areas highly susceptible for contamination of groundwater resources;
- (D) Community/public water systems, community drainfields, and hookup to public sewer systems (in conformance with the Washington State Department of Health and Chelan-Douglas health district requirements, the provisions of the sewer purveyor, and Chapter 36.70A RCW) are encouraged and may be required where site conditions indicate a high degree of potential contamination to individual wells from on-site or off-site sources. Where required, community systems shall be placed in the most favorable location for the prevention of groundwater contamination;
- (E) Where wells are required to be abandoned, the applicant shall ensure that they are abandoned according to state guidelines;
- (F) Known contaminants shall be removed from stormwater runoff prior to their point of entry into surface or groundwater resources using available and reasonable best management practices consistent with the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chelan County Code Chapter 13.16.

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

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

### **6.3 Frequently Flooded Areas**

#### **6.3.1 FREQUENTLY FLOODED AREAS OVERLAY DISTRICT (FFOD)**

##### **6.3.2 Classification**

Those areas located within the one percent chance floodplain, also known as the one-hundred-year floodplain and the special flood hazard area, as defined by the Federal Emergency Management Agency and adopted by the board of county commissioners, are classified as frequently flooded areas. These areas are specified in Chelan County Code Section 3.20.090, Flood hazard areas established.

### 6.3.3 Designation

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

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

### 6.3.4 Protection measures

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

## 6.4 Geologically Hazardous Area

### 6.4.1 GEOLOGICALLY HAZARDOUS AREAS OVERLY DISTRICT (GHOD)

#### 6.4.2 Purpose

The purpose of the geologically hazardous overlay district is to reduce the risk to the health and safety of citizens by designating and regulating geologically hazardous critical areas consistent with the Growth Management Act and Chapter 365-190 WAC, Minimum Guidelines to Classify Agricultural, Forest, Mineral Lands, and Critical Areas.

#### 6.4.3 Classification

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

(1) Known or Suspected Risk. Areas that are susceptible to one or more of the following types of hazards shall be classified as a geologically hazardous area with a known or suspected risk and shall require a geologic site assessment as described in Section 6.4.9:

- (A) Erosion hazard areas identified by the U.S. Department of Agriculture Natural Resources Conservation Service Chelan County Soil Survey as either:
  - (i) Areas with a “very severe” erosion hazard; or
  - (ii) Areas with a “severe” erosion hazard where slopes are fifteen percent or steeper.
- (B) Landslide hazard areas shall include areas potentially subject to mass wasting based on a combination of geologic, topographic and hydrologic factors. They include any areas susceptible to mass movement because of any combination of bedrock or soil characteristics, slope (gradient), slope aspect, rock or soil bedding and inclination or fractures or other geologic structure, hydrology, damage or removal of vegetative cover, or other factors. Examples of these may include, but are not limited to, the following:
  - (i) Sites that are located on or within two hundred fifty feet of areas of documented or historic landslides, including areas identified in geotechnical/geological reports, such as:

- (a) Those areas delineated by the United States Department of Agriculture Natural Resources Conservation Service as having a “severe” limitation for building site development.
  - (b) Areas designated as landslides or mass wasting deposits on maps published by the United States Geological Survey or the Washington Department of Natural Resources Division of Geology and Earth Resources.
  - (c) Areas located on a landslide feature which has shown movement during the past ten thousand years or which is underlain or covered by mass waste debris of that period.
- (ii) Sites that are located on or within two hundred fifty feet from areas with all three of the following characteristics:
- (a) Slopes steeper than fifteen percent; and
  - (b) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
  - (c) Springs or groundwater seepage.
- (iii) Areas potentially unstable as a result of rapid stream incision, stream or channel migration, stream bank erosion, or undercutting by wave action.
- (iv) Areas located in bottoms of narrow drainages and other confined channels including canyons, ravines, and gullies, and areas located on an alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding.
- (v) Steep Slopes. Areas located within two hundred fifty feet from the base of any slope of forty percent or steeper with ten feet of relief or a talus slope or a distance equal to the vertical height of the slope, whichever is greater.

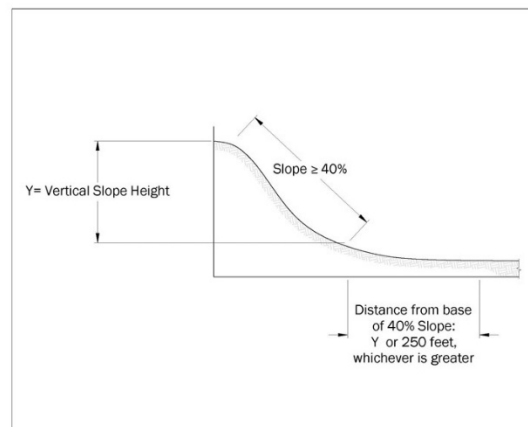


Figure 1. Steep slope classification.

- (vi) Areas that have slopes of fifteen percent or steeper and are located within two hundred fifty feet from areas affected by wildfire within the past ten years, or areas within confined drainage channels downstream of recent wildfire areas.
  - (vii) Areas that show evidence of, or are at risk from, sliding that may pose a threat to the public health and safety.
- (C) Seismic hazards. Sites that are located within areas mapped by Washington Department of Natural Resources as having liquefaction susceptibility of “moderate” or higher, and sites located within two hundred fifty feet from a mapped or inferred fault.



- (D) Sites that are located on or within five hundred feet from snow avalanche areas. Snow avalanche areas include areas that show evidence of, or are at risk from, snow avalanches.
  - (E) Upon examination of the subject property by a qualified professional pursuant to Section 6.4.8, if a determination is made that none of the foregoing conditions are present on or adjacent to the property, the qualified professional may state in letter form the circumstances under which the site assessment or report may be waived.
- (2) No Risk. Areas classified initially as geologically hazardous areas with a known or suspected risk or unknown risk may, upon further study, actually pose no risk to development or to the public health and safety. Where the administrator can determine that no risk from the geologically hazardous area is present, based upon geotechnical reports or best available science, these areas shall be classified as geologically hazardous areas determined to be of no risk.
- (3) Unknown Risk. Geologically hazardous areas may be present in the county that cannot readily be identified based upon the criteria of subsection (1) of this section. Geologically hazardous areas of unknown risk include areas where data are not available to determine the presence or absence of a geological hazard. The administrator may require a geologic site assessment and/or geotechnical report to determine the actual presence or absence of a geologically hazardous area.

#### **6.4.4 Classification challenge**

An applicant may challenge the geologically hazardous area classification determination made by the administrator. Said challenge shall be in the form of a geologic site assessment or a geotechnical report under the provisions of Section 6.4.9. If the geologic site assessment or a geotechnical report indicates that the geologically hazardous area does not exist or should be classified as no risk or low risk, the administrator may find that the performance standards outlined in this chapter do not apply to the site or project.

#### **6.4.5 Administrative review**

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

#### **6.4.6 Designation**

Areas classified as geologically hazardous areas pursuant to Section 6.4.3 are designated as geologically hazardous areas.

#### **6.4.7 Performance standards**

(1) Upon completion of a geotechnical report, the following performance standards shall be applied during county review of proposed development projects that are the subject of the geotechnical report. Additional mitigation measures may be required pursuant to the findings of a geotechnical report. The administrator may agree to alternative mitigation measures set forth by the geotechnical report, if such alternative measures provide greater or equal protection than the application of the performance standards below. Development proposals may be approved pursuant to the performance standards of this section and/or mitigation measures of a geotechnical report, if they are determined to satisfy the

purposes of this chapter. A development permit may be denied based upon the administrator's evaluation of the inability of said measures to reduce risks associated with the geologically hazardous area. Performance standards to be utilized include:

- (A) Construction methods should be used which minimize risks to structures and do not increase the risk to the site, or to adjacent properties and their structures, from the geologic hazard. Development shall not increase instability or create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion.
- (B) Site planning should minimize disruption of existing topography and vegetation, and should incorporate opportunities for phased clearing.
- (C) Disturbed areas shall be replanted within one year of project completion, in accordance with an approved revegetation plan, and be appropriately bonded for.
- (D) Impervious surface coverage shall be minimized.
- (E) Excavation and grading shall be minimized. A clearing and grading schedule shall consider limitations based upon seasonal weather conditions.
- (F) Detailed drainage plans may be required for projects affecting areas of geologic hazard. These plans shall indicate the effect the project may have on the hazard areas and adjacent properties and mitigating measures, with stormwater detention standards based upon the technical studies required under this document.
- (G) Any limitations to site disturbance, such as clearing restrictions, imposed as a condition of development approval should be marked in the field and approved by the county prior to undertaking the project.
- (H) A monitoring program should be prepared for construction activities occurring in geologic hazard areas and be marked on the face of the building permit.
- (I) All authorized clearing for roads, utilities, etc., should be limited to the minimum necessary to accomplish engineering design. Alternatives should meet the following requirements:
  - (i) Clearing, grading, or filling of sloped sites containing erosion hazard areas shall be limited by weather conditions and an approved erosion control plan.
  - (ii) The face of cut and fill on slopes shall be prepared and maintained to control against erosion.
- (J) Unless otherwise directed by the administrator or recommended in the site assessment or geotechnical report pursuant to Section 6.4.9, temporary erosion and sedimentation control shall be consistent with best management practices (BMPs) in the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chelan County Code Chapter 13.16.
- (K) To maintain the natural integrity of landslide hazard areas and to protect the environment, and the public health and safety, adequate vegetation shall be maintained around all sides of the landslide hazard area.
- (L) Development proposals that involve altering land upon areas identified as landslide or avalanche hazard areas must demonstrate the following for approval:
  - (i) There is no evidence of recent landslides or avalanches in the vicinity of the proposed development and quantitative analysis of slope stability and/or other pertinent factors indicate no significant risk to the proposed development or nearby areas.
  - (ii) The landslide or avalanche hazard areas can be modified or the project can be designed so that the landslide or avalanche hazard to the project is eliminated.
  - (iii) Unless otherwise directed by the administrator or recommended in the geotechnical report pursuant to Section 6.4.9, surface water discharge from the site shall comply with requirements in the Stormwater Management Manual for Eastern Washington, as revised, pursuant to Chelan County Code Chapter 13.16, and natural surface water drainages including water discharging from springs or seeps and shall be maintained.

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

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

- (M) Projects in snow avalanche hazard areas shall provide technical studies, which identify the location and extent of the potential avalanche area and include mitigation measures, which ensure that the proposed activity will not increase the potential for an avalanche on the subject property and adjacent properties.
- (2) Performance standards or mitigation measures outlined in a geologic site assessment or geotechnical report shall be implemented and incorporated into conditions of approval, if applicable.
- (3) If performance standards or mitigation measures are outlined in a geologic site assessment or geotechnical report, an engineer or geologist shall verify that said measures/standards have been adequately completed and provide written notification of completion to the department.

#### **6.4.8 Report preparer qualifications and criteria.**

- (1) A geologic site assessment, when required, shall be prepared by either a geologist licensed by the state of Washington; an engineering geologist licensed by the state of Washington; or a professional civil engineer with geologic expertise licensed by the state of Washington.
- (2) A geotechnical report, when required, shall be prepared by either an engineering geologist licensed by the state of Washington or a professional civil engineer with geologic expertise licensed by the state of Washington. A civil engineer must also have the following experience and background.
- (A) Five years of geotechnical experience evaluating geologically hazardous conditions and site development activities, such as landform recognition; unstable geologic units; roads; structural footings, foundations and retaining walls; swimming pools and sport courts; and other activities such as timber removal, site disturbance and mining.

#### **6.4.9 Geologic site assessment and geotechnical report requirements.**

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

- (1) The geologic site assessment shall include the following:
- (A) Evaluate the actual presence of geologically hazardous areas within or in the vicinity of the site and the need for a geotechnical report. Specifically mention the circumstances or conditions which require the report to be prepared (steep slopes, erodible soils, suspected landslide or avalanche hazard, adverse hydrologic or flood risk, etc.).
- (B) Evaluate safety issues related to proposed activities. Address issues that could involve personal injury, worksite safety, or property damage.
- (C) Address existing geologic, topographic, and hydrologic conditions on the site, including an evaluation of the ability of the site to accommodate the proposed activity. Describe the proposed development, including property size and location, nature and extent of the planned development (i.e., house, garage, shop, swimming pool, etc.), and its specific location on the property. Include evidence of prior grading, excavation, cut banks, fill areas, or mining activity, and their potential impact on the project. Note and evaluate any features that could adversely affect development such as drainage gullies, erosion channeling, alluvial fans, evidence for

- debris flow or avalanche, surface creep and landslides observed or suspected spring activity and flood risk potential.
- (D) A discussion of the surface and subsurface geological and engineering properties of the soils, sediments, and/or rocks on the subject property and adjacent properties and their effect on the stability of the slope. Note any areas of modified ground or fill. Where known from field inspection or reference maps and literature, include bedrock identification and age, bedding and joint attitude with respect to slope inclination, fracturing, faults and shear zones, hydrothermal alteration, weathering characteristics, presence of landslide deposits and its age and consolidation, etc. Use cross-sections if necessary for better representation of subsurface character.
  - (E) A description of the soils in accordance with the Unified Soil Classification System. Give general soil characteristics that could affect site development (i.e., frost action and shrink/swell potential, permeability, compressibility, density or consistency, plasticity and wet/dry behavior, erodibility, etc.). Especially note the presence or suspected presence of clay-rich horizons and their position/location in the soil profile, and any indication that a building site could be subjected to soil compression or differential setting.
  - (F) Evidence and history of avalanches, faults, significant geologic contacts, springs or seeps, landslides or other downslope soil movement, or sedimentation and alluviation, stream or channel or shoreline incision, migration, or erosion, on the subject property and adjacent properties not detailed in subsection (1)(C) of this section.
  - (G) A discussion of seismic hazards including seismic class, liquefaction susceptibility including probable depth to groundwater, fault rupture, ground shaking, slope failure, and settlement or subsidence.
  - (H) A summary of the site assessment and its conclusions, mentioning the presence or absence of geological hazards and site suitability. Determine the appropriate hazard category according to the classification of the geologically hazardous area consistent with Section 6.4.3. Include any recommendations for mitigation of potential hazards that can be dealt with without requiring a complete geotechnical report (control measures such as footing or intercept drainage systems, erosion control, debris catchment, vegetative management and restoration, and the probable need for engineering consultation and design). Include a recommendation whether additional study, including a geotechnical report pursuant to Section 6.4.9, is required.
  - (I) A topographic map showing the proposed development site location and approximate parcel shape location and boundaries.
  - (J) Provide a summary of readily available existing information for the site vicinity, including geological/geotechnical reports. Cite all references and information used in the assessment preparation, such as United States Geologic Survey (USGS) and Department of Natural Resources Geologic Maps and Bulletins, soil studies, surveys and previous reports.

(2) The geotechnical report determined to be required by the geologic site assessment shall include the following:

All of the information required for a geologic site assessment as well as the following:

- (A) Determine the appropriate hazard category according to the classification of the geologically hazardous area consistent with Section 6.4.3.
- (B) Evaluation of seismic hazards considering the proposed development.
- (C) Determine the appropriate application of the performance standards of Section 6.4.7 and/or alternative mitigation measures that provide an equal or greater level of protection.

- (D) Include a contour map of the proposed site, at a scale of one-inch equals twenty feet or as deemed appropriate by the administrator. Slopes shall be clearly delineated for the ranges between fifteen and twenty-nine percent, and thirty percent or greater, including figures for a real coverage of each slope category on the site. When site-specific conditions indicate the necessity, the administrator may require the topographic data to be field surveyed.
- (E) A site development plan drawn to scale which shows the boundary lines and dimensions of the subject property, the location, size and type of any existing or proposed structures, off-site structures or facilities that could be impacted, impervious surfaces, wells, drainfields, drainfield-reserve areas, roads, easements, and utilities proposed or located on site.
- (F) The location of springs, seeps, or other surface expressions of groundwater. The location of surface water or evidence of seasonal surface water runoff or groundwater.
- (G) The extent and type of vegetative cover prior to development activity or site disturbance.
- (H) The proposed method of drainage and locations of all existing and proposed surface and subsurface drainage facilities and patterns, and the locations and methods for erosion control.
- (I) An identification of any modified ground including fill areas and assessment of potential hazards or recommendations for mitigation.
- (J) Information demonstrating compliance with all applicable codes and ordinances for the proposed development permit.
- (K) Recommendations for vegetation management or restoration or whether a vegetation specialist is required for a management plan.
- (3) Geologic site assessments and geotechnical reports, when completed in accordance with this chapter, shall be valid for a period of five years. A qualified professional, as outlined in Section 6.4.8 (2), may extend the applicability of a valid geologic site assessment or geotechnical report by five years by submittal of a letter stating the validity of the existing document and its application for the extension; provided, that such letter must address any changes in surrounding land use activity or site conditions.

## SECTION 7 WARNING AND DISCLAIMER OF LIABILITY

### 7.1 Warning and Disclaimer of Liability

The degree of hazard protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Catastrophic natural disasters can, and will, occur on rare occasions. This chapter does not imply that land outside the critical areas or activities permitted within such areas will be free from exposure or damage. This chapter shall not create liability on the part of the County, and officers or employees thereof, for any damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

## ***SMP and CAO Integration Comparative Table***

<b>CHELAN COUNTY CODE – CRITICAL AREAS ORDINANCE</b>			<b>SHORELINE MASTER PROGRAM - APPENDIX B</b>		
<b>TITLE</b>	<b>CHAPTER</b>	<b>SECTION</b>	<b>TITLE</b>	<b>CHAPTER</b>	<b>SECTION</b>
<b>CAO District General Provisions and Administration</b>	<b>11.77</b>		<b>CAO District General Provisions and Administration</b>	<b>5</b>	<b>5.8</b>
Purpose		11.77.010	Purpose		5.8.1
Applicability		11.77.020	Applicability	<b>NOT ADOPTED</b>	
Administration		11.77.030	Administration	<b>NOT ADOPTED</b>	
Exemption, exceptions, uses		11.77.040	Exemptions, exceptions, uses	<b>NOT ADOPTED</b>	
General Regulations		11.77.050	General Regulations		5.8.2
General Critical Areas Report		11.77.060	General Critical Areas Report		5.8.3
Mitigation Sequencing		11.77.070	Mitigation Sequencing	<b>NOT ADOPTED</b>	
Variance Provisions		11.77.080	Variance Provisions	<b>NOT ADOPTED</b>	
Subdivision Notation		11.77.090	Subdivision Notation		5.8.4
Noncompliance		11.77.100	Noncompliance		5.8.5
Incentives		11.77.110	Incentives		5.8.6
Education		11.77.120	Education		5.8.7
<b>Fish and Wildlife Habitat Conservation Areas</b>	<b>11.78</b>		<b>Fish and Wildlife Habitat Conservation Areas</b>		<b>5.9</b>
Designations and Identification		11.78.010	Designation and Identification		5.9.1
Exemptions		11.78.020	Exemptions	<b>NOT ADOPTED</b>	
General Regulations		11.78.030	General Regulations	<b>NOT ADOPTED</b>	
Riparian Habitat Regulations		11.78.040	Riparian Habitat Regulations	<b>NOT ADOPTED</b>	
Upland Habitat Regulations		11.78.050	Upland Habitat Regulations	<b>NOT ADOPTED</b>	
Habitat Management and Mitigation Plan		11.78.060	Habitat Management and Mitigation Plan	<b>NOT ADOPTED</b>	
			<b>Critical Areas and Development Standards</b>	<b>6</b>	
			Wetlands		6.1
<b>Wetlands Overlay District</b>	<b>11.80</b>		<b>Wetlands Overlay District</b>		<b>6.1.1</b>
Wetland Designation and Identification		11.80.010	Wetland Designation and Identification		6.1.2
Regulated Activities		11.80.020	Regulated Activities		6.1.3
Exemptions and Allowed Uses		11.80.030	<b>NOT ADOPTED</b>		

## ***SMP and CAO Integration Comparative Table***

Wetland Classification and Rating		11.80.040	Wetland Classification and Rating		6.1.4
Wetland Buffers		11.80.050	Wetland Buffers		6.1.5
Wetland Reports		11.80.060	Wetland Reports		6.1.6
Wetland Mitigation		11.80.070	Wetland Mitigation		6.1.7
Compensatory Mitigation Plan and Monitoring		11.80.080	Compensatory Mitigation Plan and Monitoring		6.1.8
			Wetland Delineations	<b>DELETED</b>	6.1.1
			Categorization and Rating	<b>DELETED</b>	6.1.2
			Wetland Buffers and Regulations	<b>DELETED</b>	6.1.3
			Wetland Buffer Condition	<b>DELETED</b>	6.1.3.2
			Multiple Buffers	<b>DELETED</b>	6.1.3.3
			Interrupted Buffer	<b>DELETED</b>	6.1.3.4
			Buffers of Restored Wetlands	<b>DELETED</b>	6.1.3.5
			Buffer Averaging	<b>DELETED</b>	6.1.3.6
			Permitted Buffer Use	<b>DELETED</b>	6.1.3.7
			Wetland Compensatory Mitigation	<b>DELETED</b>	6.1.3.8
<b>Aquifer Recharge Areas Overlay District</b>	<b>11.82</b>		<b>Aquifer Recharge Areas Overlay District</b>	<b>6.2.1</b>	
Classification		11.82.010	Classification		6.2.2
Designation		11.82.020	Designation		6.2.3
Procedure		11.82.030	Procedure		6.2.4
Evaluation Criteria		11.82.040	Evaluation Criteria		6.2.5
Hydrogeologic Evaluation		11.82.050	Hydrogeologic Evaluation		6.2.6
Performance Standards		11.82.060	Performance Standards		6.2.7
<b>Frequently Flooded Areas Overlay District</b>	<b>11.84</b>		<b>Frequently Flooded Areas Overlay District</b>	<b>6.3</b>	6.3.1
Classification		11.84.010	Classification		6.3.2
Designation		11.84.020	Designation		6.3.3
Protection Measures		11.84.030	Protection Measures		6.3.4
			Designation	<b>DELETED</b>	6.3.2

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			Protection Measures	<b>DELETED</b>	6.3.3
			Anchoring	<b>DELETED</b>	6.3.4
			Construction Materials and Methods	<b>DELETED</b>	6.3.5
			Use of Other Base Flood Data	<b>DELETED</b>	6.3.7
			Construction Activities	<b>DELETED</b>	6.3.8
			Grading and Filling	<b>DELETED</b>	6.3.9
			Manufactured Homes and Recreational Vehicles	<b>DELETED</b>	6.3.10
			Regulatory Floodways	<b>DELETED</b>	6.3.11
			Critical Facilities	<b>DELETED</b>	6.3.12
			Subdivision	<b>DELETED</b>	6.3.13
			Reasonable Use	<b>DELETED</b>	6.3.14
<b>Geologically Hazardous Areas Overlay District</b>	<b>11.86</b>		<b>Geologically Hazardous Areas Overlay District</b>	6.4	6.4.1
Purpose		11.86.005	Purpose		6.4.2
Applicability		11.86.010	Applicability	<b>NOT ADOPTED</b>	
Classification		11.86.020	Classification		6.4.3
Classification Challenge		11.86.030	Classification Challenge		6.4.4
Administrative Review		11.86.040	Administrative Review		6.4.5
Designation		11.86.050	Designation		6.4.6
Performance Standards		11.86.060	Performance Standards		6.4.7
Report Preparer Qualifications		11.86.065	Report Preparers Qualifications		6.4.8
Geologic Site Assessment		11.86.070	Geologic Site Assessment		6.4.9
Whispering Pines		11.86.080	Whispering Pines	<b>NOT ADOPTED</b>	
			Geologically Hazardous Areas	<b>DELETED</b>	6.4
			Purpose	<b>DELETED</b>	6.4.1
			Applicability	<b>DELETED</b>	6.4.2
			Classification	<b>DELETED</b>	6.4.3
			Classification Challenge	<b>DELETED</b>	6.4.4
			Administrative Review	<b>DELETED</b>	6.4.5
			Designation	<b>DELETED</b>	6.4.6
			Performance Standards	<b>DELETED</b>	6.4.7



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			Report Preparer Qualifications	<b>DELETED</b>	6.4.8
			Site Assessment and Reports	<b>DELETED</b>	6.4.9
			Subdivision Notation	<b>DELETED</b>	6.4.10
			<b>Fish and Wildlife Habitat Conservation Areas</b>	<b>DELETED</b>	6.5
			Purpose	<b>DELETED</b>	6.5.1
			Applicability	<b>DELETED</b>	6.5.2
			Fish and Wildlife Habitat	<b>DELETED</b>	6.5.3
			Class II Wildlife Habitat	<b>DELETED</b>	6.5.5
			Habitat Management	<b>DELETED</b>	6.5.6
			<b>Warning and Disclaimer of Liability</b>	<b>7</b>	7.1