



**July 26, 2017**

**Municipal Building Council Chambers**

**6<sup>th</sup> Street and "Q" Avenue**

**AGENDA**

**6 P.M.**

1. **Roll Call**
2. **Minutes of June 14, 2017**
3. **Correspondence**  
**Anacortes Neighborhood Greenways Presentation - Anacortes Bike/Pedestrian Advisory Committee**
4. **New Business**  
**Critical Areas Regulations Update - Introduction**

If reasonable accommodation of a disability is needed please contact Cherri Kahns at 299-1950 at least 48 hours prior to this meeting.



## **Planning Commission Meeting Minutes for – June 14, 2017**

Chair Laumbattus called the meeting of June 14, 2017 to order at approximately 6 p.m.

### **Roll Call**

Members Present: Commissioners Laumbattus, Moffit, Oppel, Cleland-McGrath, McNett, and Mount

Members Absent: Commissioners Doll

### **Minutes**

Minutes of May 24, 2017 were approved as written.

### **Correspondence**

#### **Development Regulations Update**

Libby Grage, Planning Manager, presented a summary of the workshops, surveys, timelines, and concepts of the development regulations that are proposed.

**Patrick O'Hearn, 11039 Post Drive.** Mr. O'Hearn complimented staff on the effort put forth and provided additional comment on several of the regulation concepts.

Chair Laumbattus called the meeting to a close at approximately 7 p.m.



# Planning Commission Agenda Bill

**Meeting Date:** 7/26/2017 **Agenda Item:**

**Subject:** Introduction to Critical areas regulations update

**Staff Contact:** Don Measamer, Libby Grage

| Approved for Submittal to Council by |                              |
|--------------------------------------|------------------------------|
|                                      | Laurie Gere, Mayor           |
| x                                    | Don Measamer, PCED Director  |
|                                      | Darcy Swetnam, City Attorney |

| Action Type |                |
|-------------|----------------|
|             | Public Hearing |
|             | Staff Report   |
| x           | Discussion     |

**Summary Statement:** At the July 26, 2017 PC meeting, staff will present an introduction to the critical areas regulations update process that is required to be conducted under the periodic update requirements of the Growth Management Act. Staff is proposing reorganization and changes to the existing regulations to reflect new Ecology and agency guidance, best practices, best available science, and other local circumstances.

It is important to emphasize that the attached document is a first draft, and is provided to allow opportunity for early public and Planning Commission feedback. Staff is continuing to research and analyze various topics, which may result in potential proposed adjustments to the 1<sup>st</sup> draft language at a later date. Additionally, public, planning commission and other agency review and feedback will inform the continuing development of this document.

Due to the extent of the reorganization and other changes, the 1<sup>st</sup> draft is presented as a new document, rather than in strike-through underline format using the existing code language. During the upcoming critical area-type specific PC meetings, staff will provide more detailed information identifying proposed substantive changes to the existing regulations, and the rationale behind them.

**Proposed Schedule:** The following general process is proposed for public and Planning Commission review. It is anticipated that public input would be welcomed at all PC work sessions, in addition to the required public hearing. Feedback and suggestions about this proposed process are welcomed.

## Proposed Schedule (2017)

|                  |                                                                                                                            |
|------------------|----------------------------------------------------------------------------------------------------------------------------|
| July 26          | PC Work Session: Introduction and overview, public input                                                                   |
| August 9         | PC Work Session: General Provisions; Wetlands; and Fish & Wildlife Habitat Conservation Areas (FWHCAs), public input       |
| August 23        | PC Work Session: Geologically Hazardous Areas; Critical Aquifer Recharge Areas; and Frequently Flooded Areas, public input |
| August/September | SEPA determination; staff to revise draft to incorporate feedback received                                                 |
| September 13     | PC Work Session: Review of revised draft, public input                                                                     |
| September 27     | PC Public Hearing; Recommendation to CC                                                                                    |

**Background:** Please see the attached memo dated July 20, 2017, which provides more in-depth background information.

**Previous Council/Committee/Commission Action:** None.

**Competing Viewpoints Considered:** Public input is encouraged and welcomed. Informal public comment may be provided at Planning Commission work sessions or in writing to Libby Grage, [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org). A formal public hearing will be advertised and held later in the process.

**Recommended Motion:** N/A

**Alternative Actions:** N/A

**Attachments:**

Memo from Libby Grage, July 20, 2017

Draft Critical Areas regulations ("Ch.19.70-CriticalAreasPC-V1", July 20, 2017)

Current critical areas map

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## City of Anacortes

### Planning, Community & Economic Development Department

**DATE:** July 20, 2017

**TO:** Planning Commission

**FROM:** Libby Grage  
Planning, Community & Economic Development Department

**SUBJECT:** Anacortes Critical Areas Regulation Update - Introduction

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#### Introduction

This document is intended to provide background information regarding the required update to the City's critical areas regulations. Additional detailed information regarding specific critical area types, descriptions of proposed changes to regulations, and other items for consideration is being developed and will be provided at a later date during the public review process.

#### Background

The Washington State Growth Management Act (GMA) of 1990 establishes state goals, sets deadlines for compliance, and offers direction on how to prepare local comprehensive plans and development regulations. The GMA requires state and local governments manage growth by designating urban growth areas, identifying and protecting critical areas and natural resource lands, preparing comprehensive plans, and implementing them through development regulations, capital improvements and other plans.

The GMA requires the City to periodically update its Comprehensive Plan and development regulations. The most recent GMA periodic update to the Anacortes Comprehensive Plan was completed in July, 2016. The Critical Areas Ordinance (CAO) in the Anacortes Municipal Code is the final item requiring update under GMA's periodic review requirements.

The GMA deadline to complete the critical areas regulations update was June 30, 2017. Although currently past this deadline, staff has been working diligently for the past several months to prepare a 1<sup>st</sup> draft for public review. Steps taken to date include compilation of updated information, working with qualified professionals to obtain recommended updates to the code, review of recently updated codes from other jurisdictions to identify best practices and BAS, and contacting resource agencies for assistance and guidance.

#### What are Critical Areas?

As mandated in the GMA, critical areas include:

- Wetlands,
- Critical Aquifer Recharge Areas (CARAs),

- Fish and Wildlife Habitat Conservation Areas (FWHCAs),
- Frequently Flooded Areas, and
- Geologically Hazardous Areas.

Minimum guidelines to classify critical areas are included in [WAC 365-190](#).

## Update Goals & Objectives

During this update process, the GMA requires at a minimum, that the City review, and if needed, revise its critical area regulations to ensure they comply with the requirements of the act. The city is required to include best available science (BAS) in developing development regulations to protect the functions and values of critical areas. In addition to the elements required under the state mandated update, City staff is recommending that the critical areas regulations be completely reorganized and integrated into AMC Title 19, Unified Development Code, and reworked to make them easier to understand and administer.

The primary goals guiding the development of the 1<sup>st</sup> draft of the revised CAO include:

- Identify regulatory changes needed to ensure consistency with state or federal law
- Update regulations for consistency with Best Available Science
- Reorganize and integrate the entire chapter into Title 19, Unified Development Code
- Identify regulatory changes that further implementation of the Comprehensive Plan
- Identify regulatory improvements to increase predictability and consistency in application
- Remove duplications and contradictions
- Update definitions consistent with WACs and RCWs
- Update mapping resources

## Brief History of Critical Areas Protection in Anacortes

GMA required preliminary classifications and designation of critical areas to be completed in 1991. Interim regulations to protect critical areas were required to be enacted by September 1, 1991. By July 1, 1993, the city was required to adopt a comprehensive plan and implement the comprehensive plan by 1994.

The City's first wetland regulations were adopted in January, 1990 (Ord. 2131). In 1991, standards were added for land clearing and slope development, natural resource lands, and geologically hazardous areas (Ord. 2198).

In 1994, Anacortes adopted a new zoning ordinance (Ord. 2316) consistent with the mandates of the 1990 Growth Management Act (GMA), including critical areas regulations.

In 1998, the City adopted standards for participation in the National Flood Insurance Program (NFIP), including standards for development in the flood plain. In 2003 the City adopted interim regulations for aquifer recharge areas and updated geologically hazardous areas (Ord. 2628 & 2635).

As part of GMA periodic update requirements, the City's critical areas ordinance was updated in 2005 (Ord. 2702), including adoption of FWHCA regulations. Since the 2005 update, changes to buffers, exemptions and other miscellaneous changes have been made periodically through the annual

development code amendment process, the most recent of which was Ordinance 2756, approved December 16, 2006, impacting fish and wildlife habitat conservation areas.

The critical area regulations, as they currently exist in AMC Chapter 17.70, are available online at: [https://www.municode.com/library/wa/anacortes/codes/code\\_of\\_ordinances?nodeId=TIT17ZO\\_CH17\\_70CRARRE](https://www.municode.com/library/wa/anacortes/codes/code_of_ordinances?nodeId=TIT17ZO_CH17_70CRARRE). Additional critical areas update project information is available on the City's project website at: [http://www.cityofanacortes.org/community\\_planning.php](http://www.cityofanacortes.org/community_planning.php).

## Best Available Science

All critical areas must be designated and their functions and values protected using the best available scientific information – known as best available science (BAS). The WA Department of Commerce (Commerce) provides guidance to cities for updating critical area regulations to integrate BAS. The Commerce guidance in the Critical Areas Assistance Hand Book and Appendices (CTED, 2007) includes sample code provisions that were consulted and are the basis for some of the staff recommended amendments.

The city contracted with a qualified professional consultant, GeoEngineers, to provide a review of BAS and recommend code changes to incorporate both BAS and best practices to regulate development in and near geologically hazardous areas, frequently flooded areas, and aquifer recharge areas. The City contracted with a qualified professional consultant, ATSI, to provide the City with a review of BAS and recommended code changes for wetlands and fish & wildlife habitat conservation areas.

Staff also utilized synthesis and guidance documents provided by the Washington State Department of Ecology (DOE) to determine what the state considers BAS for wetlands and FWHCAs. The Washington State Department of Ecology Wetland Guidance for CAO Updates – Western Washington Version (Publication No. 16-06-001, June 2016) is the primary source of example code revisions for wetlands regulations used for this update process.

In addition to state guidance documents, staff reviewed recent critical areas BAS memos and existing updated critical areas regulations from a number of other cities and counties in the region, including the Cities of Shoreline, Edmonds, Burien, Bremerton, Seattle, Marysville, Bellingham, and Skagit and Whatcom Counties to inform and support the proposed changes to the CAO.

## GMA Critical Areas Regulations & the Shoreline Master Program

Many of Anacortes's critical areas are located along the City's 27 miles of marine and freshwater lake shoreline. Under the Shoreline Management Act, shorelines and all lands extending landward 200 feet in all directions from the ordinary high water mark together with any associated wetlands are covered by the regulations in the City's Shoreline Master Program (SMP).

A Supreme Court Decision decided that, once Ecology approves the SMP, the SMP solely regulates the shorelines and critical areas within shoreline jurisdiction, and that critical areas regulations required under the authority of the GMA do not apply. In 2010, Ecology approved Anacortes's updated SMP, therefore, the critical areas within shoreline jurisdiction are not covered by the GMA critical areas regulations included as part of this update.

While protecting critical areas is important under both GMA and SMA, each law has different kinds of regulatory procedures, and different objectives for dealing with future land use and development. During Anacortes's 2010 SMP update process, rather than repeat the work already done developing the GMA critical areas regulations, relevant portions of the City's existing CAO, with limited updates, were placed into the 2010 SMP (Appendix A).

An update of the shoreline specific critical areas regulations would require amendment of the SMP, which has different procedural requirements than the GMA CAO update. The City's next major update of the SMP must be completed by June, 2020, and work on that update is expected to begin next year (2018). Therefore, with the current CAO update process, staff is recommending that only the GMA CAO in the Anacortes Municipal Code be updated.

# DRAFT Ordinance No. \_\_\_\_

## An Ordinance adopting, repealing, and amending AMC Chapter 19.70 and Chapter 17.70 relating to critical areas regulations.

Whereas \_\_\_\_\_;

Whereas \_\_\_\_\_;

Whereas \_\_\_\_\_;

Whereas \_\_\_\_\_;

Whereas RCW 36.70A.170 and RCW 36.70A.172 provide that the City must designate critical areas and include the best available science in developing policies and development regulations to protect the functions and values of critical areas;

Whereas RCW 36.70A.130 requires continuing review, evaluation and periodic update of development regulations, including critical areas regulations,

Whereas

Now, therefore, the City Council of the City of Anacortes does ordain as follows:

Section 1. The Anacortes Municipal Code is amended as shown in Attachment A.

Section 2. Consistent with RCW 35A.12.130, this ordinance takes effect five days after passage and publication.

PASSED and APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2017.

CITY OF ANACORTES:

\_\_\_\_\_  
Laurie Gere, Mayor

**Attest:**

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Steve Hoglund, City Clerk-Treasurer

**Approved as to Form:**

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Darcy Swetnam, City Attorney

## Attachment A Amendments to the Anacortes Municipal Code

Chapter 17.70 Critical Areas Regulations are repealed except that .....

Recodify Article II. – Frequently Flooded Areas (FEMA Approved), AMC 17.70.020 through AMC 17.70.070 to Chapter 19.\_\_\_\_ and retitle “Floodplain Management”.

### Chapter 19.70 Critical Areas Regulations

*The following chapter and sections in Title 19 are created or amended:*

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## DIVISION 7 – ENVIRONMENT

### CHAPTER 19.70 CRITICAL AREAS

#### GENERAL PROVISIONS

##### 19.70.010 Purpose.

- A. The purpose of this chapter is to designate critical areas and to establish standards for the protection of their functions and values, in compliance with the provisions of the Washington State Growth Management Act of 1990 (Ch. 36.70A RCW), and consistent with the goals and policies of the Anacortes Comprehensive Plan.
- B. By identifying and regulating development and alterations to critical areas and their buffers, this chapter seeks to accomplish the following goals:
  - 1. Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, or flooding;
  - 2. Protect, maintain and restore healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including, but not limited to ground and surface waters, wetlands, and fish and wildlife and their habitats; and to conserve the biodiversity of plant and animal species;
  - 3. Direct activities not dependent on critical area resources to less environmentally sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;
  - 4. Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, and habitat conservation areas;
  - 5. Alert owners, potential purchasers, real estate agents, appraisers, lenders, builders, developers and other members of the public to natural conditions that pose a hazard or may otherwise limit development;
  - 6. Serve as the basis for exercise of the City's substantive authority under the State Environmental Policy Act (SEPA).
- C. The regulations of this Chapter are intended to protect critical areas in accordance with the Growth Management Act and through the application of best available science, as determined according to [WAC 365-195-900](#) through [365-195-925](#), and in consultation with state and federal agencies and other qualified professionals.

**Commented [GL1]:** The section provides general purpose, interpretation, jurisdiction, and other information that is applicable to all critical area types.

- D. This Chapter is intended 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 that planned for by the community without decreasing current service levels below minimum standards.
- E. The City's enactment or enforcement of this Chapter must not be construed for the benefit of any individual person or group of persons other than the general public.

#### 19.70.015- Applicability.

- A. Unless explicitly exempted, the provisions of this chapter apply to all land uses, development activity, and all structures and facilities within the City of Anacortes that are within, adjacent to, within the maximum buffer distance of, or likely to affect, one or more critical areas.
- B. Relationship to other regulations.
  - 1. Shorelines of the state and shorelands as defined in [RCW 90.58.030](#), and other critical areas occurring within the jurisdiction of shorelines of the state and shorelands, are regulated by AMC 18.16, Shoreline Master Program, and the Anacortes Shoreline Master Program, including Appendix A - Shoreline Critical Areas Regulations.
  - 2. These critical areas regulations apply in addition to zoning and other regulations adopted by the City. In the event of any conflict between these regulations and any other regulations of the City, the regulations apply that provide greater protection to the critical areas, as determined by the Director.
  - 3. When any provision of this chapter or any existing easement, covenant, or deed restriction conflicts with this chapter, that which provides more protection to the critical areas will apply.
  - 4. Compliance with the provisions of this Chapter does not constitute compliance with other federal, state, or local regulations and permit requirements that may be required. The applicant is responsible for complying with other agency requirements, apart from the process established in this Chapter.

**Commented [GL2]:** For consistency, amend 19.12.040(E) to coincide with this language, or say "Notwithstanding 19.12.040(E)....." in this section.

**Commented [GL3]:** For example: shoreline permits, HPAs, USACE Section 404, etc.

#### 19.70.020 Exemptions.

- A. **General requirements for all exempt activities.** Activities listed in this section are exempt from the rest of the provisions of this chapter only if they meet the specific terms of this section.
  - 1. To be exempt from this chapter does not give permission to degrade a critical area or ignore risk from natural hazards. All exempt activities must use reasonable methods to avoid potential impacts to critical areas.

**Commented [GL4]:** "Exempt" typically means that the regulations do not apply and no review is required, provided the activity meets the terms of the exemption. The proposed exemption language here is crafted to minimize the potential for adverse impacts.

2. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity must be restored, rehabilitated, or replaced at the responsible party's expense.
- B. **Exempt Activities that do not require prior notification.** The following developments, activities, and associated uses are exempt from the provisions of this Chapter and do not require prior notification to the Department, only if they are otherwise consistent with the provisions of this section and other local, state and federal laws and requirements:
1. **Emergencies.**
    - a. Alterations in response to emergencies which threaten the public health, safety and welfare or which pose an imminent risk of damage to private property, as long as any alteration undertaken pursuant to this subsection is reported to the Director no later than 30 days after the alteration.
    - b. Only the minimum intervention necessary to reduce the risk to public health, safety, or welfare and/or the imminent risk of damage to private property may be authorized by this exemption.
    - c. Once notified, the Director must confirm that an emergency existed and determine what, if any, additional applications and/or measures are required of the property owner to protect the critical area(s) consistent with the provisions of this chapter, and to repair any damage to a pre-existing resource.
    - d. If the Director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, the Director may take action to enforce this chapter.
    - e. After the emergency, the person or agency undertaking the action must fully fund and conduct necessary restoration and other mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical area report and restoration/mitigation plan. The person or agency undertaking the action must apply for review; and the alteration, critical area report, and mitigation plan must be reviewed by the City in accordance with the review procedures contained herein. Mitigation activities must be initiated within one year of the date of the emergency.
  2. **Landscaping Maintenance.** Maintenance of lawfully established vegetation, landscaping, and gardens, including, but not limited to cutting, mowing lawns, weeding, removal or noxious and invasive species, pruning, and planting of noninvasive ornamental vegetation to maintain the general condition and extent of such areas; except that Native Growth Protection Areas, or other areas protected via conservation easements or similar restrictive covenants are not covered by this exemption.

3. **Site Investigation.** Site investigative work and studies necessary for preparing land use applications, including, but not limited to, soils tests, water quality studies, wildlife studies, and similar tests and investigations; provided, that any disturbance of the critical area must be the minimum necessary to carry out the work or studies;
  4. **Passive Outdoor Activities.** When it can be demonstrated that there will be no undue adverse effect, the following activities are allowed within critical areas and their buffers: educational activities, scientific research, and outdoor recreational activities, including but not limited to interpretive field trips, bird watching, public beach access including water-related activities, bicycling, and hiking.
- C. **Exempt Activities that Require Prior Notification.** The following developments, activities, and associated uses are exempt from the provisions of this Chapter, but require prior notification of the Department, and must otherwise be consistent with the provisions of this section and other applicable local, state, and federal laws and requirements:
1. **Utility Operation, Maintenance, Repair, or Replacement.** Public water, electric and natural gas distribution, public sewer collection, cable communications, telephone, utility and related activities undertaken pursuant to City-approved best management practices, and best available science with regard to protection of threatened and endangered species, as follows:
    - a. Normal and routine maintenance or repair of existing utility structures or rights-of-way;
    - b. Relocation of electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less, only when required by the City of Anacortes, which approves the new location of the facilities;
    - c. Replacement, operation, repair, modification, installation or construction in an improved City road right-of-way or City authorized private roadway of all electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less;
    - d. Relocation of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances, only when required by the City of Anacortes, which approves the new location of the facilities;
    - e. Replacement, operation, repair, modification, relocation, installation or construction of public sewer local collection, public water local distribution, natural gas, cable communication, or telephone facilities, lines, pipes, mains, equipment or appurtenances when such facilities are located within an improved public right-of-way or City-authorized private roadway;
    - f. Repair and maintenance of existing private connections to public utilities and private stormwater management facilities;

**Commented [LBG5]:** Define replacement to mean not more impact than the existing facility has.

**Commented [GL6]:** Relocation of electric facilities 55,000 volts or less when required by other governmental bodies is categorically exempt from SEPA review per WAC 197-11-800.

**Commented [GL7]:** See comment for b. above.

- g. Vegetation management activities that are a part of a regular and ongoing maintenance program.
- 2. **Roadway Operation, Maintenance, Repair, or Replacement.** Maintenance, operation, repair, modification, or replacement of publicly improved roadways or City-authorized private roadways, and associated stormwater drainage systems; as long as any such alteration does not involve expansion of roadways or related improvements into previously unimproved rights-of-way or portions of rights-of-way, and does not alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater. Retention and replanting of native vegetation must occur whenever possible along the right-of-way improvement and resulting disturbance.
- 3. **Recreation Areas Operation, Maintenance, Repair, or Replacement.** Maintenance, operation, repair, modification, or replacement of existing facilities within publicly improved recreation areas, such as the Anacortes Community Forest Lands and public parks, may be performed subject to the following:
  - a. The activity does not involve the expansion of facilities or improvements into a previously unimproved portion of critical areas or required buffers;
  - b. Work is conducted using best management practices;
  - c. Flow and circulation patterns and biological characteristics are not impaired and adverse impacts are minimized;
  - d. Limited excavating and filling necessary for the repair and maintenance of piers, walkways, observation decks, wildlife management shelters, boathouses, and other similar water-related structures, provided they are built on pilings to allow unobstructed flow of water and preserve the natural contour of the wetland;
  - e. Retention and replanting of native vegetation must occur wherever possible in areas of land disturbance.
- 4. **Minor Conservation and Enhancement.** Minor conservation and enhancement of critical areas and buffers that does not alter the location, dimensions, or size of the critical area or buffer, and results in improvement of the critical area functions and values, including the following removal activities:
  - a. Removal of noxious weeds or invasive vegetation, as identified by the Washington State or Skagit County Noxious Weed Control Board, in a wetland buffer, stream buffer, other fish and wildlife habitat conservation areas and buffers, is allowed when:

**Commented [GL8]:** Proposed language here attempts to incorporate current code – 17.70.380(E).

**Commented [LBG9]:** "Non-compensatory restoration and enhancement" See section 8.3.3.13 in [Volume 2 – Protecting and Managing Wetlands](#).

- i. Undertaken with hand labor, including handheld mechanical tools;
  - ii. Plants that appear on the Washington State or Skagit County Noxious Weed Control Board lists must be handled and disposed of in accordance with the best management practices appropriate to that species and approved by the City when permit review is applicable;
  - iii. Areas cleared by removal of noxious and/or invasive plant species must be revegetated with site-appropriate native species at natural densities and the site must be stabilized against erosion in accordance with the stormwater manual adopted by the City;
  - iv. All work performed is above the ordinary high water mark and above the top of a stream bank; and
  - v. The following limits may not be exceeded: Within City-owned property, no more than 3,000 square feet of soil may be exposed at any one time; and within private property, not more than 500 square feet of area may be cleared, as calculated cumulatively, over one year, without a permit and critical area report prepared by a qualified professional.
5. Vegetation management consistent with a previously approved critical area mitigation, restoration, remediation, or enhancement plan that requires ongoing maintenance and vegetation management beyond final inspection and the required monitoring period for the permitted project.
6. **Hazard Trees.**
- a. The felling of hazard trees may be permitted when necessary to:
    - i. Control fire; or
    - ii. Halt the spread of disease or damaging insects consistent with 76.09 RCW; or
    - iii. Avoid a threat to existing structures, above ground utility lines or other facilities.
  - b. Unless there is an emergency pursuant to 19.70.020(B)(1), the landowner must first obtain prior written approval from the Department. A tree risk assessment prepared by a qualified professional must be submitted by the applicant to the Department that includes the following information:

**Commented [LBG10]:** Currently there is no official process for considering these situations and inquiries are relatively common. Balancing public safety exemptions with critical area protection is important.

**Commented [GL11]:** Define – ISA certified arborist? DOE recommends a "qualified arborist"

- i. Identification of the tree(s) proposed to be removed;
- ii. A recommendation that the condition constitutes an **actual** threat to life or property;
- iii. An assessment of whether a portion of the tree suitable for a snag for wildlife habitat may be safely retained.
- iv. If a tree to be removed provides priority habitat, such as an eagle perch or occupied nest, a description of timing and methods of removal that will minimize and mitigate impacts.
- v. If a tree to be removed is located within a geologically hazardous area, an **evaluation of impacts**.....

**Commented [LBG12]:** Imminent?

- c. All work must be done using handheld implements only, unless the property owner requests and the Director approves otherwise in writing.
- d. Any removed tree or vegetation must be replaced with appropriate native species in appropriate size and location consistent with accepted restoration standards within 1 calendar year.

**Commented [LBG13]:** Consider requirement for an assessment by a geotech engineer if located in a geohazard (landslide hazard) area?

7. **Fish habitat enhancement projects.** Fish, wildlife, and wetland restoration or enhancement activities not required as project mitigation that have been approved by the U.S. Fish and Wildlife Service, the Washington State Department of Ecology, Washington State Department of Fish and Wildlife, or other appropriate local, state, federal, or tribal jurisdiction and/or that meet the criteria of [RCW 77.55.181\(1\)](#) and that are reviewed and approved according to the provisions of [RCW 77.55.181](#).

8. **Chemical applications.** The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary; except that their use will be restricted in accordance with State Department of Fish and Wildlife Management recommendations, regulations of the State Department of Agriculture and the U.S. Environmental Protection Agency;

**Commented [GL14]:** WDFW recommends restricting the use of pesticides and herbicides in many types of habitat. THE WA State Dept. of Agriculture and/or US EPA have regulations specific to the use of pesticides, fertilizers, and other chemicals that must be adhered to under federal law, and generally appear on the packaging.

9. **Minor Activities.** Minor activities not mentioned above and determined by the Director to have minimal impacts to a critical area

10. **OTHER**

**Commented [LBG15]:** Should there be a specific exemption for public projects where the purpose for activities within a critical area or buffer are for the benefit of the public's passive enjoyment of the environmentally critical area, like walking trails under certain circumstances?

See [Seattle SMC 25.09.042](#)

#### 19.70.025 Identification, classification, and rating of critical areas.

A. **Critical Areas Maps.** The general locations of many critical areas in Anacortes are displayed on the City of Anacortes' Critical Areas Maps, which are hereby adopted by reference. The maps are used to alert the public of the potential location of critical areas in Anacortes. As new

**Commented [GL16]:** Maps are being updated. Still TBD if just one map could work, or if multiple are needed.

environmental information related to critical areas becomes available, the Director is authorized to make changes as necessary to the Critical Areas Maps.

- B. **Actual site conditions.** Regardless of whether a critical area is shown on the Critical Areas Map, the actual presence or absence of the features defined in this code as critical areas will govern. The Director may require an applicant to submit technical information to indicate whether critical areas actually exist on or adjacent to the applicant's site based on the definitions of critical areas in this code.
- C. **Classification and rating.** To promote consistent application of the standards and requirements of this chapter, critical areas within the City will be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance.
  - 1. Classification of critical areas will be determined by the City using the following tools:
    - a. Application of the criteria contained in these regulations;
    - b. Consideration of the critical area reports submitted by qualified professionals in connection with applications subject to these regulations; and
    - c. Review of maps adopted pursuant to this chapter.

#### **19.70.030 Protection of critical areas.**

- A. Critical areas and their required buffers may not be altered except as allowed by this Chapter.
- B. Any action taken pursuant to this chapter must result in equivalent or greater functions and value of the critical areas associated with the proposed action, as determined by the best available science.
- C. All actions and development must be designed and constructed in accordance with mitigation sequencing per AMC 19.70.xxx to achieve no net loss of critical area functions and values.
- D. Applicants must first demonstrate an inability to avoid or reduce impacts, before restoration and compensation of impacts will be allowed.
- E. No activity or use may be allowed that results in a net loss of the functions or value of critical areas.
- F. Any individual critical area adjoined by another type of critical area must have the buffer and meet the requirements that provide the most protection to the critical areas involved.

#### **19.70.035 Critical Areas Review.**

- A. **When required.** Except for those activities identified below, all uses, modifications, and activities subject to this Chapter require Critical Areas Review per AMC 19.70.110-.185.
- B. **Best Management Practices.** All activities, including those allowed without critical areas review, must be conducted using the best management practices that result in the least amount of impact to the critical areas. Best management practices must be used for tree and vegetation

**Commented [LBG17]:** Clarify source of BMPs.

protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The use of best management practices is required to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area and/or buffer shall be restored, rehabilitated, or replaced at the responsible party's expense.

- C. **Activities Allowed Without Critical Areas Review.** The following activities must be reviewed and permitted or approved by the City and any other agency with jurisdiction, but do not require submittal of a separate critical area report, unless such submittal was required previously for the underlying permit. The Director may apply conditions to the underlying permit or approval to ensure that the activity is consistent with the provisions of this chapter to protect the critical areas.

1. **Permit Requests Subsequent to a Previous Critical Area Review.** A permit or approval sought as part of a development proposal for which multiple permits are required is exempt from the provisions of this chapter, except for the title notice provisions, as applicable, if:
  - a. The City of Anacortes has previously reviewed all critical areas on the site; and
  - b. There is no material change in the development proposal since the prior review; and
  - c. There is no new information available which may alter previous critical area review of the site or a particular critical area; and
  - d. The permit approval under which the prior review was conducted has not expired, or if no expiration date is specified, no more than five years have lapsed since the issuance of that permit or approval; and
  - e. The prior permit or approval, including any conditions, has been complied with.
2. **Modifications to Existing Nonconforming Structures.** Structures that do not meet the critical area, buffer, or buffer setback requirements may be modified as follows:
  - a. Routine maintenance and repairs;
  - b. Structural modifications or additions that do not increase the existing footprint of the structure or area of hardscape lying within the critical area or buffer; except that the Director may require an updated critical areas report to confirm location of buffers and that the addition is located entirely outside the critical area or buffer.
  - c. Restoration or replacement of a structure that is damaged by fire, natural disaster or other calamity when:

**Commented [GL18]:** This section recognizes that an applicant should not need to complete a new critical area review for a project that has just had a previous review completed. For example, if CA review were addressed during the plat review process, it should not need to be readdressed during construction of individual homes as long as it is consistent with the original approval. If previous codes did not adequately include BAS, it may be appropriate to limit this. See subsection (d).

**Commented [LBG19]:** Note – Existing CAO, AMC 17.70.500 states that: "final plat approvals, conditional use permits, and building permits issued after the date of adoption of the city's first wetland ordinance (Ord. #2131, adopted January 2, 1990) but before the effective date of the ordinance codified in this chapter amendment will continue to be controlled by the version of this chapter in effect at the time of their final approval/permit issuance.

**Commented [LBG20]:** ...and height? This could be important for geohazard areas...

- i. A complete application for reconstruction or replacement is submitted within one year of the damage; and
  - ii. The restoration or replacement is made to conform to the current critical areas regulations, or if such regulations cannot be physically met without reducing the size of the building, the restoration or replacement may not extend any nonconformity that existed prior to the damage.
3. **Demolition.** Demolition of structures located within critical areas or their buffers, excluding demolition of structures necessary to support or stabilize landslide hazard areas, and subject to approval of a stormwater pollution prevention plan consistent with the adopted stormwater management manual and clearing limits that will adequately protect the critical area.

#### 19.70.040 Variances.

- A. If strict application of this Chapter is found to deprive the subject property of rights and privileges enjoyed by other properties in the vicinity, due to special circumstances applicable to the subject property, including size, shape, and topography, a critical areas variance to minimum buffer standards may be authorized as provided in AMC Chapter 19.38 Variances. Surrounding properties that have been developed under regulations in effect prior to the effective date of this Chapter may not be the basis for granting a variance.
- B. The City must ensure the opportunity for public comment, including that from appropriate Federal, State, and Tribal natural resource agencies, to ensure the use of best available science before deciding on variance request and must develop and maintain a public record on each variance request.
- C. Variances to buffer requirements of this Chapter may only be issued if the applicant meets all of the following requirements:
  - 1. The applicant has demonstrated that the criteria in AMC Section 19.38.040 (variance criteria) are met;
  - 2. The issuance of a variance to zoning requirements (setback, height, coverage, etc.) by itself will not provide sufficient relief to avoid the need for a variance to the buffer and other requirements for the critical areas regulated by this Chapter;
  - 3. A critical areas report and mitigation plan prepared by a qualified professional pursuant to the requirements of this chapter is submitted that demonstrates the following:
    - a. The proposed variance of the dimensional requirements of this chapter is supported by best available science; and
    - b. The proposed variance allows for development of the subject parcel with the least impact on critical areas while providing a reasonable use of the property.

**Commented [GL21]:** Skagit County has similar provisions. Staff is continuing to review best practices in other jurisdictions to determine whether this approach would be appropriate for Anacortes. Specifics still need to be worked out.

**Commented [LBG22]:** Need to update 19.38 to make consistent with this section, if it retained.

**Commented [LBG23]:** Surrounding properties may be been developed under older, less restrictive regulations, when smaller buffers were required. This sentence is saying that cannot be a basis for arguing deprivation of rights and privileges enjoyed by adjacent properties.

- D. **Conditions may be required.** In granting any variance, conditions and safeguards may be prescribed as are necessary to secure adequate protection of critical areas from adverse impacts, and to ensure conformity with this chapter.
- E. **Burden of proof.** The burden of proof shall be on the applicant to bring forth evidence in support of the application and upon which any decision has to be made on the application.

#### 19.70.045 Reasonable use exception.

- A. Reasonable use is a legal concept articulated by federal and state courts in regulatory takings cases. Within the context of these cases and for the purposes of this title, reasonable use means uses allowed by the underlying zoning designation and does not mean the subdivision or property.
- B. If the application of this Chapter would result in denial of all reasonable and economically viable use of a property, and if such reasonable and economically viable use of the property cannot be obtained by consideration of a variance pursuant to AMC 19.70.040, then a landowner may seek a reasonable use exception from the standards of this Chapter.
- C. Reasonable use exceptions are intended as a last resort when no plan for mitigation and/or a variance can meet the requirements of this Chapter and allow the applicant a reasonable and economically viable use of property.
- D. **Review process.** A Critical Area Reasonable Use permit is required.
- E. **Decision criteria.** A reasonable use permit may be granted only if the applicant demonstrates that:
  1. The application of this chapter would deny all reasonable economic use of the property and that there is no reasonable economically viable use with a lesser impact on the critical area than that proposed; and
  2. The proposed development does not pose a threat to the public health and safety; and
  3. Any proposed modification to a critical area will be evaluated through consideration of a critical areas report and mitigation plan prepared by a qualified professional pursuant to the requirements of this Chapter, and will be the minimum necessary to allow reasonable and economically viable use of the property. The critical areas report and mitigation plan must be prepared utilizing best available science; and
  4. The inability of the applicant to derive reasonable use of the property is not the result of actions by the current or previous owner in subdividing the property or adjusting a boundary line, thereby creating the undevelopable condition, after the effective date of the ordinance codified in this Chapter; and
  5. The applicant has requested and been denied a variance under the provisions of AMC 19.70.040.

**Commented [GL24]:** The City must allow a minimum "reasonable use" of property even if such a use would otherwise be denied by the CA regs. The Fifth Amendment and Fourteenth Amendment of the U.S. Constitution provide individuals with protection from being deprived of the use one's property without due process or just compensation.

Unlike variances, the purpose of a reasonable use exception permit is not to allow general development within critical areas, but to allow the minimal "reasonable" use of the property so as to avoid a constitutional taking.

**Commented [GL25]:** According to the process identified in AMC 19.20.030- currently a Type 3 PC decision.

**Commented [GL26]:** Should an applicant with a property that is completely encumbered by critical areas and buffers be required to go through the variance process first? That might be onerous.

- F. **Conditions.** Conditions of approval may be included as part of the decision, including modifications to the size and placement of structures and facilities to minimize impacts to critical areas and associated buffers and mitigation requirements that ensure that all impacts are mitigated to the maximum extent feasible utilizing best available science.

#### 19.70.050 Public Agency Exception.

- A. **Purpose.** The purpose of this exception is to allow development by a public agency when the strict application of the standards in this Chapter would otherwise unreasonably prohibit the provision of public services. This type of permit does not apply to special flood hazard areas.
- B. **Public agency defined.** For the purposes of this subsection, "public agency" means any agency, political subdivision, or unit of local government, or private utility regulated by the Washington Utilities and Transportation Commission, including, but not limited to, municipal corporations, special purpose districts and local service districts, private regulated utilities, any agency of the state of Washington, the United States or any state thereof or any Indian tribe recognized as such by the federal government.
- C. **Review process.** A Critical Area Special Use Permit is required. An application must include a critical area report, including a mitigation plan, if necessary, in addition to other project related documents.
- D. **Decision criteria.** A critical areas special use permit may be granted only if the applicant demonstrates all of the following:
1. The application of the critical areas regulations would unreasonably restrict the ability of the public agency to provide services to the public;
  2. There is no other practical alternative to the proposed development with less impact on the critical area;
  3. The proposed development does not create a health or safety hazard on or off the development site, and will not be detrimental to the property or improvements in the vicinity;
  4. The special use permit process must not allow the use of the following critical areas for regional retention/detention facilities except where a finding is made that the facility is necessary to protect the public health and safety or repair damaged natural resources:
    - a. Type S or Type F anadromous streams or buffers;
    - b. Category I wetlands or buffers with plant associations of infrequent occurrence; or
    - c. Category I or II wetlands or buffers which provide critical or outstanding habitat for herons, raptors or State or Federal designated endangered or threatened species unless clearly demonstrated, using best available science, that there will be no impact on such habitat;

**Commented [GL27]:** This language is based on Shoreline's code..... See SMC 20.30.333.

**Commented [GL28]:** Table 19.20.030 references "Special Use Permit per AMC Ch. 17.70". Will need to amend the existing table to reference new location in 19.

5. Any alterations permitted to the critical area are mitigated in accordance with AMC 19.70.130 and relevant mitigation standards for the impacted critical areas(s) type;
  6. The proposal attempts to protect the existing critical area functions and values consistent with the best available science and attempts to mitigate adversely impacted critical area functions and values to the fullest extent possible; and
  7. The proposal is consistent with other applicable regulations.
- E. **Conditions authorized.** Conditions may be established as necessary to mitigate impacts to critical areas and to conform to the standards required in this Chapter.

## CRITICAL AREAS REVIEW PROCEDURES

### 19.70.110 Critical areas preapplication meeting and determination.

- A. **Preapplication meeting required.** A preapplication meeting is required prior to submitting an application for development or use of land that may be regulated by the provisions of this chapter, unless specifically exempted in AMC 19.70.020, an allowed activity in AMC 19.70.035, or if waived by the Director.
- B. **Determination.** A determination may be provided through the preapplication meeting regarding whether critical area reports are required, and if so, what level of detail and what elements may be necessary for the proposed project. A summary of this analysis and the findings will be included in the preapplication meeting summary letter and any staff report or decision on the underlying permit. The determination does not preclude the Director from requiring additional critical area report information during the review of the project. After initial review, the Director may determine:
  1. **No Critical Areas Present.** If the Director's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed activity is unlikely to degrade the functions or values of a critical area, then the Director shall determine that the critical area review is complete and note in the preapplication meeting summary letter the reasons that no further review is required.
  2. **Critical Areas Present, But No Impact.** If the Director determines that there are critical areas within or adjacent to the project area, but that the best available science shows that the proposed activity is unlikely to degrade the functions or values of the critical area, the Director may waive the requirement for a critical area report if there is substantial evidence of the all of the following:
    - a. There will be no alteration of the critical area or buffer;
    - b. The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this chapter; and
    - c. The proposal is consistent with other applicable regulations and standards.

**Commented [GL29]:** Provides a process for how and when potential presence of critical areas will be determined and what types of reports may be required with a formal permit application.

3. **Critical Areas Present, May be Affected.** If the Director determines that a critical area or areas may be affected by the proposal, then the Director must notify the applicant that a critical area report(s) must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report. The Director may indicate the sections or report types that must be included in the critical area report(s) consistent with AMC 19.70.xxx.

C. **Effect of Determination.** A prior determination by the Director of the apparent absence of one or more critical areas does not preclude the Director from determining, at a later date, that a critical areas report is required for a proposed project.

#### 19.70.115 Critical area identification form.

Prior to the City's consideration of any proposed activity found not to be exempt under Exemptions or allowed pursuant to Allowed Activities, the applicant must submit to the Department a completed form identifying critical areas on, and within the vicinity, of the site.

#### 19.70.120 Public Notice of Initial Determination.

The City will notify the public of initial determinations for applications that require public notice in accordance with AMC 19.20.030 Types of Review and 19.20.140, Application – Notice.

#### 19.70.125 Critical area report – Requirements.

- A. **Report required.** If required by the Director, the applicant must obtain and submit a critical area report that has been prepared by a qualified professional. This provision is not intended to expand or limit an applicant's other obligations under [WAC 197-11-100](#).
- B. **Third Party Review of Critical Area Reports.** The Director may require, at the applicant's expense, a third-party review of a critical area report by a qualified professional under contract with or employed by the City in any of the following circumstances:
1. The project requires a critical area variance, reasonable use permit, or critical areas special use permit; or
  2. Third party review is specifically required by the provisions of this chapter for the critical area(s) or critical area buffer(s) potentially being impacted; or
  3. When the Director determines that such services are necessary to demonstrate compliance with the standards and guidelines of this chapter.
- C. **Critical Area Report Types or Sections.** Critical area report requirements may be met in stages through multiple reports or combined in one report. A critical area report must include one or more of the following sections or report types unless exempted by the Director based on the extent of the potential critical area impacts. The scope and location of the proposed project will determine which report(s) alone or combined are sufficient to meet the critical area report

**Commented [GL30]:** For consideration – This would be a tool to be used by the applicant to assist in identifying areas of potential critical areas. It would ask questions that property owners could answer without the help of a scientist or professional consultant. This form could be attached to a preapplication application form.

**Commented [GL31]:** 19.20.140 could be updated to include identification in the NOA of the Director's initial determination about whether a critical area report is necessary.

**Commented [GL32]:** This section is intended to add clarity and predictability to the CA review and permitting process and to reduce the need for correction letters and revisions that add time and cost to the permit.

The report requirements outlined here apply to reports for all critical area types so that these requirements don't have to be listed again under each specific CA type. There are additional specific requirements for each type of critical area listed within those specific sections.

requirements for impacted critical area type(s). The typical sequence of required sections or reports that will fulfill the requirements of this section include:

1. **Reconnaissance.** The existence, general location, and type of critical areas on and/or adjacent to a project site. Determination of whether the project will adversely impact or be at risk from the potential critical areas based on maximum potential buffers for the particular critical area type. Possible application of exemptions should also be addressed;
  2. **Delineation.** The extent, boundaries, rating or classification, and applicable standard buffers of critical areas where the project area could potentially impact the critical area or its buffer including an assessment of the characteristics of or functions and values of the critical area and buffers identified;
  3. **Analysis.** The proposal and impact assessment report documenting the potential project impacts to the critical area and buffers including a discussion of the efforts taken to avoid, minimize, and reduce potential impacts to those areas per AMC 19.70.130(A);
  4. **Mitigation.** The measures that prevent or compensate for the potential impacts of the project designed to meet the requirements of this chapter, AMC 19.70.135, Mitigation Plan Requirements, and the standards for the specific critical areas impacted. Mitigation includes, but is not limited to, adjustments to required buffer sizes, best practices to minimize impacts, and critical area or buffer enhancement, restoration, or preservation plans. Mitigation plans include habitat management plans, revegetation, or replanting plans, and restoration plans;
  5. **Maintenance and Monitoring.** The goals of the mitigation proposed, performance standards for success, monitoring methods and reporting schedule, and contingency actions. Maintenance and monitoring plans must be consistent with the mitigation performance standards and requirements of this chapter, including the specific mitigation plan requirements outlined in each critical area type section.
- D. **Minimum written report contents.** At minimum, all critical area reports must contain the following information:
1. The name and contact information of the applicant;
  2. Adequate information to determine compliance with the requirements of the critical area regulations, including a critical area report, impact and hazard assessment, and mitigation requirements specific to each critical area type, as indicated in the corresponding sections of this chapter;
  3. The names and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;
  4. A description of the proposal, proposal location including address and parcel number(s), and a vicinity map for the project;

5. Identification of the development permit(s) requested and all other local, State, and/or Federal critical area-related permits required for the project;
  6. A copy of the site plan for the development proposal including:
    - a. Property and project site boundaries.
    - b. Surveyed critical areas and buffers on-site, and buffers for off-site critical areas that extend onto the project site.
    - c. The development proposal, including grading and clearing limits and areas of proposed impacts to critical areas and/or buffers (include square footage estimates).
    - d. A scaled depiction and description of the proposed stormwater pollution prevention plan consistent with the adopted stormwater manual, for the development and consideration of impacts to critical areas due to drainage alterations;
  7. Identification and characterization of all critical areas, water bodies, shorelines, and buffers on and adjacent to the proposed project area;
  8. A statement specifying the accuracy of the report and all assumptions made and relied upon;
  9. A description of methodologies used to conduct the critical areas investigation, including references;
  10. An assessment of probable impacts to the critical areas resulting from the proposed development of the site based upon identified findings;
  11. A description of reasonable efforts made to apply mitigation sequencing pursuant to AMC 19.70.130, Mitigation requirements, to avoid, minimize, and mitigate impacts to critical areas; and
  12. Plans for mitigation required to offset any critical areas impacts, in accordance with AMC 19.70.135, Mitigation plan requirements, and the corresponding mitigation performance standards sections of this chapter, including a discussion of the applicable development standards and cost estimates for determination financial guarantee requirements.
- E. **Existing reports.** Unless otherwise provided, a critical areas report may incorporate, be supplemented by, or composed of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Director. At the discretion of the Director, reports previously compiled or submitted as part of a proposal for a development may be used as a critical areas report to the extent that the requirements of this section and the requirements for each specific critical area type are met. Supplemental critical area report(s) may be required to provide information or analysis to address changes to the project scope, potential impacts or to changes to applicable regulations that have been made subsequent to existing, valid critical area reports, or other circumstances.

**Commented [GL33]:** Is it necessary to have surveys for all project types? Should there be a waiver to that requirement for certain enhancement projects, minor permits that wouldn't otherwise require a survey, or other types of projects that the City wants to encourage? Could use the term "accurately depicted", or similar.

**Commented [GL34]:** This will ensure documentation in the record that the applicant looked at less impactful alternatives.

**F. Modifications to Report Requirements.**

1. Limitations to study area. The Director may limit the required geographic area of the critical areas report as appropriate if:
  - a. The applicant, with assistance from the City of Anacortes, cannot obtain permission to access properties adjacent to the project area; or
  - b. The proposed activity will affect only a limited part of the project site.

**G. Modifications to Required Contents.** The applicant may consult with the Director prior to or during preparation of the critical areas report to obtain approval of modifications to the required contents of the report where, in the judgement of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation. In some cases, such as when it is determined that no geologically hazardous area is present, a full report may not be necessary to determine compliance with the critical area regulations, and in those cases a letter or reconnaissance only report may be required.

**H. Additional Information Requirements.** The Director may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with this chapter. Additional information that may be required includes, but is not limited to:

1. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;
2. Grading and drainage plans; and
3. Information specific to the type, location, and nature of the critical area.

**19.70.130 Mitigation requirements.**

Mitigation must be sufficient to maintain or compensate for the impacted functions and values of the critical area and to prevent risk from a hazard posed by a critical area. Mitigation must not be implemented until after the Director has provided approval of a critical areas report that includes a mitigation plan.

**A. Mitigation sequencing.** This section applies to mitigation required with all critical areas reviews, approvals, and enforcement pursuant to this chapter. This section is supplemented with specific measures under subchapters for particular critical area types. Mitigation for specific development proposals may include a combination of the measures below and must be designed and constructed in accordance with the provisions of this section. Before impacting any critical areas, an applicant must demonstrate that the following actions have been taken in the following sequential order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of actions;

**Commented [LBG35]:** Compensatory

**Commented [LBG36]:** Mitigation is a series of actions that requires addressing each action, or step, in a particular order. This sequence of steps is used to reduce the severity of negative impacts from activities that potentially affect critical areas and to determine what types of impacts may be permitted and what types of compensatory mitigation may be appropriate. According to the rules implementing SEPA, mitigation involves the following..... (WAC 197.11.768).

**Commented [LBG37]:** The primary decision to be made with respect to avoidance is one of risk management. For example, using the state's system for wetland rating, impacts to Category I wetlands (which are rare, sensitive to disturbance, irreplaceable, or perform a high level of functions) are higher risk and should have to pass a higher avoidance threshold than impacts to a Category IV wetland. Cat. IV wetlands are usually significantly degraded, provide a low level of functions, and may be more successfully replaced. If the goal is to protect the existing functions, it make sense to apply a more stringent protection to those wetlands that have a higher rating. (DOE/WDFW guidance).

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
  3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment or by restoring or stabilizing the hazard area through natural, engineering, or other methods;
  4. Reducing or eliminating the impacts or hazard over time by preservation and maintenance operations during the life of the action;
  5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
  6. Monitoring, measuring and reporting the impact to the Director and taking appropriate corrective measures.
- B. Applicants must first demonstrate an inability to avoid or reduce impacts before the use of actions to mitigate potential impacts will be allowed. No activity or use may be allowed that results in a net loss of the functions or values of a critical area.
- C. **Type, Location and Timing of Mitigation.** Unless it is demonstrated that higher level of ecological functioning or greater reduction of hazard risk would result from an alternative approach or as otherwise allowed in this chapter, mitigation for adverse impacts shall be based on best available science and shall be in-kind, on-site, and prior to the activities that will disturb the critical area. Mitigation measures that cannot be implemented prior to the critical area impacts must be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects must be timed to reduce impacts to existing fisheries, wildlife, and flora.
1. The Director may authorize a one-time temporary delay in completing construction or installation of the mitigation when the applicant provides a written explanation from a qualified professional 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.

#### 19.70.135 Mitigation plan requirements

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

- A. **Environmental Goals and Objectives.** The mitigation plan must include a written report identifying environmental goals and objectives of the mitigation proposed and including:

**Commented [LBG38]:** Generally, if mitigation is conducted in advance of the impacts, then the risk and temporal loss are reduced and the ratio should be reduced commensurately. If mitigation is conducted well after the impact, the ratio should be increased. (DOE/WDFW)

**Commented [GL39]:** This section is intended to very clearly lay out requirements for mitigation plans; the current code lacks clarity in this area. The report requirements outlined here apply to reports for all critical area types so that these requirements don't have to be listed again under each specific CA type.

The language is based on the Commerce example:

1. A description of the anticipated impacts to the critical areas, the mitigating actions proposed, and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives must be related to the functions and values of the impacted critical area; and
  2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed.
- B. **Performance Standards.** The mitigation plan must include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained at the end of the required monitoring period and whether or not the requirements of this chapter have been met.
- C. **Detailed Construction Plans.** In order to convey proposed construction techniques and anticipated final outcome, the mitigation plan must include written specifications, descriptions, and drawings of the mitigation propose, including:
1. The proposed construction sequence, timing, and duration;
  2. Best management practices to be implemented;
  3. Site plans showing grading and excavation details, slope parentage and final grade elevations, with minimum two-foot contour intervals;
  4. Cross-sectional drawings;
  5. Erosion and sediment control features;
  6. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and
  7. Measures to protect and maintain plants until established.
- D. **Monitoring Program and Contingency Plan.** A monitoring and contingency plan is required for all projects requiring mitigation.
1. The mitigation plan must include a monitoring program to be implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program must determine if the original goals and objectives of the mitigation plan are being met.
  2. A contingency plan must be established for indemnity in the event that the mitigation project is inadequate or fails. Contingency plans include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met. Corrective measures must be taken when the qualified professional indicates, in a monitoring report, that the contingency actions are needed to ensure project success by the end of the monitoring period. A performance and

maintenance bond, or other acceptable financial guarantee, is required to ensure the applicant's compliance with the terms of the mitigation agreement consistent with AMC 19.70.175, Financial guarantee requirements.

3. Monitoring programs prepared to comply with this section must include the following requirements:
  - a. Best available scientific procedures must be used to establish the success or failure of the project. A protocol outlining the schedule for site monitoring (for example, monitoring shall occur in years zero (as-built), one, three, and five after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met.
  - b. For vegetation determinations, permanent sampling points must be established.
  - c. Vegetative success must, at a minimum, equal 80 percent survival of planted trees and shrubs and 80 percent cover of desirable understory or emergent plant species at the end of the required monitoring period. Alternative standards for vegetative success, including (but not limited to) minimum survival standards following the first growing season, may be required after consideration of recommendations provided in a critical area report or as otherwise required by the provisions of this chapter.
  - d. A monitoring report must be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. Monitoring reports on the current status of the mitigation project shall be submitted, consistent with Subsection (e) of this section, to the City on the schedule identified in the monitoring plan, but not less than every other year. The reports are to be prepared by a qualified professional and reviewed by the City, or a qualified professional retained by the City, and should include monitoring information on wildlife, vegetation, water quality, water flow, stormwater storage and conveyance, and existing or potential degradation, as applicable.
  - e. Monitoring programs must be established for a period necessary to establish that performance standards have been met, but not for less than a minimum of five years without approval from the Director.
  - f. If necessary, failures in the mitigation project must be corrected.
  - g. Dead or undesirable vegetation must be replaced with appropriate plantings.
  - h. Damage caused by erosion, settling, or other geomorphological processes must be repaired.
  - i. The mitigation project shall be redesigned (if necessary) and the new design shall be implemented and monitored, as in subsection (D)(3)(d) of this section.
  - j. Correction procedures must be approved by a qualified professional and the Director.

- k. If the mitigation goals are not obtained within the initial monitoring period, the applicant remains responsible for restoration of the impacted values and functions or hazard risk reduction until the mitigation goals agreed to in the mitigation plan are achieved.
- E. **Monitoring Reports.** Monitoring reports must be submitted to the City consistent with the approved monitoring plan.
  - 1. The as-built report, required prior to final inspection, must, at a minimum, include documentation of the following:
    - a. Departures from the original approved plans;
    - b. Construction supervision provided by the qualified professional;
    - c. Approved project goals and performance standards;
    - d. Baseline data for monitoring per the approved monitoring methods;
    - e. Photos from established photo points; and
    - f. A site plan showing final mitigation as constructed or installed, monitoring points, and photo points.
  - 2. Subsequent monitoring reports must, at a minimum, include:
    - a. Monitoring visit observations, documentation, and analysis of monitoring data collected;
    - b. Photos from photo points;
    - c. Determination whether performance standards are being met; and
    - d. Maintenance and/or contingency action recommendations to ensure success of the project at the end of the monitoring period.
  - 3. The applicant is responsible for the cost (at the current hourly rate) of review of monitoring reports and site inspections during the monitoring period, which are completed by the City or a qualified professional under contract with or employed by the City.
- F. **Cost Estimates.** The mitigation plan must include cost estimates that will be used by the City to calculate the amounts of financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with AMC 19.70.175, Financial guarantee requirements.
- G. **Approved Mitigation Projects – Signature.** On completion of construction, an as-built report for any approved mitigation project must be prepared and signed off by the applicant's qualified professional and approved by the City. Signature of the qualified professional on the required

as-built report and approval by the Director indicates that the construction has been completed as planned.

#### **19.70.145 General Requirements for Buffers.**

The purpose of a critical area buffer is to protect the integrity, function, value and resource of the subject critical area, and/or to protect life, property, and resources from risks associated with development on unstable or critical lands.

- A. The establishment of buffer areas, consistent with the requirements of this Chapter, is required for all development proposals and activities in or adjacent to critical areas.
- B. In all cases, the standard buffer applies unless the Director determines that additional buffer width is necessary or reduced buffer is sufficient to protect the functions and values consistent with the provisions of this chapter and the recommendations of a qualified professional.
- C. Buffers must consist of an undisturbed area of native vegetation established to achieve the purpose of the buffer, unless modified as part of an approved alteration according to the standards for the specific critical area type. If the buffer area has previously been disturbed, it must be revegetated pursuant to an approved mitigation or restoration plan.

#### **19.70.150 Title Notice.**

- A. **Generally.** A critical area notice to title is required, as a condition of permit issuance or project approval, when a permit or development application is submitted for development on any property containing a critical area or buffer. The purpose is to inform subsequent purchasers of real property of the existence of critical areas. This requirement can be met through recording of a title notice on forms prepared by the City, establishment of a critical area tract, or recording of native growth protection area easement consistent with the following provisions:
- B. **Title Notice.** The title notice applicable to the property must be approved by the Director and City Attorney for compliance with this provision and be filed by the property owner, at their expense, with the Skagit County Auditor's Office. The title holder will have the right to challenge this notice and to have it extinguished if the critical area designation no longer applies. However, the titleholder is responsible for completing a critical area report, subject to approval by the Director, before the notice on title can be extinguished. The notice must state that critical areas or buffers have been identified on the property and that limitations on actions in or affecting the critical area or buffer may exist. The title notice runs with the land.
- C. **Critical Area Tract.** Subdivisions, short subdivisions, and binding site plans must establish a separate critical areas tract as a permanent protective measure for wetlands, fish and wildlife habitat conservation areas, and landslide hazard areas and their buffers. The plat or binding site plan for the project must clearly depict the critical areas tract, and include all of the subject critical area, any required buffer, and any additional lands included voluntarily by the applicant. Restrictions to development within the critical area tract must be clearly noted on the plat or

plan. Restrictions must be consistent with this chapter for the entire critical area tract. Should the critical area tract include several types of critical areas, the applicant may establish separate critical areas tracts.

- D. **Native Growth Protection Area (NGPA).** NGPA easements are required on a property where no subdivision, short subdivision, or binding site plan is proposed or required. Unless otherwise required in this chapter, NGPA easements must be recorded on title for all affected parcels prior to approval of a development agreement, issuance of a master development plan permit, or issuance of a site development or building permit, when two or more dwelling units and/or nonresidential development are proposed on one parcel, to delineate and protect critical areas and their buffers. The easement to be recorded must clearly depict the critical area(s), required buffer(s) and the limits of the NGPA easement. Restrictions to development within the NGPA easement must be clearly noted in the easement and include the following:
1. That native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, limiting chemical applications of hazardous substances (pesticides, herbicides, fertilizers), maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
  2. The right of the City to enforce the terms of the restriction.

#### **19.70.155 Field marking.**

- A. **Temporary field marking during construction.** The outer perimeter of the critical area buffer and the clearing limits identified by an approved permit or authorization must be marked in the field with temporary "clearing limits" fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Director prior to the commencement of permitted activities. This temporary marking and fencing must be maintained throughout construction and may not be removed until permanent fencing and/or signs, if required, are in place.
- B. **Permanent field marking.** The Director may require installation of permanent signs, markers, and fencing along the outer perimeter of a critical area or its buffer when it is determined necessary to protect the critical areas' functions and values. Permanent markings must be installed prior to final project approval or occupancy, as determined by the Director.
1. **Signs.** All critical areas tracts, easements, and dedications, should be clearly marked on the site using permanent markings, placed at least every 50 feet, which includes the following text, or similar, as approved by the Director:

*City of Anacortes Designated Critical Area. Activities, including clearing and grading, removal of vegetation, pruning, cutting of trees or shrubs, planting of nonnative species, and other alterations may be prohibited. Help protect and care for this area. Please contact the City of Anacortes with questions or concerns.*

2. **Fencing.** Permanent fencing must be designed so as to not interfere with species migration or wildlife movement and be constructed in a manner that minimizes impacts to the critical areas and buffers. Proposed fencing type and materials must be approved by the Director prior to installation.

- C. **Maintenance and replacement.** It is the responsibility of the landowner, successors, or assigns to maintain in perpetuity and replace, if necessary, all permanent fencing and field markings.

#### 19.70.160 Construction plan review, monitoring, and inspection.

- A. The Director may require project building and construction plans be reviewed by a qualified professional for confirmation of consistency with the critical areas report and recommendations prior to approval of construction plans.
- B. The Director may require monitoring by a qualified professional during site alteration activities within, or adjacent to, critical areas or buffers, and/or a final inspection report by the qualified professional stating that construction has or has not implemented the design recommendations provided in the project critical areas report, and evaluation of any deviation from the recommendations.

#### 19.70.165 Financial guarantee requirements.

Bonds, and other financial guarantees, and associated performance agreements or maintenance/defect/monitoring agreements are required for projects with required mitigation or restoration of impacts to critical areas or critical area buffers consistent with the following:

- A. A performance agreement and bond, or other acceptable financial guarantee, are required from the applicant when mitigation required pursuant to a development proposal is not completed prior to final permit approval, such as final plat approval or final building inspection. The amount of the performance bond(s) must equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).
- B. A performance agreement and bond, or other acceptable financial guarantee, are required from the applicant when restoration is required for remediation of a critical area violation. The amount of the performance bond(s) must equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).
- C. A maintenance/defect/monitoring agreement and bond, or other acceptable financial guarantee, are required to ensure the applicant's compliance with the conditions of the approved mitigation plan pursuant to a development proposal or restoration plan for remediation of a violation. The amount of the maintenance bond(s) must equal 25 percent of the cost of the mitigation project (after City mobilization is calculated) in addition to the cost for monitoring for a minimum of five years. The monitoring portion of the financial guarantee may be reduced in proportion to work successfully completed over the period of the bond. The bonding period must coincide with the monitoring period.

**Commented [LBG40]:** Split-rail fencing is intended to not interfere with wildlife movement and in most cases this is appropriate. However, one of the measures for mitigating Pets and Human disturbances under Table 19.70.250-2 is to install privacy fencing, which is typically solid 6' tall fencing.

**Commented [GL41]:** Financial guarantee / bonding requirements are currently included in some of the CA-specific chapters in the existing code. This language would standardize this requirement for all CA types and make it clear when a financial guarantee is required.

#### **19.70.170 Unauthorized critical area alterations.**

- A. When a critical area or its buffer has been altered in violation of this chapter, all development work must stop and the critical area must be restored. The Director may issue a stop work order to cease all development, and order restoration measures at the owner's or other responsible party's expense to remediate the impacts of the violation of the provisions of this chapter.

#### **B. Requirement for Restoration Plan.**

1. All development must remain stopped until a restoration plan is prepared by the responsible party and an approved permit is issued by the City. Such a plan must be prepared by a qualified professional using the best available science and must describe how the actions proposed meet the minimum requirements described in subsection C of this section.
2. The Director may, at the responsible party's expense, seek expert advice, including but not limited to third party review by a qualified professional under contract with or employed by the City, in determining if the plan meets the minimum performance standards for restoration. Submittal, review, and approval of required restoration plans for remediation of violations of this chapter must be completed through a site development permit application process.

#### **C. Minimum Performance Standards for Restoration.**

1. For alterations to critical aquifer recharge areas, wetlands, and fish and wildlife habitat conservation areas, the following minimum performance standards must be met for the restoration; provided, that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:
  - a. The pre-violation function and values of the affected critical areas and buffers must be restored, including water quality and habitat functions;
  - b. The pre-violation soil types and configuration must be replicated;
  - c. The critical area and buffers must be replanted with native vegetation that replicates the vegetation historically, or pre-violation, found on the site in species types, sizes, and densities. The pre-violation functions and values should be replicated at the location of the alteration; and
  - d. Information demonstrating compliance with the requirements in SMC 19.70.082, Mitigation plan requirements, and the applicable mitigation sections for the affected type(s) of critical area(s) and their buffer(s) must be submitted to the Director with a complete site development permit application.
2. For alterations to flood hazard and geologically hazardous areas, the following minimum performance standards must be met for the restoration of a critical area; provided, that if

**Commented [GL42]:** Compare to AMC 17.70.470, which only applies to wetlands.

the violator can demonstrate that greater safety can be obtained, these standards may be modified:

- a. The hazard must be reduced to a level equal to, or less than, the pre-violation hazard;
- b. Any risk of personal injury resulting from the alteration must be eliminated or minimized; and
- c. The hazard area and buffers must be replanted with native vegetation sufficient to minimize the hazard.

D. **Site Investigation.** The Director is authorized to take such actions as are necessary to enforce this chapter. The Director shall present proper credentials and obtain permission before entering onto private property.

E. **Penalties.** Any responsible party violating of any of the provisions of this chapter may be subject to any applicable penalties per AMC 20.\_\_\_\_, plus the following:

1. A square footage cost of \$3.00 per square foot of impacted critical area buffer; and a square footage cost of \$15.00 per square foot of impacted critical area; and
2. A per tree penalty in the amount of \$3,000 per nonsignificant tree and \$9,000 per significant tree, for trees removed from a critical area or critical area buffer in violation of the provisions of this chapter.

#### 19.70.175 Final Decision and Appeals.

- A. **Completion of the critical area review.** The city's determination regarding critical areas pursuant to this chapter is final concurrent with the final decision to approve, condition, or deny the underlying permit for the development proposal or other activity involved.
- B. **Appeals.** Any decision to approve, condition, or deny a development activity proposal or other activity based on the requirements of this chapter may be appealed according to, and as part of, the appeal procedure for the underlying permit or approval involved.

## WETLANDS

#### 19.70.200 Wetlands – Description and Purpose.

It is the purpose of this Chapter to protect the functions and values of wetlands, which serve many important ecological and environmental functions and help to protect public health, safety, and welfare by providing flood storage and conveyance and erosion control, while also providing fish and wildlife habitat, recreation, water quality protection, water storage, education, scientific research opportunities and other public benefits..

**Commented [LBG43]:** This implements Comprehensive Plan Policy EC-7.2, Develop regulations which encourage tree retention and provide regulatory penalties for unauthorized tree removal.

**Commented [GL44]:** As part of levying a penalty, consider developing a program and fund for restoration of CAs altered illegally or alternate replacement of functions and values that cannot be restored, perhaps for use in a project off-site in the same basin or nearby basin.

**Commented [GL45]:** From Shoreline:  
A penalty range of \$3.00/square foot up to \$15.00/square foot of area impacted is proposed. The lower amount is for violations in critical area buffers and is at the low end of the range of what it currently costs to restore native vegetation in critical areas. For violations in critical areas themselves \$15.00/square foot is proposed based on the upper end of restoration costs estimates, when restoration also requires grading. These amounts are based on information from Environmental Science Associates. Whether or not the penalty should be applied is discretionary and can take specific circumstances into consideration.

**Commented [GL46]:** Would need to define if this penalty concept is retained.

**Commented [LBG47]:** ...or otherwise adversely impacted....? (If not removed, but topped, or damaged, etc.)

#### 19.70.210 Wetlands - Designation and Rating.

- A. **Designation.** All areas meeting the definition of a wetland and the wetland identification criteria pursuant to this chapter, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.
- B. **Rating.** Wetlands must be rated by a qualified professional according to the Washington State Department of Ecology Wetland Rating System for Western Washington - 2014 Update (Ecology Publication #14-06-029, October 2014), or as revised. Wetland rating categories will be applied as the wetland exists on the date of adoption of the rating system by the City, as the wetland naturally changes in accordance with permitted activities.
1. **Category I.** Category I wetlands are those that represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a high level of functions. The following types of wetlands are Category I:
    - a. Relatively undisturbed estuarine wetlands larger than one acre;
    - b. Wetlands of high conservation value identified by scientists of the Washington Natural Heritage Program/Department of Natural Resources (DNR);
    - c. Bogs;
    - d. Mature forested wetlands larger than one acre;
    - e. Wetlands in coastal lagoons; and
    - f. Wetlands that perform many functions well and score 23 points or more in the wetland rating.
  2. **Category II.** Category II wetlands are those wetlands that are difficult, though not impossible, to replace and provide high levels of some functions. The following types of wetlands are Category II:
    - a. Estuarine wetlands smaller than 1 acre or disturbed estuarine wetlands larger than 1 acre;
    - b. Wetlands with a moderately high level of functions (scoring 20 to 22 points in the wetland rating).
  3. **Category III.** Category III wetlands are those with a moderate level of functions, generally have been disturbed in some ways, can often be adequately replaced with a well-planned mitigation project, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. The following types of wetlands are Category III:
    - a. Wetlands with a moderate level of functions (scoring between 16 and 19 points in the wetland rating).

**Commented [GL48]:** Use of Ecology's revised rating allows for standardization in rating wetlands when permits are needed from various permitting agencies.

The Categories descriptions have been updated according to the [most recent Ecology guidance](#), which was updated in 2016.

**Commented [GL49]:** These Categories descriptions have been updated according to the [most recent Ecology guidance](#), which was updated in 2016 and references the 2014 wetland rating system.

**Commented [LBG50]:** Cannery Pond is identified as a wetland of high conservation value per DNR, as are areas around Heart Lake and Whistle Lake.

**Commented [LBG51]:** Recent rating for Ship Harbor wetlands resulted in a score of 23 points.

4. **Category IV.** Category IV wetlands are with the lowest levels of functions (scoring below 16 points) and are often heavily disturbed. These are wetlands which should be able to be replaced, or in some cases improved.
- C. **Illegal Modifications.** Wetland rating categories do not change due to illegal modifications or alterations. A wetland's category must be based on the pre-modification/alteration analysis of the wetland.

#### 19.70.220 Wetlands – Mapping and delineation.

- A. **Mapping.** The approximate location and extent of wetlands are shown in the wetland data layer maintained in the City of Anacortes geographic information system (GIS). In addition, the following maps and inventories are hereby adopted by reference as amended:
  1. Soils maps produced by the U.S. Department of Agriculture, National Resources Conservation Service; and
  2. The National Wetlands Inventory, produced by the U.S. Fish and Wildlife Service.
- B. **Reference Only.** The maps and resources cited above are to be used as a guide for the Department, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.
- C. **Identification and Delineation.** Identification of wetlands and delineation of their boundaries pursuant to this chapter must be done in accordance with the adopted Federal wetland delineation manual and applicable regional supplements per WAC 173-22-035. The exact location of a wetland's boundary must be determined through the performance of a field investigation by a qualified professional. Evidence documenting the results of the boundary survey must be submitted to the City.

**Commented [GL52]:** This is also stated in the General Provisions section. Might not be needed here.

**Commented [GL53]:** RCW 36.70A.175

**Commented [GL54]:** See definitions.

#### 19.70.230 Wetlands – General Development Standards.

- A. **Activities** and uses are prohibited in wetlands and wetland buffers, except as provided for in this chapter, and only when it is demonstrated that the activity will not degrade the functions and values of the wetland.
- B. **Exemptions and allowed activities.** Exemptions are listed in the provisions established in (AMC 19.70.020 Exemptions).
- C. **Subdivisions.** The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:
  1. Land that is located wholly within a wetland and/or its buffer may not be subdivided; and
  2. Land that is located partially within a wetland and/or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot that meets the minimum size requirements for the zone is located outside of the wetland and its buffer.

**Commented [GL55]:** "Activities" is an intentionally broad description; an alternative would be to list out regulated activities – removal, excavation, grading, or dredging of material, draining, flooding disturbing the wetland, water level, or water table, the construction, reconstruction, demolition, or expansion of any structure, etc. (similar to the existing code – 17.70.310; 17.06.735)

#### 19.70.240 Wetlands – Specific Wetland Category Development Standards.

- A. **Category I Wetlands.** Development activities and uses that result in alteration of Category I wetlands and their associated buffers are prohibited, except if allowed under the Critical Area Variance, Critical Area Reasonable Use or Public Agency Exception process.
- B. **Category II, III and IV Wetlands.** Development activities that result in alteration of Category II, III or IV wetlands or buffers may be permitted upon demonstration, through a critical areas report meeting the requirements of this Chapter, that:
1. Mitigation sequencing has been applied per \_\_\_\_\_;
  2. The proposed alteration will not degrade the quantitative and qualitative functioning of the wetland, or that any degradation can be adequately mitigated to protect or compensate for the wetland functions that are lost.
  3. For proposed **Stormwater Management Facilities**, ALL of the criteria identified below are met:
    - a. The wetland is classified as a Category III or a Category IV wetland with a habitat score of 3-4 points or less, and
    - b. There will be “no net loss” of functions and values of the wetlands, and
    - c. The wetland does not contain a breeding population of any native amphibian species, and
    - d. The hydrologic functions of the wetland can be improved as outlined in questions 3, 4, 5 of Chart 4 and questions 2, 3, 4 of Chart 5 in the “Guide for Selecting Mitigation Sites Using a Watershed Approach,” (available here: <http://www.ecy.wa.gov/biblio/0906032.html>); or the wetland is part of a priority restoration plan that achieves restoration goals identified in a Shoreline Master Program or other local or regional watershed plan;
    - e. The wetland lies in the natural routing of the runoff, and the discharge follows the natural routing, and
    - f. All regulations regarding stormwater and wetland management are followed, including but not limited to local and state wetland and stormwater codes, manuals, and permits, and
    - g. Modifications that alter the structure of a wetland or its soils will require permits. Existing functions and values that are lost would have to be compensated/replaced.
  4. **Small, Hydrologically Isolated Category IV Wetlands (less than 4,000 sq. ft.).** The Director may allow small, hydrologically isolated Category IV wetlands to be exempt the requirement to avoid impacts (AMC 19.70.080(A)(1) Mitigation requirements) and allow alteration of such wetlands if all of the following conditions are met:

**Commented [LBG56]:** NEED TO REVIEW PROCEDURE & APPROVAL AUTHORITY. Impacts to non-exempt Cat. IV wetlands currently only allowed with CUP, subject to standards in 17.70.430.

**Commented [GL57]:** New guidance from DOE – to tie in with new LID stormwater requirements.

**Commented [LBG58]:** These criteria are from the [2014 SWMMWW](#) Appendix I-D- Guidelines for Wetlands when Managing Stormwater

**Commented [GL59]:** Isolated means that the wetland has no surface hydrologic connection to waters of the United States. This is from DOE guidance.

**Commented [LBG60]:** DOE/WDFW guidance recommends dealing with small wetlands by exempting projects from the need to avoid them, while still requiring that the loss of wetlands be compensated directly or through an in-lieu fee program or mitigation bank.

- a. The remaining mitigation sequencing actions of AMC 19.70.080(A)(2)-(6) are followed;
  - b. The wetland is less than 4,000 square feet in area;
  - c. The wetland is a low quality Category IV wetland with a habitat score of less than 5 points in the adopted rating system;
  - d. The wetland does not contain habitat identified as essential for local populations of priority species identified by the Washington Department of Fish and Wildlife or species of local importance which are regulated as fish and wildlife habitat conservation areas in Chapter 19.70.300 (FWHCA section);
  - e. The wetland is not associated with shorelines of the state or their associated buffers;
  - f. The wetland is not associated with riparian areas or buffers;
  - g. The wetland is not part of a wetland mosaic; and
  - h. A mitigation plan to replace lost wetland functions and values is developed, approved, and implemented consistent with AMC 19.70.270.
5. **Small, Hydrologically Isolated Category IV Wetlands (less than 1,000 sq. ft.).** Wetlands less than 1,000 square feet that meet the criteria in subsection (B)(4) of this section (above) and that do not contain federally listed species or their critical habitat are exempt from the buffer provisions contained in this Chapter.

Commented [GL61]: DOE Guidance

#### 19.70.250 Wetlands – Required buffer areas.

- A. **Buffer Requirements.** The standard buffer widths in Table 19.70.250-1 have been established in accordance with the best available science. The buffer widths must be determined based on the category of wetland and the habitat score as assigned by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington.
- 1. The use of the standard buffer widths requires the implementation of the mitigation measures in Table 19.70.250-2, where applicable to the development type, to minimize the impacts of the adjacent land uses.
  - 2. If an applicant chooses not to apply the appropriate mitigation measures in Table 19.70.250-2, then a 33 percent increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.
  - 3. The standard buffer widths assume that the buffer is a relatively intact native plant community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the existing buffer is bare ground, sparsely vegetated, or vegetated with nonnative or invasive species that do not perform needed functions, then the applicant must either develop and implement a wetland buffer restoration or enhancement plan to maintain the standard width to create the appropriate plant

community or the buffer must be widened to ensure that adequate functions of the buffer are provided.

4. Table 19.70.250-1. Buffer Widths by Wetland Category and Characteristics

| Wetland Category                                                                                                                          | Buffer Width (feet) |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>Category I</b>                                                                                                                         |                     |
| High level of function for habitat (score for habitat 8-9 points)                                                                         | 225                 |
| Moderate level of function for habitat (score for habitat 5-7 points)                                                                     | 110                 |
| High level of function for water quality improvement (8-9 points) and low for habitat (less than 5 points)                                | 75                  |
| Not meeting above characteristic                                                                                                          | 75                  |
| <b>Category II</b>                                                                                                                        |                     |
| High level of function for habitat (score for habitat 8-9 points)                                                                         | 225                 |
| Moderate level of function for habitat (score for habitat 5-7 points)                                                                     | 110                 |
| High level of function for water quality improvement and low for habitat (score for water quality 8-9 points; habitat less than 5 points) | 75                  |
| Not meeting above characteristic                                                                                                          | 75                  |
| <b>Category III</b>                                                                                                                       |                     |
| Moderate level of function for habitat (score for habitat 5-7 points)                                                                     | 110                 |
| Not meeting above characteristic                                                                                                          | 60                  |
| <b>Category IV</b>                                                                                                                        |                     |
| Score for all 3 basic functions is less than 16 points                                                                                    | 40                  |

5. Table 19.70.250-2. Required Measures to Minimize Impacts to Wetlands

| Examples of Disturbance | Activities and Uses that Cause Disturbances                                                                    | Required Measures to Minimize Impacts                                                                                                                                                                                                                                     |
|-------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lights                  | Parking lots<br>Warehouses<br>Manufacturing<br>Residential                                                     | <ul style="list-style-type: none"> <li>Direct lights away from wetland</li> </ul>                                                                                                                                                                                         |
| Noise                   | Manufacturing<br>Residential                                                                                   | <ul style="list-style-type: none"> <li>Locate activity that generates noise away from wetland to the maximum extent practicable</li> </ul>                                                                                                                                |
| Toxic runoff            | Parking lots<br>Roads<br>Manufacturing<br>Residential<br>Application of agricultural pesticides<br>Landscaping | <ul style="list-style-type: none"> <li>Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered</li> <li>Establish covenants limiting use of pesticides within 150 ft. of a wetland</li> <li>Apply integrated pest management</li> </ul> |

**Commented [GL62]:** The CAO requires the use of Ecology's [revised wetland rating system](#) to rate wetlands. This system represents best available science for wetland protection.

Anacortes's buffer structure was initially adopted in 2005 and then updated by Ord. 2743 in 2006. It is based on Section 8C.2.3, Buffer Alternative 3 of Appendix 8-C of DOE's Wetlands in Washington State, Volume 2 – Protecting and Managing Wetlands.

This alternative provides flexibility by basing the widths of buffers on three factors: the wetland category, the intensity of the impacts, and the functions or special characteristics of the wetland that need to be protected as determined thru the rating system.

In 2014, Ecology [updated](#) the Washington State Wetland Rating System for Western Washington that were published in 2004. The effective date for the new rating system was January 1, 2015. Ecology changed the scale of rating scores from 1 – 100 to 9 – 27 to better reflect the scientific accuracy of the tools. Ecology provided a [score conversation table](#) that has been used in the scoring in this updated table.

These wetland buffers are the same as current CAO, but the point values have been modified per the updated rating system scale.

|                            |                                                                                          |                                                                                                                                                                                                                                                                                                                     |
|----------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stormwater runoff          | Parking lots<br>Roads<br>Manufacturing<br>Residential areas<br>Commercial<br>Landscaping | <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     | Impermeable surfaces<br>Lawns<br>Tilling                                                 | <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 | Residential areas                                                                        | <ul style="list-style-type: none"> <li>• Use privacy fencing</li> <li>• Plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion</li> <li>• Place wetland and its buffer in a separate tract or protect with a conservation easement</li> </ul> |
| Dust                       | Tilled fields                                                                            | <ul style="list-style-type: none"> <li>• Use best management practices to control dust</li> </ul>                                                                                                                                                                                                                   |

6. **Increasing buffer widths.** Buffer widths may be increased, on a case-by-case basis, as determined by the Director. This determination must be supported by appropriate documentation showing that it is necessary to protect wetland functions and values. Documentation must include, but is not limited to, any of the following:

- The wetland is used by a plant or animal species listed by the Federal government or the State as endangered, threatened, candidate, sensitive, monitored, or documented priority species or habitats, or the wetland is essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or
- The adjacent land has slopes greater than 15 percent and is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or
- The adjacent land has minimal vegetative cover on slopes greater than 30%. In lieu of increasing the buffer width where exiting buffer vegetation is inadequate to protect the wetland functions and values, development and implementation of a wetland buffer restoration/enhancement plan in accordance with AMC 19.70.270 may be substituted.

7. **Averaging buffer widths.** The Director may allow averaging of wetland buffer widths on a case-by-case basis when the critical areas report demonstrates that the following criteria are met:

- There is not a feasible alternative to the site design that could be accomplished without buffer averaging;

**Commented [GL63]:** DOE guidance... not specified in current CAO

- b. The buffer averaging does not reduce the functions or values of the wetland;
  - c. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer, and all increases in buffer dimension for averaging must be parallel to the wetland boundary;
  - d. The wetland contains variation in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrow buffer in other places;
  - e. The buffer width at its narrowest point is not reduced to less than seventy-five percent of the standard width, or 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV, **whichever is greater**.
- B. Measurement of Wetland Buffers.** All buffers must be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations must be the same as the buffer required for the category of the created, restored, or enhanced wetland.
- C. Buffers on mitigation sites.** Buffer widths must be applied to mitigation sites consistent with the wetland ratings and buffer requirements of this chapter for subsequent development proposals based on expected category of the wetland once the mitigation actions are taken. Only fully vegetated buffers with predominantly native plants will be considered. Lawns, walkways, driveways, and other mowed or paved areas will not be considered as buffers.
- D. Buffer Maintenance.** Except as otherwise specified or allowed in accordance with this Chapter, wetland buffers must be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive nonnative weeds is required for the duration of the mitigation bond.
- E. Buffer impacts.** When buffer impacts occur, compensatory mitigation must be provided at a minimum ratio of 1:1 for the area impacted. The mitigation must occur on the same site when feasible or within the same wetland system preferably. The mitigation must ensure that the wetland functions and values are not diminished due to the buffer impacts.
- F. Allowed Wetland Buffer Uses.** In addition to the general exemptions and allowed activities outlined in AMC 19.70.020, the following uses may be allowed within a wetland buffer by the Director, if the use is not prohibited by any other applicable law and it is conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:
1. **Conservation and restoration activities.** Conservation or restoration activities aimed at protecting or enhancing the soil, water, vegetation, or wildlife.
  2. **Passive recreation.** Low impact uses and activities which are consistent with the purpose and function of the wetland buffer and do not detract from its integrity may be permitted within the buffer depending on the sensitivity of the wetland. Uses may include:

**Commented [GL64]:** Ecology guidance, not currently in CAO.

**Commented [GL65]:** Check if this is duplicative of language in general provisions.

- a. Pedestrian walkways and trails meeting the following standards:
    - i. The trail is generally parallel to the perimeter of the wetland;
    - ii. The trail is located in the outer 25% of the buffer area and is designed to avoid removal of significant vegetation;
    - iii. The trail does not exceed 6 feet in width, and is constructed with a surface that does not interfere with substrate permeability. Raised boardwalks utilizing non-treated pilings may be acceptable;
    - iv. The trail does not fully enclose a habitat area or buffer; and
    - v. The trail may be subject to closure during critical spawning, migration or breeding time periods of sensitive species that are present.
  - b. Wildlife viewing structures; and
  - c. Fishing access areas down to the water's edge no larger than 6 feet in width.
3. **Stormwater management facilities.** Stormwater management facilities that meet the criteria and standards outlined in AMC 19.70.240(C)(4) (Allowed activities in Cat. III and IV wetlands) may be allowed in Category III and IV wetland buffers.
- G. **Setbacks from buffers.** Buildings, structures, paving, and other hard surfacing shall be set back a minimum distance of 10 feet from the edge of the wetland buffer, or edge of the wetland if no buffer is required, unless otherwise determined by the Director that a smaller distance would meet the intent of this subsection. This setback is to avoid conflicts with tree branches and/or critical root zones of trees that are in the buffer or will be planted in the buffer. The following may be allowed in the building setback from the buffer if they do not cause damage to the critical root zone of trees in the buffer:
1. Landscaping;
  2. Uncovered decks, roof eaves and overhangs, unroofed stairways and steps;
  3. Pervious ground surfaces, such as driveways, patios, and parking may be allowed; provided that it is engineered as a pervious system as defined in AMC \_\_\_\_\_. Such improvements may be subject to the requirements in AMC \_\_\_\_\_, Stormwater Management.
- H. **Previously established buffers.** Where a buffer has been previously established after \_\_\_\_ (date) \_\_\_\_\_ through a City development review and approval process, and is permanently recorded on title or placed within a separate tract or easement, the buffer shall be as previously established. Additional review may be requested by the applicant or required by the Director to determine whether conditions on site have changed resulting in the previously established buffer no longer being applicable.

**Commented [GL66]:** This has come up in cases where a separate tract (and hence, a new property line) is not created for the CA/buffer. Technically a building could be built up to the buffer.

The building setback distance is intended to provide adequate room for construction, maintenance, use and access without infringing upon the critical area or buffer, where no separate tract is created.

**Commented [LBG67]:** Or 5'?

**Commented [GL68]:** This is from Skagit County: <http://www.codepublishing.com/WA/SkagitCounty/#!/SkagitCounty14/SkagitCounty1424.html#14.24.230>.

Also incorporate this into the FWHCA section.

- I. **Isolated buffers.** Where a portion of a required buffer is effectively isolated from the remainder of the buffer or its associated wetland by existing development such as a road, building, paving, etc., in such a way that it cannot perform the usual functions of a buffer, it will not be identified as a buffer.

#### 19.70.260 Wetlands - Critical areas report additional requirements

- A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to, a wetland, a wetland critical area report will be required. In addition to the general critical area report requirements of AMC 19.70.125, critical area reports for wetlands must meet the requirements of this section.
- B. **Preparation by a Qualified Professional.** Critical area reports for wetlands must be prepared and signed by a qualified professional who is a Professional Wetland Scientist with experience preparing wetland delineation, impact assessments, and mitigation plans.
- C. **Third Party Review Required.** Critical areas studies and reports on wetland areas shall be subject to third party review consistent with AMC 19.70.125, and in any of the additional following circumstances:
  - 1. Compensatory mitigation is required for impacts to Category I, II, or III wetlands and or buffers; or
  - 2. Compensatory mitigation is required for impacts to Category IV wetlands.
- D. **Minimum Report Contents for Wetlands.** The written critical area report(s) and accompanying plan sheet(s) shall contain the following information, at a minimum:
  - 1. The minimum report contents required per AMC 19.70.125;
  - 2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, site photos, etc.;
  - 3. A description of the methodologies used to conduct the wetland delineations, ratings, or impact analyses including references;
  - 4. **Site Plans.** 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) depicting delineated and surveyed wetland(s) and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to wetlands and/or buffers (include square footage estimates); and
    - b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas.

**Commented [GL69]:** Most of these requirements are straight from the [Wetlands Guidance for CAO updates](#) provided by DOE.

**Commented [GL70]:** Do all projects require a survey?

5. For each wetland identified on site and off site within 300 feet of the project site provide: the wetland rating, including a description of and score for each function, per wetland ratings (AMC 19.70.210) required buffers (AMC 19.70.250); hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site;
  6. A discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project;
  7. A description of the proposed actions, including an estimation of acreages of impacts to wetlands and buffers based on the field delineation and survey and an analysis of site development alternatives, including a no-development alternative;
  8. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development;
  9. A description of reasonable efforts made to apply mitigation sequencing pursuant to AMC 19.70.130 to avoid, minimize, and mitigate impacts to critical areas and 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;
  10. A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions; and
  11. An evaluation of the functions of the wetland and adjacent buffer. Include reference for the method used and data sheets.
- E. **Additional Information.** When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:
1. Where impacts are proposed, mitigation plans consistent with the requirements of AMC 19.70.135 and the wetland mitigation performance standards and requirements of AMC 19.70.270;
  2. A request for consultation with the Washington State Department of Fish and Wildlife (DFW), Washington State Department of Ecology (Ecology), local Native American Indian tribes, and/or other appropriate agency;

3. Copies of the joint aquatic resource permit application (JARPA) and related approvals, such as a hydraulic project approval (HPA) from the DFW, when applicable to the project; and
4. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

#### 19.70.270 Wetlands – Compensatory mitigation performance standards and requirements.

##### A. Requirements for Compensatory Mitigation.

1. Compensatory mitigation for alterations to wetlands may 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, March 2006, or as revised).
2. Mitigation ratios shall be consistent with subsection H of this section.
3. Mitigation requirements may also be determined using the credit/debit tool described in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Operational Draft” (Ecology Publication No. 10-06-011, February 2011, or as revised) consistent with subsection H of this section.

##### B. Compensating for Lost or Impacted Functions. Compensatory mitigation must address the functions and values affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions and values. The goal for the compensatory mitigation must be to provide similar wetland functions and values as those lost, except when either:

1. The lost wetland provides minimal functions and values, and the proposed compensatory mitigation action(s) will provide equal or greater functions and values or will provide functions and values shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or
2. Out-of-kind replacement of wetland type or functions and values will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.

##### C. Preference of Mitigation Actions. Methods to achieve compensation for wetland functions and values must be approached in the following order of preference:

1. **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. Restoration of wetlands includes re-establishment and rehabilitation.
2. **Creation.** Creation (establishment) of wetlands on disturbed upland sites, such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to the wetland community that is anticipated in the design.

**Commented [GL71]:** Most of these requirements are straight from the Wetlands Guidance for CAO updates provided by DOE.

**Commented [LBG72]:** <https://fortress.wa.gov/ecy/publications/summarypages/0606011b.html>

**Commented [GL73]:** Most of these requirements are straight from the Wetlands Guidance for CAO updates provided by DOE.

**Commented [LBG74]:** If we don't want to describe each of these terms here, their definitions in Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans, could be referenced instead.

3. **Enhancement.** Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions and values lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

4. **Preservation.** Preservation of high-quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high-quality, at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

- a. Proposed wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA-listed species;
- b. There is no net loss of habitat functions within the watershed or basin;
- c. Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost;
- d. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low-functioning system (Category III or IV wetland); and
- e. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

D. **Type and Location of Compensatory Mitigation.** Unless it is demonstrated that a higher level of ecological functioning would result from an alternative approach, compensatory mitigation for ecological functions must be either in kind and on site, or in kind and within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions must be conducted within the same sub-drainage basin and on the site of the alteration, except when the following apply:

1. 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:
  - a. Anticipated replacement ratios for wetland mitigation;
  - b. Buffer conditions and proposed widths;
  - c. Available water to maintain anticipated hydrogeomorphic classes of wetlands when restored; and

**Commented [LBG75]:** Preservation is sometimes perceived as trading one wetland for another one that is already protected, resulting in a net loss of wetland area. The reality is that some wetland types are not adequately protected under existing laws and can benefit from being placed in public ownership or protected by a conservation easement. (DOE/WDFW)

**Commented [GL76]:** Most of these requirements are straight from the [Wetlands Guidance for CAQ updates](#) provided by DOE.

**Commented [LBG77]:** Historically, mitigation activities were required to be performed on-site because it was believed that the closer the mitigation was to the impact site, the better chance it would have of replacing the functions that were lost. However, more recent studies have concluded that this requirement too often has forced applicants to try to fit a mitigation project onto an area that makes little ecological sense and is not sustainable.

- d. Proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);
  2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland;
  3. Off-site locations shall be in the same sub-drainage basin, unless watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; and
  4. Off-site locations shall be in the same sub-drainage basin, unless watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; and
  5. 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. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing, seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.
- E. **Wetland mitigation Banks.** Credits from a wetland mitigation bank certified under [WAC 173-700](#) may be used to compensate for impacts located within the service area specified in the mitigation bank instrument, if:
1. The proposal would provide appropriate compensation for the proposed impacts; and
  2. The impact site is located in the service area of the bank.
  3. The proposed use of credits is consistent with the terms and conditions of the certified mitigation bank instrument.
  4. Replacement ratios using bank credits is consistent with replacement ratios specified in the certified mitigation bank instrument.
- F. **In-Lieu Fee Mitigation.** Credits from an approved in-lieu fee (ILF) program may be used when all of the following apply:
1. The Director determines that it would provide environmentally appropriate compensation for the proposed impacts.

**Commented [GL78]:** From Ecology wetland guidance.

A mitigation bank is a site where wetlands, streams, and/or other aquatic resource areas have been restored, established, enhanced, or (in certain circumstances) preserved for the purpose of providing compensation for unavoidable impacts to aquatic resources.

Ecology adopted the final Wetland Mitigation Banks Rule (WAC 173-700) in 2009.

<http://www.ecy.wa.gov/programs/sea/wetlands/mitigation/banking/index.html>.

**Commented [GL79]:** From ecology wetland guidance.

In this approach to mitigation, a permittee pays a fee to a third party in lieu of conducting project-specific mitigation or buying credits from a mitigation bank. ILF mitigation is used mainly to compensate for impacts to wetlands when better approaches to compensation are not available or practicable, or when the use of an ILF is in the best interest of the environment.

An ILF represents the expected costs to a third party of replacing the wetland functions lost or degraded as a result of the permittee's project. Fees are typically held in trust until sufficient funds have been collected to finance a mitigation project. Only a nonprofit organization such as a local land trust, private conservation group, or government agency with demonstrated competence in natural resource management may operate an ILF program.

2. The proposed use of credits is consistent with the terms and conditions of the approved ILF program instrument.
  3. Projects using ILF credits shall have debits associated with the proposed impacts calculated by the applicant's qualified wetland professional using the credit assessment method specified in the approved instrument for the ILF program.
  4. The impacts are located within the service area specified in the approved ILF instrument.
- G. **Alternative Mitigation Plans.** The Director may approve alternative wetland mitigation plans that are based on best available science. 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.

**Commented [GL80]:** Most of these requirements are straight from the [Wetlands Guidance for CAO updates](#) provided by DOE.

1. The following will be considered in the approval of an alternative mitigation proposal:
  - a. The proposal uses a watershed approach consistent with [Selecting Wetland Mitigation Sites Using a Watershed Approach \(Western Washington\)](#) (Ecology Publication #09-06-032, Olympia, WA, December 2009).
  - b. Creation or enhancement of a larger system of natural areas and open space is preferable to the preservation of many individual small habitat areas.
  - c. Mitigation according to Section D is not feasible due to site constraints such as parcel size, stream type, wetland category, or geologically hazardous areas.
  - d. There is a clear potential for success of the proposed compensation at the identified site.
  - e. The Plan must contain clear and measurable standard for achieving compliance with the specific provisions of the plan, consistent with 19.70.135.
  - f. The plan must be reviewed and approved as part of the 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 must meet the minimum requirements as outlined in \_\_\_\_\_.
  - i. Qualified professionals in each of the critical areas addressed must prepare the plan.
  - j. The City 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.

H. **Wetland Mitigation Ratios:** \_\_\_\_\_

**Commented [GL81]:** This chart is from the 2010 SMP, which was updated as part of the SMP update process.

| Category and Type of Wetland              | Creation or Reestablishment | Rehabilitation Only                           | Re-Est or Creation (R/C) and Re-Hab (RH) | Re-Est or Creation (R/C) and Enhancement (E) | Enhancement Only |
|-------------------------------------------|-----------------------------|-----------------------------------------------|------------------------------------------|----------------------------------------------|------------------|
| Category I Forested                       | 6:1                         | 12:1                                          | 1:1 R/C & 10:1 RH                        | 1:1 R/C & 20:1 E                             | 24:1             |
| Category I – based on score for functions | 4:1                         | 8:1                                           | 1:1 R/C & 6:1 RH                         | 1:1 R/C & 12:1 E                             | 16:1             |
| Category I – Natural Heritage Site        | Not allowed                 | 6:1 Rehabilitation of a Natural Heritage Site | Not allowed                              | Not allowed                                  | Case-by-case     |
| Category I Bog                            | Not allowed                 | 6:1 Rehabilitation of a bog                   | Not allowed                              | Not allowed                                  | Case-by-case     |
| Category II                               | 3:1                         | 6:1                                           | 1:1 R/C & 4:1 RH                         | 1:1 R/C & 8:1 E                              | 12:1             |
| Category III                              | 2:1                         | 4:1                                           | 1:1 R/C & 2:1 RH                         | 1:1 R/C & 4:1 E                              | 8:1              |
| Category IV                               | 1.5:1                       | 3:1                                           | 1:1 R/C & 1:1 RH                         | 1:1 R/C & 2:1 E                              | 6:1              |

- I. **The ratios above are based** on the assumption that the rehabilitation or enhancement actions implemented represent the average degree of improvement possible for the site. Proposals to implement more effective rehabilitation or enhancement actions may result in a lower ratio, while less effective actions may result in a higher ratio. The distinction between rehabilitation and enhancement is not clear-cut. Instead, rehabilitation and enhancement actions span a continuum. Proposals that fall within the gray area between rehabilitation and enhancement will result in a ratio that lies between the ratios for rehabilitation and the ratios for enhancement.
- J. **Buffer Mitigation Ratios.** Impacts to buffers must be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.
- K. **Mitigation Performance Standards.** Wetland mitigation plans must be consistent with AMC 19.70.130 Mitigation requirements and 19.70.135 Mitigation plan requirements and Wetland

**Commented [GL82]:** From the 2010 SMP.

**Commented [LBG83]:** DOE/WDFW – recommend that impacts to buffers be handled similarly as impacts to wetlands. Applicant should be required to use all available means of modifying their development proposal, as well as using existing provisions for buffer averaging, before they are allowed to build in buffers. Where buffer impacts are unavoidable, compensation should be required in the form of wetland and/or upland restoration or enhancement.

Mitigation in Washington State, Part 1: Agency Policies and Guidance (Version 1, Ecology Publication #06-06-011a), or as amended, and best available science.

- L. The performance standards in this section must be incorporated into mitigation plans submitted to the City for impacts to wetlands. The following performance standards apply to any mitigations proposed within Category I, II, III and IV wetlands and their buffers. Modifications to these performance standards consistent with the guidance in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, March 2006, or as revised) may be considered for approval by the Director as alternatives to the following standards:
1. Plants indigenous to the region (not introduced or foreign species) must be used.
  2. Plant selection must be consistent with the existing or projected hydrologic regime, including base water levels and stormwater event fluctuations.
  3. Plants should be commercially available or available from local sources.
  4. Plant species high in food and cover value for fish and wildlife must be used.
  5. Mostly perennial species should be planted.
  6. Committing significant areas of the site to species that have questionable potential for successful establishment must be avoided.
  7. Plant selection must be approved by a qualified professional.
  8. The following standards apply to wetland design and construction:
    - a. Water depth must not exceed six and one-half feet (two meters).
    - b. The grade or slope that water flows through the wetland must not exceed 6 percent.
    - c. Slopes within the wetland basin and the buffer zone must not be steeper than 3:1 (horizontal to vertical).
    - d. The wetland (excluding the buffer area) should not contain more than 60 percent open water as measured at the seasonal high water mark.
  9. Substrate should consist of a minimum of one foot, in depth, of clean (uncontaminated with chemicals or solid/hazardous wastes) inorganic/organic materials.
  10. Planting densities and placement of plants should be determined by a qualified professional and shown on the design plans.
  11. The planting plan must be approved by the City.
  12. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City.

13. Planting instructions must be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock.
14. Controlled release fertilizer must be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process.
15. An irrigation system must be installed, if necessary, for the initial establishment period.
16. All construction specifications and methods shall be approved by a qualified professional and the City.
17. Construction management provided must be provided by a qualified professional. Ongoing work on site must be inspected by the City.

**M. Compensatory Mitigation Plan.** When a project involves wetland and/or buffer impacts, a compensatory mitigation plan must be included as part of the required critical area report. Compensatory wetland mitigation plans must meet the minimum requirements AMC 19.70.082 and demonstrate compliance with ACM 19.70.080. Full guidance can be found in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, March 2006, or as revised). The mitigation plan must meet the following additional standards:

1. Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding land uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on wetland ratings (AMC 19.70.210(B));
2. 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);
3. 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;
4. A description of the proposed mitigation construction activities, construction/installation notes, and timing of activities;
5. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands);

6. Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas; and
7. The scaled plan sheets for the compensatory mitigation must contain, at a minimum
  - a. Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions;
  - b. Existing topography, ground-proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be impacted and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation;
  - c. Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions;
  - d. 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;
  - e. 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;
  - f. A plant schedule 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, typical plant installation details and notes, total number of each species by community type, timing of installation; and
  - g. Performance standards (measurable standards reflective of years post-installation) for upland and wetland communities, monitoring plan, contingency plan, and maintenance schedule, and actions. Standards for success shall be established based on the performance standards identified and the functions and values being mitigated based on the guidance in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, March 2006, or as revised).

## **FISH AND WILDLIFE HABITAT CONSERVATION AREAS**

### **19.70.300. Fish and wildlife habitat – Description and Purpose**

- A. Fish and wildlife habitat conservation areas are lands managed for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat

available is sufficient to support viable populations over the long term and isolated subpopulations are not created. In addition to their intrinsic value, certain species of fish and wildlife represent important historic, cultural, recreational and economic resources.

- B. It is the purpose of this Chapter to protect fish and wildlife populations and their associated habitats and provide special consideration to conservation or protection measures necessary to preserve or enhance anadromous species.

#### 19.70.310 Fish and wildlife habitat – Designation.

- A. Fish and Wildlife Habitat Conservation Areas (FWHCAs) are designated as follows:
1. Areas with which endangered, threatened, and sensitive species listed by the federal government or the State of Washington have a primary association;
  2. Commercial and recreational shellfish areas, including public and private tidelands suitable for shellfish harvest and shellfish protection districts established pursuant to [RCW 90.72](#);
  3. Kelp and eelgrass beds and herring and smelt spawning areas;
  4. Naturally occurring ponds under 20 acres with submerged aquatic beds that provide fish or wildlife habitat as further defined in [WAC 365-190-130\(4\)\(e\)](#);
  5. Waters of the State, including streams as classified in [WAC 222-16-030](#);
  6. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;
  7. Areas with which anadromous fish species have a primary association;
  8. State natural area preserves, natural resource conservation areas, and state wildlife areas as established by WA DNR;
  9. Areas of rare plant species and high quality ecosystems as identified by the Washington State Department of Natural Resources through the Natural Heritage Program in Chapter [79.70 RCW](#).
  10. State priority habitats and areas associated with State priority species identified by the State Department of Fish and Wildlife in the Priority Habitats and Species List. Priority habitats and species known to be identified and mapped by WDFW in Anacortes include, but may not be limited to, the following:
    - a. Biodiversity areas near
    - b. Bald eagle habitat protected pursuant to the Federal Bald and Golden Eagle Protection Act;
    - c. Chinook/fall chinook salmon;
    - d. Coho salmon;
    - e. Great blue heron nest sites and breeding areas;

**Commented [LBG84]:** In Anacortes, this would include:  
Federal: Chinook, Southern resident orca or killer whales, Marbled Murrelet.  
State: Purple Martin, Peregrine falcon, Bald eagle

**Commented [LBG85]:** Existing CAO does not designate "waters of the state" as FWHCA. Instead, 17.70.540(7)(a) specifically designates 15 streams (for those stretches that are not in culverts or artificially created ditches as of December 31, 2003). "Artificially created ditch" is not defined in existing CAO. See additional comments on this topic below. Also, see proposed "ditch" definition.

Designating waters of the state would provide protection for streams that are annexed into City limits in the future, and unnamed streams that may currently exist in city limits but have not been identified to date.

**Commented [LBG86]:** Listing specific species as proposed below is intended to help create more awareness (staff and public, property owners).

There are additional PHS mapped in the Anacortes that would only occur within the marine shoreline environment, which would be covered under the SMP specific critical reas regs:  
Smelt, Pacific sand lance, and herring spawning areas  
Dungeness crab  
Estuarine intertidal aquatic habitat

**Commented [GL87]:** See <http://apps.wdfw.wa.gov/phsonthefweb/>  
Washington Park (used by eagles when foraging), Cap Sante (Bald Eagle winter concentrations, hunting) are listed as Biodiversity Areas.

- f. Osprey nest sites;
- g. Peregrine falcon nest sites and breeding areas;
- h. Purple martin breeding areas;
- i. Resident coastal cutthroat trout;
- j. Winter steelhead trout;
- k. ||

11. The following Habitats and Species of Local Importance have been designated by the City:

- a. The Anacortes Community Forestlands.
- b. The March Point Heronry.
- c. The one and one-half acre "Park Reserve" at Cap Sante bounded by 3<sup>rd</sup> Street, East Park Drive, and Curtis Drive.

B. In addition to the FWHCAs identified in Subsection (A)(11) of this section, additional habitats and species of local importance may be designated by the City using the following process:

1. Designation process. The city may consider nominations for habitat areas and species to be designated as locally important on an annual basis as part of the annual comprehensive plan and development regulation update process, based on the following criteria:
  - a. Local populations of native species that are in danger of extirpation based on existing trends, likely to become endangered, or are vulnerable or declining;
  - b. The habitat represents either a high quality native habitat, or the habitat has a high potential to recover to a suitable condition and which is of limited availability, is highly vulnerable to alteration, or provides landscape connectivity which contributes to the integrity of the surrounding landscape;
  - c. The species or habitat has recreation, commercial, game, tribal, or other special value;
  - d. Long-term persistence of a species is dependent on protection, maintenance, and/or restoration of the nominated habitat;
  - e. Protection by other county, state, or federal policies, laws, regulations, or non-regulatory tools is not adequate to prevent degradation of the species or habitat; and
  - f. Without protection, there is a likelihood that the species or habitat will be diminished over the long-term.
2. The nomination must indicate whether specific habitat features are to be protected (for example, nest sites, breeding areas, and nurseries) or whether the habitat or ecosystem is being nominated in its entirety.

**Commented [LBG88]:** Skagit County lists (SCC 14.24.500(4):  
 Great blue heron nest sites;  
 Vaux's swifts communal roosts;  
 Pileated woodpecker nest sites;  
 Osprey nest sites;  
 Townsend big-eared bat communal roosts;  
 Cavity nesting duck breeding areas;  
 Trumpeter swan concentrations;  
 Harlequin duck breeding areas;  
 Waterfowl concentrations.

3. The nomination may include management strategies for the species or habitats, which must be supported by best available science. Where restoration of habitat is proposed, a specific plan for restoration must be provided.
- C. All areas within the city meeting one or more of these criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.

#### 19.70.320 Fish and wildlife habitat – Mapping.

- A. **Mapping.** The approximate location and extent of some fish and wildlife habitat areas are shown in the data layers maintained in the City of Anacortes geographic information system (GIS). In addition, the following maps and inventories are hereby adopted by reference, as amended:
  1. [Washington Department of Fish and Wildlife Priority Habitat and Species maps](#);
  2. Washington Department of Natural Resources, [Official Water Type Reference maps](#);
  3. Washington Department of Natural Resources [Puget Sound Intertidal Habitat Inventory maps](#);
  4. Washington Department of Natural Resources [Shore Zone inventory](#);
  5. Washington Department of Natural Resources [Natural Heritage Program mapping data](#);
  6. Washington Department of Health Annual [Inventory of Shellfish Harvest Areas](#);
  7. Anadromous and resident fish distribution maps contained in the habitat limiting factors reports published by the Washington Conservation Commission and others;
  8. Washington Department of Natural Resources State Natural Area Preserves and Natural Resource Conservation Area maps; and
  9. NOAA Northwest Region Critical Habitat Mapper or equivalent source:  
<http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm>
- B. **Reference Only.** The maps and resources cited above are to be used as a guide for the City of Anacortes Planning, Community & Economic Development Department, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

#### 19.70.330 Fish and wildlife habitat – General Development Standards for all FWHCAs.

- A. Fish and wildlife habitat conservation areas or their buffers may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the functions and values of the habitat. All new structures and land alterations are prohibited from habitat conservation areas and their buffers except in accordance with this Chapter.

**Commented [LBG89]:** Either spell out or abbreviate every time, for consistency

**B. Exemptions and Activities Allowed without Critical Areas Review.** The following activities are allowed in or adjacent to fish and wildlife habitat conservation areas without submission of a critical area report, and are exempt from monitoring and financial guarantee requirements, except where such activities result in a loss of the functions and values of a fish and wildlife habitat conservation area.

1. Exemptions that are listed in (AMC 19.70.020 Exemptions) and additional activities allowed without critical areas review listed in AMC 19.70.035(C).
2. Clearing, grading, and the construction of fences and arbors are allowed within the required 10-foot stream buffers for a piped stream segment if no other critical area or buffer is present.
3. Regular maintenance of stormwater facilities that are within a segment of a regulated stream, such as conveyance ditches/swales within the right of way or within public drainage easements.

**C. Approvals and the Best Available Science.** Any approval of alterations or impacts to a fish and wildlife habitat conservation area must be supported by the best available science.

**D. Approvals of Activities may be conditioned.** The Director may condition approvals of activities allowed within or adjacent to a fish and wildlife habitat conservation area as necessary to minimize or mitigate any potential adverse impacts. Conditions will be based on the best available science and may include, but are not limited to, the following:

1. Establishment of buffers;
2. Preservation of important vegetation and/or habitat features such as snags and downed wood specific to the priority wildlife species in the fish and wildlife habitat conservation area;
3. Limitation of access to the habitat area, including fencing to deter unauthorized access;
4. Seasonal restriction of construction activities;
5. Establishment of a duration and timetable for periodic review of mitigation activities; and
6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

**E. Buffers.**

1. **Establishment of Buffers.** Buffers from fish and wildlife habitat conservation areas must be established to protect the functions and values of the critical area from the impacts of proposed adjacent activities. Buffers must:
  - a. Consist of an undisturbed area of native vegetation, or areas identified for restoration, sufficient to protect the integrity, functions, and values of the affected habitat;

**Commented [GL90]:** The referenced section applies to all critical area types and lists things like emergencies, hazard tree removal, some utility projects, etc. that are applicable to all critical areas.

**Commented [LBG91]:** Should this be a specific type of fence?

**Commented [LBG92]:** See definition.

- b. Reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby;
  - c. Be consistent with the applicable species-specific management recommendations issued by the Washington Department of Fish and Wildlife.
- 2. **Seasonal Restrictions.** When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.
- 3. **Habitat Buffer Averaging.** The Director may allow the recommended fish and wildlife habitat area buffer width to be reduced in accordance with a critical area report, the best available science, and the applicable management recommendations issued by the Washington Department of Fish and Wildlife, only if:
  - a. It will not reduce stream or habitat functions;
  - b. It will not adversely affect fish and wildlife habitat;
  - c. It will provide additional natural resource protection, such as buffer enhancement;
  - d. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
  - e. The buffer width is not reduced by more than 25 percent in any location.
- F. **Subdivisions.** The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:
  - 1. Land that is located wholly within a FWHCA or its buffer may not be subdivided;
  - 2. Land that is located partially within a FWHCA may be subdivided only if an accessible and contiguous portion of each new lot that meets the minimum lot size requirements for the zone is located outside of the FWHCA and its buffer.
  - 3. Access roads and utilities serving a proposed subdivision may be permitted within the FWHCA and associated buffers only if the applicant's qualified professional(s) demonstrate, and the Director determines, that no other feasible alternative exists, all unavoidable impacts are fully mitigated, and the use is consistent with this chapter.
- G. **Non-indigenous species.** No plant, wildlife, or fish species not indigenous to Fidalgo Island may be introduced to a FWHCA unless authorized by a state or federal permit approval.

#### 19.70.340 Fish and wildlife habitat – Specific Standards for Streams

- A. **Typing.** Streams must be classified according to WAC 222-16-030.
- B. **Buffers**
  - 1. **Standard Stream Buffer Widths.** Buffer widths must reflect the sensitivity of the stream type, the risks associated with development and, in those circumstances permitted by these

**Commented [LBG93]:** WDFW recommends not allowing habitat buffers to be reduced by more than 25%.

**Commented [LBG94]:** Existing CAO allows for reduction in lot size through a subdivision or BIA process to transfer the density onto the non-critical portion of the site. Staff recommends considering similar provisions either within the CAO or the subdivision standards and other development regulations that are currently being updated.

**Commented [LBG95]:** This is consistent with how the majority of other jurisdictions type streams (based on presence of fish habitat, perennial or seasonal flow) to determine buffer widths. Staff is currently reviewing the potential impacts of this proposal, including identification of streams that might contain fish habitat.

regulations, the type and intensity of human activity and site design proposed to be conducted on or near the stream area. The following standard buffers are established for streams:

Table 19.70.xxx-1

| DNR Water Type<br>(WAC 222-16-030)                                                                                                                                                                                                               | Standard Buffer Width        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| <b>Type S</b><br>Shorelines of the State                                                                                                                                                                                                         | See Shoreline Master Program |
| <b>Type F</b><br>Streams that are known to be used by fish, or meet the physical criteria to be potentially used by fish.                                                                                                                        | 100 feet                     |
| <b>Type Np</b><br>Streams that have year round flow and do not meet the physical criteria of a Type F. This also includes streams that have been proven not to contain fish using methods described in Forest Practices Board Manual Section 13. | 50 feet                      |
| <b>Type Ns</b><br>Streams that do not have surface flow during at least some portion of the year, and do not meet the physical criteria of a Type F stream.                                                                                      | 50 feet                      |
| <b>Piped Stream Segments</b><br>Those segments of streams, regardless of their type, that are fully enclosed in an underground pipe or culvert.                                                                                                  | 10 feet                      |

**Commented [LBG96]:** Proposed buffers listed below are generally consistent with other urban areas in the region.

**Commented [LBG97]:** It is possible some Anacortes streams may be a Type F under the DNR typing system. Various guidance says that Type F streams should typically have a larger buffer than non-fish streams.

Staff is currently reviewing the potential impacts of this proposal, including identification of streams that might contain fish habitat, what the impacts of a larger buffer might be on existing development, and how to deal with nonconformities, etc. Additional information will be provided at a later date.

**Commented [LBG98]:** Do roadside ditches that are part of a regulated water of the state, but that need regular maintenance, need to be specified here?

2. **Stream Buffer Measurement.** Stream buffers are measured from the ordinary high water mark (OHWM), or the top of the bank if the OHWM cannot be determined. Buffers must be measured with rounded ends where streams enter or exit piped segments.
3. **Increased Stream Buffer Widths.** The stream buffer widths may be increased by the Director as follows:
  - a. When the qualified professional determines that the minimum width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area as a result of a habitat assessment required pursuant to AMC 19.70.360;
  - b. When the frequently flooded area exceeds the minimum stream buffer width, the stream buffer must extend to the outer edge of the frequently flooded area;

- c. When a channel migration zone is present, the stream buffer must extend to the outer edge of the channel migration zone;
- d. When the habitat area is in an area of high blowdown potential, the stream buffer width must be expanded an additional 50 feet on the windward side;
- e. When the habitat area is within an erosion or landslide hazard area, or buffer, the stream buffer width shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.

4. **Stream Buffer Width Averaging and Enhancement.**

- a. **Approval Criteria.** The Director may allow the averaging of stream buffer widths when the critical areas report demonstrates the following:
  - i. Buffer enhancement will be provided consistent with AMC 19.70.350(D)(2) below.
  - ii. The stream or habitat functions, including those of non-fish habitat and riparian wildlife, will be increased or maintained where buffer vegetation is generally intact native vegetation, or increased where the existing buffer vegetation is inadequate to protect functions and values of the stream;
  - iii. The total area contained in the buffer on the development proposal site is not decreased after averaging;
  - iv. The buffer width is not reduced by more than 25% in any one location;
  - v. The buffer width reduction will not be located within another critical area or associated buffer;
  - vi. Only those portions of the stream buffer within the project area or subject parcel may be considered in the total buffer area for buffer averaging.
- b. **Stream Buffer Enhancement Measures.** The measures deemed most applicable and/or appropriate will be considered in buffer averaging requirements. These include, but are not limited to:

**Commented [LBG99]:** Needs wordsmithing, see GMA CAO sample code provisions

**Commented [GL100]:** There is currently no minimum in code. Also, the averaging section is titled habitat area width averaging, but includes the common criteria for reduction.

- i. Removal of fish barriers to restore accessibility to fish.
    - ii. Enhancement of fish habitat using log structures incorporated as part of a fish habitat enhancement plan.
    - iii. Enhancement of fish and wildlife habitat structures that are likely to be used by wildlife, including wood duck houses, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.
  - c. Additional enhancement measures may include:
    - i. Planting native vegetation within the buffer area, especially vegetation that would increase value for fish and wildlife, increase stream bank or slope stability, improve water quality, or provide aesthetic/recreational value; or
    - ii. Creation of a surface channel where a stream was previously underground, in a culvert or pipe. Surface channels which area “daylighted” must be located within a buffer area and shall be designed with energy dissipating functions or channel roughness features such as meanders and rootwads to reduce future bank failures or nearby flooding;
    - iii. Removal or modification of existing stream culverts (such as road crossings) to improve fish passage, stream habitat, and flow capacities; or
    - iv. Upgrading of retention/detention facilities or other drainage facilities beyond required levels.
5. **Stream Buffer Allowed Uses and Alteration.** Activities and uses are prohibited in stream buffers, except as provided in this chapter. Stream buffers must be maintained as undisturbed or restored natural vegetation. No clearing or grading activities are allowed except within the provisions of this subchapter. No structures or improvements are permitted within the stream buffer area, including buildings, decks, or docks, except as otherwise permitted under one of the following circumstances:
- a. **Approved mitigation.** When the improvements are part of an approved rehabilitation/restoration or mitigation plan;
  - b. **No feasible alternative.** Construction of new roads, utilities, and accessory structures, when no feasible alternative location exists;
  - c. **Trails.** Construction of trails over and in the buffer of piped stream segments, and the construction of trails near other open stream segments, consistent with the following criteria:

- i. Trails should be constructed of pervious surface, with preference for natural materials. Raised boardwalks utilizing non-treated pilings may be acceptable;
- ii. Trails must be designed in a manner that minimizes impact on the stream system;
- iii. Trails must have a maximum trail corridor width of five feet; and
- iv. Trails should be located within the outer 25% of the buffer, i.e. that portion of the buffer that is farther away from the stream and located to avoid removal of significant trees; or \_\_\_\_\_

**Commented [LBG101]:** Gravel is not considered a pervious surface according to stormwater regs..

- d. **Footbridges.** Construction of footbridges that minimize impacts to the stream system;
- e. **Informational signs.** Construction and placement of informational signs or educational demonstration facilities no more than 9 square feet surface area and 4 feet high, as long as there is no permanent infringement on stream flow;
- f. **Stormwater Management Facilities.** Establishment of low-impact stormwater management facilities, such as stormwater dispersion outfalls and bioswales, may be allowed within stream buffers consistent with the adopted stormwater manual; provided, that:
  - i. No other location is feasible;
  - ii. Pipes and conveyance facilities are only allowed in the outer 25% of the standard buffer area as set forth in Table \_\_\_\_\_;
  - iii. Stormwater dispersion outfalls, bioswales, bioretention facilities, and other low-impact facilities consistent with the adopted stormwater manual may be allowed anywhere within stream buffers when determined by a qualified professional that the location of the facilities will enhance the buffer area and protect the stream; and
  - iv. Such facilities are designed consistent with the requirements of AMC 19.76.

- 6. **Development Proposals within Physically Separated and Functionally Isolated Stream Buffers.** Consistent with the definition of "buffers" (AMC \_\_\_\_\_), areas that are functionally isolated and physically separated from a stream due to existing, legally established roadways, railroads or other legally established structures or paved areas eight feet or more in width that occur between the area in question and the stream shall be considered physically isolated and functionally separated stream buffers. Once determined by the Director, based on a submitted critical area report, to be a physically separated and functionally isolated stream buffer, development proposals are allowed in these areas.

**Commented [GL102]:** Buffer = "A designated area contiguous to and for the protection of a critical area, which is required for the continued maintenance, functioning, and/or structural stability of a critical area".

7. **Building setbacks from stream buffers.** Buildings, structures, paving, and other hard surfacing shall be setback a minimum distance of 10 feet from the edge of the stream buffer unless determined by the Director that a smaller distance would meet the intent of this subsection. This setback is to avoid conflicts with tree branches and/or critical root zones of trees that are in the buffer or will be planted in the buffer. The following may be allowed in the building setback from the buffer if they do not cause damage to the critical root zone of trees in the buffer:

- a. Landscaping;
- b. Uncovered decks, roof eaves and overhangs, unroofed stairways and steps;
- c. Pervious ground surfaces, such as driveways, patios, and parking may be allowed; provided that they are engineered as a pervious system as defined in AMC \_\_\_\_\_. Such improvements may be subject to the requirements in AMC \_\_\_\_\_, Stormwater Management.

- C. **Allowed Activities in streams.** Activities, uses and alterations of streams are prohibited, subject to the reasonable use exception provisions (AMC 19.70.xxx), critical areas variance (AMC 19.70.xxx) or public agency exception provisions (AMC 19.70.xxx), unless otherwise exempt or allowed according to the provisions of this subsection. No alteration to a stream buffer may be permitted unless consistent with the provisions of this section and the specific standards for development outlined below.

1. **Type S, Type F and Type Np Streams.** Activities and uses that result in alteration of Type S, Type F or Type Np streams and their associated buffers are prohibited subject to the reasonable use exception provisions (AMC 19.70.55) or public agency exception provisions (AMC 19.70.050) of this Chapter.
  - a. Relocation of Type S, F or Np streams may be permitted only when the proposed relocation is **part of an approved mitigation or rehabilitation/restoration plan**, and will result in equal or better habitat and water quality, and will not diminish the flow capacity of the stream.
2. **Type Ns Streams.** Development activities and uses that result in unavoidable impacts may be permitted in Type Ns streams and associated buffers in accordance with an approved critical area(s) report and compensatory mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the loss of acreage and functions of streams and buffers must be provided in compliance with the mitigation performance standards and requirements of these regulations.
  - a. **Relocation of Type Np streams may be permitted only when the proposed relocation will result in equal or better habitat and water quality, and will not diminish the flow capacity of the stream.**

**Commented [GL103]:** This would be a change from the current code. No specific building setback from a critical area buffer is currently required (unless the buffer is also the property line, like in the case of a NGPE tract). So technically a building could be built up to the buffer.

The building setback distance is intended to provide adequate room for construction, maintenance, use and access without infringing upon the critical area or buffer.

**Commented [LBG104]:** Need to reconcile this with allowed uses in buffers, above.

3. **Stream Crossing.** Crossing of streams may be permitted, subject to the limitations in subsections (D)(1) and (2) of this section and consistent with the following:

- a. **Bridges.** Bridges must be used to cross Type S and Type F-anadromous streams. Culverted crossings and other obstructive means of crossing Type S and Type F-anadromous streams shall be prohibited; and
- b. **Culverts.** Culverts are allowed for crossing of Type F-nonanadromous, Np, and Ns streams when fish passage will not be impaired and when the following design criteria and conditions are met:
  - i. Oversized culverts, that allow for fish passage and floodplain or wetland connectivity, will be installed;
  - ii. Culverts for Type F streams must be designed for fish passage that will allow natural stream functions and processes to occur (i.e., sediment, wood, and debris transport) where appropriate;
  - iii. Gravel substrate will be placed in the bottom of the culvert to a minimum depth of one foot for Type F streams;
  - iv. A maintenance covenant shall be recorded on title with Skagit County that requires the property owner to, at all times, keep any culvert free of debris and sediment to allow free passage of water and, if applicable, fish; and
  - v. The City may require that a culvert be removed from a stream as a condition of approval, unless it is demonstrated conclusively that the culvert is not detrimental to fish habitat or water quality, or removal would be detrimental to fish or wildlife habitat or water quality.

D. **Restoring Piped Watercourses.** The voluntary opening and restoration or rehabilitation of previously channelized, culverted, or piped streams may be approved by the Director, when the following is demonstrated within a critical areas report:

- a. The restoration will result in a net gain in FWHCA functions, including an improvement in water quality and ecological functioning;
- b. Opened channels must be designed to support fish and wildlife habitat and uninhibited fish access, unless demonstrated to be infeasible;
- c. A protective buffer will be provided from the top of bank which includes habitat improvements and measures to prevent erosion, landslide and water quality impacts;
- d. The proposal will not significantly increase the threat of erosion, flooding, slope stability or other hazards on the site or on adjacent properties.

**Commented [LBG105]:** Existing CAO allows reduction of individual lot sizes to any buildable configuration through the subdivision or BLA (if applicable) process provided the total square footage of the new lots plus the stream and buffer square footage equals or exceeds the total square footage for an equal number of minimum size lots in the zone prior to removing the stream from the culvert. (Subdivision in FWHCA required a CUP in existing CAO).

Staff recommends maintaining similar flexibility either within the updated CAO or within the updated subdivision standards that are currently being drafted through the development regulation update.

**Commented [LBG106]:** What should this be? Currently it is 10', but maybe it should be a **minimum of 10'**, with a recommendation provided by the qualified professional?

#### E. Anadromous Fish.

1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies must give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:
  - a. Subsection A of this section applies to anadromous fish where those populations are identified as endangered, threatened or sensitive species;
  - b. Activities shall be timed to occur only during the allowable work window as designated by the Washington Department of Fish and Wildlife for the applicable species;
  - c. An alternative alignment or location for the activity is not feasible;
  - d. The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;
  - e. Shoreline erosion control measures must be designed to use bioengineering methods or soft armoring techniques, according to an approved critical area report; and
  - f. Any impacts to the functions or values of the fish and wildlife habitat conservation area are mitigated in accordance with an approved critical area report.
2. Structures that prevent migration are not allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities must be provided, consistent with RCW [77.57.030](#), that allow the upstream migration of adult fish and prevent fry and juveniles migrating downstream from being trapped or harmed.
3. Fills, when authorized by the City and all applicable joint aquatic resource permit application approvals, must not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts and shall only be allowed for a water-dependent use.

#### 19.70.350 Fish and wildlife habitat – Specific Standards for Other FWHCA's

##### A. Endangered, Threatened, and Sensitive Species.

1. No development is allowed within a fish and wildlife habitat conservation area or buffer with which State or Federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by the Washington Department of Fish and Wildlife or applicable State or Federal agency.
2. Whenever activities are proposed adjacent to a fish and wildlife habitat conservation area with which State or Federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and approved by the City. Approval for alteration of the fish and wildlife habitat conservation area or its buffer may not occur prior to consultation with the Washington Department of Fish and

#### Commented [GL107]: Per WDFW data:

**Clyde Creek** has modeled presence of fall chinook, pink salmon, coho, and steelhead trout.

**Cranberry Creek** has documented presence of Resident Coastal Cutthroat trout.

Stream (unnamed and not currently mapped on CAO maps) east of Reservation Road flowing into Similk Bay has documented presence of Resident Coastal Cutthroat Trout & Coho Salmon. Modeled presence of Winter Steelhead Trout, Fall Chinook, Fall Chum, and Pink Salmon.

Wildlife for animal species, the Washington State Department of Natural Resources for plant species, and other appropriate Federal or State agencies.

**B. Other Priority Habitats and Species.** Fish and wildlife habitat conservation areas or buffers with which species that are not State or Federally listed as endangered, threatened, or sensitive species, and are not anadromous fish species are subject to the following:

1. Development activities and uses that result in unavoidable impacts may be permitted in priority species habitat areas and associated buffers in accordance with an approved critical area(s) report and habitat assessment/management plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the loss of acreage and functions of habitat and buffer areas must be provided in compliance with the mitigation performance standards and requirements of these regulations.

**C. City-Designated Habitats and Species of Local Importance**

**1. Anacortes Community Forest Lands.**

- a. **Proposed** alterations must be consistent with the adopted Anacortes Community Forest Lands Comprehensive Plan, as amended.
- b. **Shared Wetland.** In any circumstance where a jurisdictional wetland is shared by a private property owner and the ACFL, said wetland shall not be impacted adversely by private property owners unless the impacts are appropriately mitigated per Article V of this chapter.
- c. **Noxious and Invasive Plants.** The Skagit County noxious weed ordinance and the ACFL invasive plant control program shall be carefully considered in any adjacent development decision. Nonnative plants known to be invasive into the ACFL shall be prohibited in landscaping plans of adjacent developments. Where such developments have CC&Rs, reference to this requirement shall be included therein.
- d. **Vacations.** In the case of street or alley vacations contiguous with an ACFL boundary, the half of the area vacated which is adjacent to the ACFL shall be incorporated into the ACFL and subject to all ACFL related requirements.
- e. **Private Access to ACFL.** No new accesses will be established to the ACFL without prior request for such access to the parks and recreation department and the forest advisory board and approval by the city council.
- f. **Burning.** No burn piles or outdoor fires shall ever be left unattended while ignited and in the event sparks or flames come within three hundred feet of the ACFL, the fire shall immediately be brought under control or extinguished.
- g. **Boundary Identification.** City staff will work closely with property owners and developers to ensure that survey lines adjacent to the ACFL boundary are clearly and

**Commented [LBG108]:** Except (C)(1)(a), this language is from the existing CAO– carried over from 17.70. Staff recommends additional review to eliminate duplicative language and remove language that is not a development regulation.

**Commented [LBG109]:** The entire ACFL is designated as a habitat of local importance, but not all parts are impacted by shoreline, wetlands, streams, geohazards, state priority species /habitat, etc. The other specific critical area type standards would apply where those features are present. The existing CAO doesn't specifically say what standards apply to those areas. [The ACFL Comp Plan](#) identifies different management areas within the ACFL that provides certain restrictions, projected uses, and recommendations that are intended guide future alterations.

**Commented [LBG110]:** Impacts to any wetland are already required to be mitigated regardless of where they are located. This might be duplicative.

**Commented [LBG111]:** See 19.70.330(G) re: no introduction on species not indigenous to the region. Duplicative.

**Commented [LBG112]:** [RCW 17.10.140](#) requires owners to eradicate all class A noxious weeds and control and prevent the spread of all class B weeds within and from the owners property. Are there other nonnative plants that should be specified here?

**Commented [LBG113]:** This isn't really a development regulation.

correctly marked before any timber and/or vegetation is removed from adjacent property. The forest manager will be involved in the final inspection of boundary lines.

- h. ACFL Buffers. City staff will work closely with builders to secure thirty-foot ACFL buffers using all available incentives.

## 2. March Point Heronry

- a. Proposed development activities within 1,000 feet, or that are likely to impact the colony, must provide a critical areas report.....
- b. Colony protection for minimum 10-years after abandonment.

## D. Required Buffer for non-stream areas

- 1. Buffer widths for fish and wildlife habitat areas must be based on consideration of the following factors: species-specific recommendations of the Washington State Department of Fish and Wildlife; recommendations contained in a habitat management plan submitted by a qualified professional; and the nature and intensity of land uses and activities occurring on the land adjacent to the site.
- 2. Low-impact uses and activities which are consistent with the purpose and function of the habitat buffer and do not detract from its integrity may be permitted within the buffer depending on the sensitivity of the habitat area. Examples of uses and activities which may be permitted in appropriate cases include trails that are pervious, viewing platforms, low-impact stormwater management facilities such as bioswales and other similar uses and activities; provided, that any impacts to the buffer resulting from such permitted facilities shall be fully mitigated.

## 19.70.360 Fish and wildlife habitat – Critical area report additional requirements.

- A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a fish and wildlife habitat conservation area, a critical area report shall be required. Critical area report requirements for fish and wildlife habitat conservation areas are generally met through submission to the Director of one or more fish and wildlife habitat critical area reports. In addition to the general critical area report requirements of AMC 19.70.125, critical area reports for fish and wildlife habitat conservation areas must meet the requirements of this section.
- B. **Preparation by a Qualified Professional.** Critical areas reports for a FWHCA must be prepared by a qualified professional.
- C. **Third Party Review Required.** Critical areas studies and reports on fish and wildlife habitat conservation areas shall be, at the applicant's sole expense, subject to third party review, consistent with AMC 19.70.125(B) and in any of the additional following circumstances:
  - 1. Mitigation is required for impacts to Type S, Type F, or Type Np streams and/or buffers; or

**Commented [LBG114]:** It would be good to define what these are.

**Commented [LBG115]:** This section still under development....

**Commented [LBG116]:** Recommended in WDFW species-specific management recommendations. Placeholder for further consideration.

**Commented [LBG117]:** This section may be able to be reworked to avoid repeating things that are already stated in other sections.

2. Mitigation is required for impacts to Type Ns streams.
- D. **Minimum report requirements for Fish and Wildlife Habitat Conservation Areas.** The critical area report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:
1. The report contents required per AMC 19.70.125;
  2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, water typing and other habitat conservation area classification, baseline hydrologic data, site photos, etc.;
  3. A description of the methodologies used to conduct the delineations, classifications, or impact analyses, including reference;
  4. **Site Plans.** 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) depicting delineated and surveyed fish and wildlife habitat conservation areas and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to fish and wildlife habitat conservation areas and/or buffers (include square footage estimates); and
    - b. Depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the fish and wildlife habitat conservation areas associated with anticipated hydroperiod alterations from the project.
  5. **Habitat Assessment /Management Plan.** A habitat assessment /management plan is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. A critical area report for a fish and wildlife habitat conservation area must contain an assessment of habitats including the following site- and proposal-related information at a minimum:
    - a. Detailed description of vegetation on and adjacent to the project area and its associated buffer;
    - b. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
    - c. A discussion of any Federal, State, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management

recommendations, that have been developed for species or habitats located on or adjacent to the project area;

- d. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;
- e. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with AMC 19.70.130, Mitigation Requirements;
- f. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs.

**6. Additional Technical Information Requirements for Streams.** If no project impacts are anticipated and standard stream buffer widths are retained, a stream delineation report, general critical areas report or other reports, alone or in combination, may be submitted as consistent with the specific requirements of this section. In addition to the general critical area report requirements for fish and wildlife habitat conservation areas provided in subsections A through D of this section, technical information on streams must include the following information at a minimum:

- a. A written assessment and accompanying maps of the stream and associated hydrologic features on and off site within 300 feet of the project area, including the following information at a minimum:
  - i. Stream survey showing the field delineated ordinary high water mark(s);
  - ii. Standard stream buffer boundary;
  - iii. Boundary for proposed stream buffers averaging, if applicable;
  - iv. Vegetative, faunal, and hydrologic characteristics;
  - v. Soil and substrate conditions; and
  - vi. Topographic elevations, at two-foot contours;
- b. A detailed description and functional assessment of the stream buffer under existing conditions pertaining to the protection of stream functions, fish habitat and, in particular, potential anadromous fisheries;
- c. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and stream functions;

- d. Proposed buffer enhancement, if needed, including a written assessment and accompanying maps and planting plans for buffer areas to be enhanced, including the following information at a minimum:
    - i. A description of existing buffer conditions;
    - ii. A description of proposed buffer conditions and how proposed conditions will increase buffer functions in terms of stream and fish habitat protection;
    - iii. Performance standards for measuring enhancement success through a monitoring period of at least five years; and
    - iv. Provisions for monitoring and submission of monitoring reports documenting buffer conditions, as compared to performance standards, for enhancement success;
  - e. A discussion of ongoing management practices that will protect stream functions and habitat value through maintenance of vegetation density within the stream buffer.
- E. **Additional information.** When appropriate due to the type of habitat or species present, or the project area conditions, the Director may also require the critical area report to include:
- 1. A request for consultation with the Washington State Department of Fish and Wildlife (DFW), Washington Department of Ecology (Ecology), local Native American Indian tribes or other appropriate agency;
  - 2. Copies of the joint aquatic resource permit application (JARPA) and related approvals, such as a hydraulic project approval (HPA) from the DFW, when applicable to the project; and
  - 3. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

#### 19.70.370 Fish and wildlife habitat – Mitigation performance standards and requirements.

##### A. Requirements for Compensatory Mitigation.

- 1. Mitigation for alterations to FWHCAs or buffers may only be used for impacts that cannot be avoided or minimized, using the mitigation sequencing in \_\_\_\_\_.
- 2. The mitigation proposed must achieve equivalent or greater biologic and hydrologic functions and must include mitigation for adverse impacts upstream from or downstream from the project site.
- 3. Each function affected by the alteration must be addressed to achieve functional equivalency or improvement on a per function basis.
- 4. Mitigation must be located on site except when demonstrated that a higher level of ecological functioning would result from an off-site location.

**Commented [LBG118]:** This section still being developed – may just need to refer to 19.70.135, Mitigation plan requirements, which includes goals and objectives, performance standards, construction plan requirements, monitoring program and contingency plan, etc.

## GEOLOGICALLY HAZARDOUS AREAS

### 19.70.400 Geologically Hazardous Areas– Description and Purpose.

- A. Geologically hazardous areas include areas susceptible to the effects of erosion, sliding, earthquake, or other geologic events. They pose a threat to health and safety of citizens when incompatible development is sited in areas of significant hazard.
- B. The primary purpose of these regulations is to avoid and minimize potential impacts to life and property from geologic hazards, conserve soil resources, and minimize structural damage relating to seismic hazards. The purpose is accomplished through appropriate levels of study and analysis, application of sound engineering principles, and regulation or limitation of land uses, including maintenance of existing vegetation, regulation of clearing and grading activities, and control of stormwater.

### 19.70.410 Geologically Hazardous Areas - Designation.

- A. Areas susceptible to one or more of the following types of hazards are designated as a geologically hazardous area:
  - 1. **Erosion Hazard Areas.** Erosion hazard areas include areas likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils. The following are considered known or suspected erosion hazards:
    - a. Areas located within the following soil map units: Nos. 46 and 47 Dystric Xerochrepts; No. 90 Lithic Haploxerolls-Rock outcrop complex (LH), or mapped severe erosion hazard, as identified in the U.S. Department of Agriculture Natural Resources Conservation Service Soil Survey of Skagit County Area, WA (1989).
    - b. Coastal, erosion-prone areas such as beaches or bluffs.
    - c. Areas designated in the Washington State Department of Ecology Coastal Zone Atlas, Washington, Volume Two Skagit County (1978) as U (Unstable), UB (Unstable Bluff), URS (Unstable Recent Slide), or UOS (Unstable Old Slide).
    - d. Areas susceptible to rapid stream incision and stream bank erosion.
  - 2. **Landslide Hazard Areas.** Landslide hazard areas are those areas subject to landslide activity based on a combination of geologic, topographic and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. The following are known or suspected landslide hazards:
    - a. Areas delineated by the U.S. Department of Agriculture Natural Resources Conservation Service Soil Survey of Skagit County Area, WA as having a “severe” limitation for building site development.

- b. Areas designated in the Washington State Department of Ecology Coastal Zone Atlas, Washington, Volume Two Skagit County (1978) as U (Unstable), UB, (Unstable Bluff), URS (Unstable Recent Slide), or UOS (Unstable Old Slide).
  - c. Areas of previous failure such as earth slumps, earthflows, mudflows, lahars, debris flows, rock slides, landslides or other failures as observed in the field or as indicated on maps or in technical reports published by the U.S. Geological Survey, the Geology and Earth Resources Division of the Washington Department of Natural Resources, or other documents authorized by government agencies.
  - d. Slopes having gradients of 15% or greater:
    - i. That intersect geologic contacts with permeable sediments overlying low-permeability sediment or bedrock and springs or groundwater seepage are present; or
    - ii. That are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials.
  - e. Areas that have shown movement during the Holocene epoch (from ten thousand years ago to the present) or that are underlain or covered by mass wastage debris of that epoch.
  - f. Slopes having gradients steeper than 80% subject to rock fall during seismic shaking.
  - g. Potentially unstable areas resulting from rapid stream incision, stream bank erosion, and undercutting by wave action.
  - h. Areas that are at risk from snow avalanches.
  - i. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding.
  - j. Slopes with a gradient of 40% or more with a vertical relief of 10 feet or more, except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and is measured by averaging the inclination over at least ten feet of vertical relief.
3. **Seismic Hazard Areas.** Seismic hazard areas are lands that, due to a combination of soil and ground water conditions, are subject to risk of damage as a result of earthquake induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, surface faulting, or tsunamis. These are typically underlain by cohesionless soils of low density typically in association with a shallow ground water table. The following are known or suspected seismic hazards:
- a. Areas having "high" and "moderate to high" risk of liquefaction as mapped on the Liquefaction Susceptibility and Site Class Maps of Western Washington State by County by the Washington State Department of Natural Resources.

Commented [GL119]: None in Anacortes

Commented [GL120]: None in Anacortes

- b. Areas located within ¼ mile of an active fault as indicated on investigative maps or described in studies by the United States Geologic Survey, Geology and Earth Resources Division of the Washington Department of Natural Resources, or other documents authorized by government agencies, or identified during site inspection.
  - c. Those known or suspected erosion and landslide hazards referenced in Subsections (1) and (2) of this Section.
4. **Mine Hazard Areas.** Mine hazard areas are those areas underlain by or affected by mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sink holes, gas releases, or subsidence due to mine workings. Factors that should be considered include: proximity to development, depth from ground surface to mine working, and geologic material.
  5. **Volcanic Hazard Areas.** Volcanic hazard areas are areas subject to pyroclastic flows, lava flows, debris avalanche, and inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.
  6. **Tsunami hazard areas.** Tsunami hazard areas include coastal areas and lake shoreline areas susceptible to flooding, inundation, debris impact, and/or mass wasting as the result of coastal wave action generated by seismic events or other geologic events. Suspected tsunami hazard areas are indicated on the Tsunami Hazard Map of the Anacortes-Whidbey Island Area, Washington: Modeled Tsunami Inundation from a Cascadia Subduction Zone Earthquake.
  7. **Other Hazard Areas.** Geologically hazardous areas may also include areas determined by the Director to be susceptible to other geological events including mass wasting, debris flows, rock falls, and differential settlement.
- B. All areas within the city meeting one or more of these criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.

#### 19.70.420 Geologically Hazardous Areas – Mapping.

- A. The approximate location and extent of geologically hazardous areas are shown on the City of Anacortes geologically hazardous data layers maintained in the City of Anacortes geographic information system (GIS). In addition, the following maps and resources providing information on the location and extent of geologically hazardous areas are hereby adopted by reference as amended:
  1. Skagit County, Skagit County Potential Landslide and Erosion Areas, 2016;
  2. Washington Department of Ecology Coastal Zone Atlas (for marine bluffs);
  3. U.S. Geological Survey geologic maps, landslide hazard maps, and seismic hazard maps;

**Commented [GL121]:** There are two known mines in Anacortes: from [mindat.org](http://mindat.org).

The Stephens Mine (Fidalgo Mine) near Cranberry Lake included a weakly mineralized and serpentinized zone 10' wide and exposed for 600' in granodiorite. It produced 1 shipment of ore that was sent to the Asarco smelter in Tacoma. Developments include 5 shallow shafts and an open cut.

Anacopper Mine, 3 ½ miles southwest of the center of Anacortes but within city limits. 8 small shafts. (no specific location)

GeoEngineers – No historic coal mines identified in published references. If a concern exists from a life safety or property standpoint, the mines listed above could be identified with an appropriate risk statement. Further research would be necessary to evaluate these historical mines and any associated risk related to future development.

Many jurisdictions do not include development language related to coal mines or mines if these hazards are not identified in the area. In the absence of published information regarding mines in the City and immediate area, we conclude mines may be designated/defined in accordance with the WAC, but classified as "no risk" in the City code unless new info is obtained in the future. Therefore, development regulations related to addressing mines could be removed from the updated GHA section of the CAO.

**Commented [GL122]:** There are no significant risks identified for the City and immediate surrounding area, other than airborne particulate impacts from an eruptions (which is the case for most Washington jurisdiction). – GeoEngineers. May be classified as "No risk" and requirements related to them could be removed.

**Commented [GL123]:** GeoEngineers - LIDAR mapping represents the current BAS with respect to mapping recent and historic landslides and should be incorporated into the current hazard maps. Also, publicly available historic satellite imagery should be used to evaluate potential current or historic landslide areas identified LIDAR. New Lidar could help identify potential geologic hazard areas more accurately and identify areas of prior landslide activity (would require professional interpretation). Staff is looking into acquisition of this data.

4. Washington State Department of Natural Resources seismic hazard maps for Western Washington, including, but not limited to, the Liquefaction Susceptibility and Site Class Maps of Western Washington State by County;
  5. Washington State Department of Natural Resources slope stability maps;
  6. Soils maps produced by the U.S. Department of Agriculture, National Resources Conservation Service;
  7. National Oceanic and Atmospheric Administration tsunami hazard maps;
  8. Washington Department of Natural Resources 2005 Tsunami Hazard Map of the Anacortes-Whidbey Island Area, Washington: Modeled Tsunami Inundation from a Cascadia Subduction Zone Earthquake.
- B. Reference Only.** The maps and resources cited above are to be used as a guide for the City of Anacortes Planning, Community & Economic Development Department, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

#### 19.70.430 Geologically Hazardous Areas – General Development Standards.

- A. Activities and uses are prohibited in geologically hazardous areas and associated buffers, except as provided for in this chapter.
- B. **Exemptions and Allowed Activities.** Exemptions are listed in the provisions established in AMC 19.70.20 Exemptions.
- C. **Alterations.** Alterations of geologically hazardous areas or associated buffers may only occur pursuant to 19.70.4xx (below) for activities that:
  1. Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;
  2. Will not adversely impact other critical areas;
  3. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than pre—development conditions; and
  4. Are determined to be safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington.
- D. **Mitigation.** Proposed mitigation techniques are considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may be required to avoid any increase in risk above the preexisting conditions, including following abandonment of the activity.
- E. **Critical Facilities Prohibited.** Critical facilities may not be sited within geologically hazardous areas unless there is no other practical alternative.

**Commented [GL124]:** Per GeoEngineers - Check to ensure none of these exemptions involve "occupied" buildings – (residential, work, parks). Recommends City require a report (or if appropriate, a simple letter saying the applicant's proposal is not subject to related concerns).

**Commented [GL125]:** As determined by a qualified professional and concurrence by a 3<sup>rd</sup> party review

- F. **International Building Code.** All development must conform to the provisions of the currently adopted International Building Code as amended by the City of Anacortes, including submittal of a critical areas report.

#### 19.70.440 Geologically Hazardous Areas – Specific Development Standards

- A. **Erosion or Landslide Hazard Areas.** Except as otherwise provided in this Chapter, only those activities approved and permitted consistent with an approved critical area report in accordance with this Chapter are allowed in erosion or landslide hazard areas. Activities must meet the standards of AMC 19.70.430, General development standards, in addition to the specific requirements contained in this subsection.
1. **Standard Buffer.** A standard buffer of 50 feet is required from all edges of a landslide or erosion hazard area. The buffer must be maintained as undisturbed native vegetation, except when alteration of vegetation is allowed per \_\_\_\_\_.
  2. **Buffer reduction.** The Director may reduce the standard buffer to a minimum of 15 feet when the critical area report demonstrates that all of the following criteria are met:
    - a. No reasonable alternative to the buffer reduction exists;
    - b. Modified or reduced buffers, through design and engineering solutions, will provide protection to the proposed development and adjacent properties equal to that of the standard buffer;
    - c. The development will not significantly increase surface water discharge or sedimentation to adjacent properties beyond pre-development conditions;
    - d. The development will not decrease slope stability on adjacent properties;
    - e. The proposed reduction will not adversely impact other critical areas.
    - f. The report makes recommendations regarding planting of vegetation or other measures to minimize impacts and resist erosion.
  3. **Increased buffer.** The standard buffer may be increased by the Director based on a critical areas report prepared by a qualified professional that indicates a greater buffer is necessary to protect the proposed development and/or adjacent properties.
  4. **Alterations.**
    - a. Alterations of an erosion or landslide hazard area and/or buffers may only occur for activities for which a critical areas report that contains a hazards analysis is submitted which determines that:

**Commented [GL126]:** GeoEngineers: Development standards for landslide areas, including buffer and/or setback requirements, depend largely on the type of proposed development, the size of the landslide hazard area, the potential landslide type, frequency of potential landslide activity, underlying soil and groundwater conditions, and, in particular, the likely consequences of landslide activity. It is our opinion that it is not realistic to incorporate all of these criteria within a CAO, but is appropriate to require that all relevant factors specific to a site be addressed in critical area reports to be completed by a licensed engineer with geotechnical background, or a licensed geologist or engineering geologist.

CAOs typically include minimum buffers and/or setbacks and allow disturbance to landslide hazard areas only if a site-specific investigation is completed, analysis indicates that the proposed development will not affect or be affected by the landslide hazard, and specific development or performance standards / recommendations are followed.

**Commented [GL127]:** 15 feet is consistent with the minimum setbacks of other codes. It may also be appropriate to include language that the director can include vegetation or other measures to minimize impacts and resist erosion.

**Commented [LBG128]:** This is intended to apply to further reduction of the standard buffer beyond the (proposed) 15' minimum allowed per 19.70.440(A)(2); or a proposal to develop within the geohazard area itself.

Current code appears to allow administratively. Appropriate process needs to be identified. Should a critical areas variance process or reasonable use process be required here?

Staff will review procedures used by other jurisdictions.

- i. The activity will not increase surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions;
  - ii. The activity will not decrease slope stability on adjacent properties;
  - iii. Such alteration will not adversely impact other critical areas.
- b. Alterations must be designed to meet the following basic requirements:
  - i. The proposed alteration must not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of dynamic conditions must be based on a minimum horizontal acceleration as established by the current version of the Uniform Building Code.
  - ii. Structures and improvements must be clustered to avoid geologically hazardous areas and other critical areas,
  - iii. Structures and improvements must minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography,
  - iv. Structures and improvements must be located to preserve the most critical portion of the site and its natural landforms and vegetation,
  - v. The proposed development must not result in greater risk or a need for increased buffers on neighboring properties;
  - vi. Development must be designed to minimize impervious lot coverage;
  - vii. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes, and
  - viii. The director may accept an alternative design that deviates from one or more of these standards if a report by a qualified professional demonstrates that greater long-term slope stability can be achieved while meeting all other provisions of this title. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function.
- c. **Additional Requirements for Alteration of Landslide hazard areas and buffers.** Prior to permit issuance, the property owner must sign and record a notice on title, at the owner's sole expense, a covenant in a form acceptable to the City, which:

- i. Acknowledges and accepts the risks of development in the landslide hazard area;
  - ii. Waives any rights to claims against the City;
  - iii. Indemnifies and holds harmless the City against claims, losses, and damages;
  - iv. Informs subsequent owners of the property of the risks and the covenant; and
  - v. Advisability of obtaining added insurance.
- 5. **Vegetation Retention and Maintenance.** Removal of vegetation from an erosion or landslide hazard area or related buffer is prohibited, except when allowed as follows:
  - a. As part of an approved alteration, that follows the criteria and process outlined in AMC 19.70.440(A)(4).
  - b. Normal nondestructive pruning and trimming of vegetation for maintenance purposes or thinning of limbs of individual trees to provide a view corridor when a plan prepared by an ISA-certified arborist is provided and approved and there are no other critical areas present.
- 6. **Seasonal Restriction.** Clearing within an erosion or landslide hazard area or buffer may be allowed only from May 1st to October 1st of each year provided that the Director may extend or shorten the dry season on a case-by-case basis depending on actual weather conditions and other factors deemed relevant.
- 7. **Utility Lines and Pipes.** Utility lines and pipes may be permitted in erosion and landslide hazard areas and buffers only when the applicant demonstrates that no other practical alternative is available. The line or pipe must be located aboveground and properly anchored and/or designed so that it will continue to function in the event of an underlying slide.
- 8. **Stormwater management.** Prior to any development activity, a plan for the collection, transport, treatment, and discharge of stormwater in accordance with the requirements of AMC Chapter 19.76, as amended, and the adopted Stormwater Management Manual for Western Washington, meeting the following requirements must be submitted:
  - a. All infiltration systems, such as stormwater detention and retention facilities, and curtain drains utilizing buried pipe or French drains, are prohibited in erosion and landslide hazard areas and their buffers unless the critical areas report determines such facilities or systems will not adversely affect slope stability.
  - b. Stormwater may not be directed across the face of a landslide hazard (including marine bluffs or ravines) except as follows:

- i. Stormwater may be discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predeveloped state;
- ii. Stormwater may be dispersed upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope;
- iii. If demonstrated that no other practical alternative is available, stormwater may be discharged from the hazard area into adjacent waters, provided it is collected above the hazard and directed to the water by a tight line drain (constructed of high-density polyethylene pipe with fuse-welded joints, or similar product that is technically equal or superior) and provided with an energy dissipating device at the point of discharge.

9. **Prohibited development.** On-site sewage disposal systems, including drain fields, are prohibited within erosion and landslide hazard areas and related buffers.

10. **Subdivisions.**

- a. The division of land in landslide hazard areas and associated buffers is subject to the following:
  - i. Land that is located wholly within a landslide hazard area or its buffer may not be subdivided. Land that is located partially within a landslide hazard area or its buffer may be divided provided that each resulting lot has sufficient buildable area outside of, and will not affect, the landslide hazard or its buffer;
  - ii. Access roads and utilities may be permitted within the landslide hazard area and associated buffers if the city determines that no other feasible alternative exists.
- b. Division of land within erosion hazard areas must comply with the following additional requirements:

**Commented [GL129]:** Something to consider....

- i. Except as otherwise provided in this section, existing vegetation must be retained on all lots until building permits are approved for development on individual lots;
- ii. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant must implement a revegetation plan in those areas that have been impacted prior to final inspection of the site development permit or the issuance of any building permit for the subject property;
- iii. Clearing of vegetation on individual lots may be allowed prior to building permit approval if the Director determines that:
  - 1. Such clearing is a necessary part of a large-scale grading plan,
  - 2. It is not feasible to perform such grading on an individual lot basis, and
  - 3. Drainage from the graded area will meet established water quality standards.

**B. Seismic Hazard Areas.**

- 1. Except as otherwise provided in this Chapter, only those activities approved and permitted consistent with an approved critical area report in accordance with this Chapter are allowed in seismic hazard areas. Activities proposed to be located in seismic hazard areas must meet the standards of AMC 19.70.4xx, General development standards in addition to the following specific standards:
  - a. The Director may allow alterations of seismic hazard areas and/or buffer are allowed, as follows:
    - i. If it is determined that the site is subject to liquefaction, mitigation measures may be imposed pursuant to \_\_\_\_\_, in addition to other applicable codes or regulations pertaining to development in areas subject to liquefaction.
    - ii. Soils engineering studies may be required for development in areas subject to liquefaction to determine the physical properties of the surficial soils, especially the thickness of unconsolidated deposits, and their liquefaction potential as set out in the adopted International Building Code.

**Commented [LBG130]:** Building Department to review this.

**C. Mine Hazard Areas.**

- 1. Activities proposed to be located in mine hazard area must meet the standards of 19.70.4xx General development standards and the specific following requirements:

- a. **Alterations.** Alterations of a mine hazard area and/or buffer are allowed, as follows:
- i. All alterations are permitted within a mine hazard area with a low potential for subsidence,
  - ii. Within a mine hazard area with a moderate potential for subsidence and at coal mine by-product stockpiles, all alterations are permitted subject to a mitigation plan to minimize risk of structural damage using appropriate criteria to evaluate the proposed use, as recommended in the hazard analysis, and
  - iii. Within a mine hazard area with a severe potential for subsidence only those activities allowed in AMC 19.70.4xx **Exemptions and allowed activities** of this chapter will be allowed.
- b. **Subdivisions.** The division of land in mine hazard areas and associated buffers is subject to the following:
- i. Land that is located within two hundred feet of a mine hazard area with a severe potential for subsidence may not be subdivided. Land that is located partially within a mine hazard area may be divided provided that each resulting lot has sufficient buildable area that is two hundred feet away from the mine hazard area with a severe potential for subsidence. Land that is located within a mine hazard area with a low or moderate potential for subsidence may be subdivided;
  - ii. Access roads and utilities may be permitted within two hundred feet of a mine hazard area with a moderate or severe potential for subsidence if the city determines that no other feasible alternative exists;
- c. **Reclamation Activities.** Reclamation activities must conform to the provisions in Chapter 332-18 WAC and AMC 17.50, Excavations For all reclamation activities, including grading, filling, and stockpile removal, as-built drawings shall be submitted to the city in a format specified by the Director.

**D. Tsunami Hazard Areas.**

1. Activities on sites containing areas susceptible to inundation due to tsunami hazards must provide an evacuation and emergency management plan.
2. The construction of structures designated Risk Categories III and IV as specified under IBC Table 1604.5 are prohibited within a tsunami hazard area, except that:
  - a. A vertical evacuation tsunami refuge may be permitted to be located in a tsunami hazard zone provided it is constructed in accordance with FEMA P646;

**Commented [GL131]:** Should nonresidential occupancies have their own plan...and exempt SFRs from this requirement? To increase awareness, maybe notice to title could be recorded?

See the [City's Tsunami Evacuation Plan](#).

**Commented [LBG132]:** This is from IBC Appendix M, Tsunami-Generated Flood Hazard, Section M101.

- b. Community critical facilities may be permitted to be located within a tsunami hazard zone when such a location is necessary to fulfill their function, providing suitable structure and emergency evacuation measures have been incorporated.

#### 19.70.450 Geologically Hazardous Areas - Critical Area Report Additional Requirements

- A. **Report Required.** If the Director determines that that geologic, hydrologic, or site conditions may present significant risk to life or property related to geologically hazardous areas, they may require the applicant to submit a critical areas report. The Director or their designee may waive all or some of the elements of the report requirements.
- B. **Preparation by a Qualified Professional.** The critical areas report must be prepared by a qualified professional, as defined in AMC \_\_\_\_\_.
- C. **Third Party Review Required.** Critical areas reports on geologically hazardous areas are subject to third party review at the owner's sole expense as provided in AMC 19.70.125 and in any of the following circumstances:
  - 1. A buffer reduction or alteration of an erosion or landslide hazard area proposed.
- D. **Minimum Report Contents for Geologically Hazardous Areas.** The written critical area report(s) must contain the following information, at minimum:
  - 1. The minimum report contents required per AMC 19.70.125;
  - 2. A detailed overview of the field investigations, including field data sheets for soils, exploration locations, baseline hydrologic data, site photos, published data and references; data and conclusions from past assessments of the site; investigations or studies that support the identification of geologically hazardous areas;
  - 3. A description of the methodologies used to conduct the geologically hazardous areas evaluations, classification, hazards assessments and/or analyses of the proposal impacts including references.
  - 4. **Assessment of Geological Characteristics.** The assessment must include the following:
    - a. Classification of the type of geologic hazard(s) present in accordance with 19.70.410.
    - b. An assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis must be accomplished in accordance with accepted classification systems in use in the region.
    - c. A description of load intensity, surface and groundwater conditions, public and private sewage disposal systems, fills, excavations, and all structural development; and
    - d. A description of the extent and type of vegetative cover;

**Commented [GL133]:** See AMC 19.70.075(B) for definitions, or those could be relocated to each specific critical area type.

- e. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion;
- 5. **Analysis of Proposal.** The report must include a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties.
- 6. **Minimum Buffer and Building Setback.** The report must make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.
- 7. **Additional Technical Information Requirements for Specific Hazards:**
  - a. **Erosion and Landslide Hazard Areas.** The technical information required in a critical area report for a project within an erosion or landslide hazard area must also include the following:

- i. An estimate of the present stability of the subject property, the stability of the subject property during construction, the stability of the subject property after all development activities are completed, and a discussion of the relative risks and slide potential relating to adjacent properties during each stage of development, including the effect construction and placement of structures, clearing, grading, and removal of vegetation will have on the slope over the estimated life of the structures. Quantitative analysis of static and seismic slope stability, modeling, and/or seismic displacement analysis may be required by the Director.
  - ii. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event;
  - iii. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on downslope properties;
  - iv. Recommendations for drainage and subdrainage improvements, locations and methods of erosion control, a vegetation management and/or replanting plan, and/or other means for maintaining long-term soil stability;
  - v. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;
  - vi. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and
  - vii. Recommendations for mitigation measures to be implemented in order to minimize the risk to the site and adjacent properties, including slope stabilization measures, if appropriate.
- b. **Seismic Hazard Areas.** The technical information required in a critical area report for a project within a seismic hazard area must also include the following:

- i. A complete discussion of the potential impacts of seismic activity on the site (for example, liquefaction, lateral spreading, fault rupture);
    - ii. An evaluation of the subsurface soil and groundwater profile, physical properties of the subsurface profiles, and the liquefaction potential of the site;
    - iii. Recommendations for mitigation measures to be implemented in order to minimize the risk to the project and adjacent properties.
  - c. **Tsunami Hazard Areas.** The technical information required in a critical area report for a project within a tsunami hazard area must also include:
    - i. A discussion of the potential impacts of the tsunami hazard on the site; and
    - ii. An emergency management plan including plans for emergency building exits routes, site evacuation routes, emergency training, notification of local emergency management officials, and an emergency warning system.
8. **Site and Construction Plans.** The critical area report for geologically hazardous areas must include a copy of the site plans for the proposal, drawn at an engineering scale, showing:
- a. The type and extent of geological hazard areas, and any other critical areas, and recommended and required buffers on, adjacent to, off site within 200 feet of, or that are likely to impact or be affected by the proposal;
  - b. Proposed development, including the location of existing and proposed structures, fill, clearing limits, significant trees to be removed, vegetation to be removed, storage of materials, and drainage facilities;
  - c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report;
  - d. Height of slope, slope gradient, and cross-section of the project area indicating the stratigraphy of the site;
  - e. The location of springs, seeps, or other surface expressions of ground water on or off site within 200 feet of the project area or that have the potential to affect or be affected by the proposal;
  - f. The location and description of surface water on or off site within 200 feet of the project area or that has the potential to be affected by the proposal.

**Commented [LBG134]:** Should SFRs be exempted; maybe provided acknowledgement of the City's Tsunami evacuation plan?

## CRITICAL AQUIFER RECHARGE AREAS

### 19.70.500 Critical Aquifer Recharge Areas – Description and Purpose.

- A. Critical aquifer recharge areas provide the public with clean, safe, and available drinking water and contribute base flows to protect aquatic resources. Once groundwater is contaminated or depleted, it is difficult, costly, and sometimes impossible to clean up or to recharge.
- B. The purpose of this section is to protect critical aquifer recharge areas from degradation or depletion resulting from new and redeveloping land use activities. Due to the potential vulnerability of groundwater underlying certain aquifer recharge areas to contamination and the importance of such groundwater as sources of public water supply, it is the intent of this section to safeguard groundwater resources by mitigating or precluding future discharges of contaminants from new development activities and redevelopment activities.

### 19.70.510 Critical aquifer recharge areas - Applicability and hazardous materials questionnaire.

- A. **Applicability.** The provisions of this section apply to regulated facilities that are within or adjacent to those portions of the City of Anacortes designated as critical aquifer recharge areas on the City of Anacortes Critical Areas Map. Regulated activities/facilities are defined as those commercial, industrial and home occupation uses that:
  - 1. Process or handle hazardous materials in regulated quantities; and
  - 2. Treat or store regulated quantities of hazardous materials.
- B. **Hazardous materials questionnaire required.** Applications for development or redevelopment of regulated facilities within the boundaries of critical aquifer recharge areas must be accompanied by a completed hazardous materials questionnaire to determine the regulatory status of the applicant facility. The Director must review the questionnaire to determine whether the facility is regulated under this chapter. If it is determined that the proposal includes a regulated facility that processes, handles, treats, and/or stores hazardous substances as defined by this chapter, the applicant must submit a critical areas report pursuant to this Chapter.

### 19.70.520 Critical Aquifer recharge areas – Designation.

- A. Critical aquifer recharge areas include:
  - a. Areas served by groundwater which have been designated as a “Sole Source Aquifer Area” under the Federal Safe Drinking Water Act;
  - b. Areas within a “closed” or “low-flow” stream watershed designated by the Department of Ecology pursuant to RCW 90.22;
  - c. Areas designated as “Wellhead Protection Areas” pursuant to [WAC 246-290](#) and the groundwater contribution area pursuant to [WAC 246-291-125\(3\)\(d\)\(iii\)](#) or otherwise

**Commented [GL135]:** Because most of Anacortes doesn't use groundwater for potable water, and new development is required to connect to city water system, a simplified approach is proposed here. Similar to Burien. Staff believes it will be easier to understand and more straightforward to administer that current code. This approach would be coupled with new CARA mapping.

**Commented [GL136]:** Not applicable in Anacortes

**Commented [GL137]:** Not applicable in Anacortes

**Commented [GL138]:** GeoEngineers recommendation,

recognized by the Director as needing wellhead protection. Wellhead protection areas include, for the purpose of this regulation, the identified recharge areas associated with:

- i. The 10-year groundwater time-of-travel for all Group A public water supply wells; or
  - ii. The 1-year groundwater time-of-travel for all Group B public water supply wells with a wellhead protection plan filed with the Skagit County Health Department; or
  - iii. Plats serviced by five or more individual wells where the average lot size is equal to or less than two acres for which a wellhead protection plan has been completed and filed with the Skagit County Health Department; or
  - iv. The 1,000-foot radius for individual private drinking water supply wells.
- B. All areas within the city meeting one or more of these criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.

#### **19.70.530 Critical Aquifer Recharge Areas – Mapping.**

- A. The approximate location and extent of critical aquifer recharge areas are shown on the City of Anacortes critical aquifer recharge area data layers maintained in the City of Anacortes geographic information system (GIS). In addition, the following maps and resources providing information on the location and extent of critical aquifer recharge areas are hereby adopted by reference as amended:
1. Areas with soils that have moderate to rapid permeability (>2 inches per hour) as listed in Table 14 of the Soil Survey of Skagit County.
  2. Source for identifying drinking water supply wells
- B. **Reference Only.** The maps and resources cited above are to be used as a guide for the City of Anacortes Planning, Community & Economic Development Department, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

**Commented [L8G139]:** Skagit Co. Health Dept?

#### **19.70.540 Critical Aquifer Recharge Areas – General Development Standards**

- A. Regulated activities/facilities may be permitted in a critical aquifer recharge area only if the applicant can demonstrate that the proposed activity will not cause contaminants to enter the aquifer and that the proposed activity will not adversely affect the recharging of the aquifer.

- B. The proposed regulated activity must comply with the water source protection requirements and recommendations of the federal Environmental Protection Agency, State Department of Health, and the Skagit County Health Department.
- C. **Storage tank permits.** The City of Anacortes specifically regulates and authorizes permits for underground storage tanks pursuant to the International Fire Code and this chapter. The Washington Department of Ecology also regulates and authorizes permits for underground storage tanks (WAC 173-360). The Anacortes Fire Department regulates and authorizes permits for the removal of underground storage tanks.
- D. Owners and operators of facilities with existing underground storage tanks that are located within a critical aquifer recharge area must comply with all release detection requirements as specified in WAC 173-360.
- E. **Spreading or injection of reclaimed water.** Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the departments of Ecology and Health.
  - 1. Surface spreading must meet the groundwater recharge criteria given in RCW 90.46.080 and 90.46.010(10).
  - 2. Direct injection must be in accordance with the standards developed by authority of RCW 90.46.042.
- F. **Prohibited activities and land uses.** The following land uses and activities for new development or redevelopment are prohibited within or adjacent to critical aquifer recharge areas:
  - 1. Landfill activities as defined in WAC 173-304 and WAC 173-351;
  - 2. All underground injection wells as defined in Chapter 173-218 WAC;
  - 3. Disposal of hazardous or dangerous wastes;
  - 4. Mining, including:
    - a. Metals and hard rock mining;
    - b. Sand and gravel mining are prohibited in critical aquifer recharge areas determined to be highly susceptible or vulnerable unless a stormwater quality management plan is approved by the City Council;
  - 5. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
  - 6. Storage, processing, or disposal of radioactive substances;
  - 7. Dry cleaning establishments using the solvent perchlorethylene; and
  - 8. Other;

**Commented [LBG140]:** Carried over from existing code - need to reconcile with new procedures in Title 19.

- a. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source;
- b. Activities that would significantly reduce the recharge to aquifers that are a source of significant baseflow to a regulated stream;
- c. Activities that are not connected to an available sanitary sewer system are prohibited from critical aquifer recharge areas associated with sole source aquifers.

**19.70.550 Critical Aquifer Recharge Areas – Specific Development Standards for Regulated Facilities**

- A. The following mitigation measures, as applicable, are required for development of regulated facilities within a critical aquifer recharge area:
  - 1. Floor drains must not be allowed to drain to the stormwater system and must be designed and installed to meet the Uniform Plumbing Code (UPC) Section 303.
  - 2. If any roof venting carries contaminants, then the portion of the roof draining this area must go through pretreatment pursuant to UPC Section 304(b).
  - 3. All nonresidential vehicle washing must be self contained or be discharged to a sanitary sewer system, if approved by the sewer utility, and is subject to UPC Sections 708 and 711.
  - 4. Utilize Integrated Pest Management (IPM) practices for pest control and Best Management Practices (BMPs) for the use of fertilizers as described by the Skagit County Local Hazardous Waste Management Program.
  - 5. Facilities installing new underground tanks. All new underground storage facilities used or to be used for the underground storage of hazardous substances or hazardous wastes must meet the requirements of WAC 173-360 and be designed and constructed so as to:
    - a. Prevent releases due to corrosion or structural failure for the operational life of the tank;
    - b. Be protected against corrosion, constructed of non-corrosive material, steel clad with a non-corrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substance; and
    - c. Use material in the construction or lining of the tank which is compatible with the substance to be stored.
  - 6. Aboveground tanks. All new aboveground storage facilities/tanks containing hazardous substances within a critical aquifer recharge area must be constructed, installed, used and maintained to:
    - a. Prevent the release of a hazardous substance to the ground, or groundwater;
    - b. Include an impervious containment area enclosing or underlying the tank or part thereof;

Commented [LBG141]: ...and/or DOE

- c. Include a secondary containment system either built into the tank structure or a dike system built outside the tank. The secondary containment system or dike system must have a capacity of at least 110 percent of the primary tank and conform to the requirements of UFC Chapter 7902.2.
7. Vehicle repair and servicing.
- a. Commercial vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.
  - b. Dry wells are not allowed on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the state Department of Ecology prior to commencement of the proposed activity.
8. Additional protective measures may be required if deemed necessary by the City of Anacortes.
9. State and federal regulations – The uses listed below will be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

Statutes, Regulations and Guidance Pertaining to Groundwater Impacting Activities

| Activity                                                                                                                                                                                                    | Statute – Regulation – Guidance                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Above Ground Storage Tanks                                                                                                                                                                                  | Chapter <a href="#">173-303-640 WAC</a>                                                               |
| Animal Feedlots                                                                                                                                                                                             | Chapter <a href="#">173-216 WAC</a> , Chapter <a href="#">173-220 WAC</a>                             |
| Automobile Washers                                                                                                                                                                                          | Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56) |
| Below Ground Storage Tanks                                                                                                                                                                                  | Chapter 173-360 WAC                                                                                   |
| Chemical Treatment Storage and Disposal Facilities                                                                                                                                                          | Chapter 173-303 WAC                                                                                   |
| Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.) | Chapter 173-303 WAC                                                                                   |

|                                                          |                                                                                                                                 |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Injection wells                                          | Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC                                                                           |
| Junk Yards and Salvage Yards                             | Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicle Recycler Facilities (WDOE 94—146)     |
| Oil and Gas Drilling                                     | WAC 332-12-450, Chapter 173-218 WAC                                                                                             |
| Wastewater Facilities                                    | Chapter 173-240 WAC                                                                                                             |
| On-Site Sewage Systems (<3,500 gal/day)                  | Chapter 246-272A WAC, Local Health Ordinances                                                                                   |
| Large On-Site Sewage Systems (3,500 to 1000,000 gal/day) | Chapter 246-272B WAC, State Health Ordinances                                                                                   |
| Pesticide Storage and Use                                | Chapter 17.21 RCW                                                                                                               |
| Sawmills                                                 | Chapter 173-303 WAC, Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)   |
| Solid Waste Handling and Recycling Facilities            | Chapter 173-304 WAC                                                                                                             |
| Surface Mining                                           | Chapter 332-18 WAC                                                                                                              |
| Wastewater Application to Land Surface                   | Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture |

**19.70.560 Critical Aquifer Recharge Areas – Critical area report additional requirements.**

- A. **Report required.** \_\_\_\_\_
- B. **Preparation by a Qualified Professional.** Critical areas reports for a FWHCA must be prepared by a qualified professional.
- C. **Third Party Review Required.** Critical areas studies and reports on critical aquifer recharge areas shall be subject to third party review at the owner's sole expense as provided in AMC 19.70.125.
- D. **Minimum Report Contents.** A critical areas report must include a hydrogeologic assessment including, but not limited to, the following:
  - 1. Information sources;
  - 2. Geologic setting – include well logs or borings used to characterize the area;
  - 3. Background water quality;
  - 4. Groundwater elevations;

5. Location/depth to perched water tables;
  6. Recharge potential of the proposed development site (permeability/transmissivity);
  7. Groundwater flow direction and gradient;
  8. Currently available data on wells located within 1,000 feet of the site;
  9. Currently available data on any spring within 1,000 feet of the site;
  10. Surface water location and recharge potential;
  11. Water source supply to the site;
  12. Any sampling schedules necessary;
  13. Discussion of the effects of the proposed project on the groundwater resources;
  14. Description of potential mitigation measures, should it be determined that the proposed project may have an adverse impact on groundwater resources; and
  15. Other information as required by the City.
- E. If the hydrogeologic assessment determines that the facility will have no effect on groundwater resources, the facility is exempt from the development standards requirements in section 19.70.540 of this Chapter.
  - F. If the hydrogeologic assessment determines that the facility could have an effect on groundwater resources, the Director will require implementation of applicable development standards in sections 19.70.540.

## FREQUENTLY FLOODED AREAS

### 19.70.600 Frequently Flooded Areas – Description and Purpose.

- A. Frequently flooded areas perform important hydrologic functions and may present a risk to persons and property.
- B. It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas caused by flooding, while protecting the functions and values of floodplains, including special consideration for anadromous fish habitat in combination with the provisions for Fish and Wildlife Habitat Conservation Areas in this chapter.

### 19.70.610 Frequently Flooded Areas – Designation.

- A. Frequently flooded areas include:
  1. Those areas established as special flood hazard areas under (AMC 19.xx – new AMC Chapter for Floodplain Management) including those areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled “The Flood

**Commented [GL142]:** This approach is similar to Bremerton's and would recodify the current FFA section within Title 19 and retitle it to “Floodplain Management”. This section would provide supplemental reference and include a requirement for a habitat assessment to address the NFMS BIOp for development within the 100-year floodplain.

**Commented [LBG143]:** 100-year flood plain is designated (which is minimum). As part of SMP update, it is recommended that additional areas be considered for inclusion in FFA designation – areas potentially effected by high tides with strong winds, sea level rise, and extreme weather events, including resulting from global climate change.

Special design provisions should be incorporated into structures in those certain areas.

Insurance Study for the City of Anacortes" dated March 17, 2003, and any revisions thereto, with accompanying flood insurance rate maps (FIRM), and any revisions thereto. The best available information for flood hazard area identification as outlined in (AMC 19.xx Use of Other Base Flood Data in A and V zones) is the basis for regulation until a new FIRM is issued that incorporates the data utilities under (AMC 19.xx Use of Other Base Flood Data in A and V zones).

2. Other flood hazard areas identified by the City of Anacortes Public Works Department based on review of historical data or other defensible evidence of past flooding.
- B. Tsunami hazard areas are designated as geologically hazardous areas per AMC 19.70.xxx and are subject to applicable development regulations outlined in \_\_\_\_\_.
- C. Climate change and sea level rise are affecting many coastal communities and some within Puget Sound. Applicants are urged to become familiar with potential impacts of climate change and sea level rise if development is proposed near the marine shoreline or associated low-lying areas.

#### 19.70.615 Frequently Flooded Areas – Mapping.

- A. **Reference Only.** The maps and resources cited above are to be used as a guide for the City of Anacortes Planning, Community & Economic Development Department, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

#### 19.70.620 Frequently flooded areas – General Development Standards

- A. All development proposals must comply with (AMC 19.xx - new AMC Chapter for Floodplain Management) for general and specific flood hazard protection.
- B. Development may not reduce the base flood water storage ability. Construction, grading or other regulated activities that would reduce the flood water storage ability must be mitigated by creating compensatory storage on or off site.
- C. Alteration of Watercourses.
  1. Projects that will relocate a watercourse must also submit a request for Conditional Letter of Map Revision, where required by FEMA. The project may not be approved unless FEMA issues the CLOMR (which requires ESA consultation) and the provisions of the letter are made part of the permit requirements.
  2. The Director must notify adjacent communities (if applicable) and the Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to FEMA.
  3. Maintenance must be provided within the altered or relocated portion of said watercourse so that flood carrying capacity is not diminished. If the maintenance program does not call

**Commented [GL144]:** DOE recommends updating the designation and mapping of FFAs including:

Final updated Flood Insurance Rate Maps (FIRM) from FEMA  
Preliminary updated FIRM maps from FEMA  
Identification of other flooding areas outside the FEMA mapped 100-year floodplain, which may be threatened by flooding under future conditions. For example: "flood of record", areas subject to groundwater flooding, or stream systems where the path of flood waters can be unpredictable.

**Commented [LBG145]:** This language is from FEMA's NFIP-ESA Model Ordinance, Floodplain Management and the ESA, Region 10, November 2013

[https://www.fema.gov/media-library-data/1383597893424-4747f702310a2bbc7e04ea83d66f73f5/NFIP\\_ESA\\_Model\\_Ordinance.pdf](https://www.fema.gov/media-library-data/1383597893424-4747f702310a2bbc7e04ea83d66f73f5/NFIP_ESA_Model_Ordinance.pdf)

Check to see if this would better be covered in FWHCA section, under streams.

for cutting of native vegetation, the system must be oversized at the time of construction to compensate for said vegetation growth or any other natural factor that may need future maintenance.

- D. Base flood data and flood hazard notes must be shown on the face of any recorded plat or binding site plan, including, but not limited to, base flood elevations, flood protection elevation, boundary of floodplain, and zero rise floodway.
- E. All development must conform to the provisions of the currently adopted International Building Code, including submittal of a critical areas report.

#### **19.70.625 Frequently Flooded Areas – Critical Areas Report Additional Requirements**

- A. Report required – unless an activity is specifically exempted or allowed under 19.70.035 or .040, a critical areas report is required.
- B. Preparation by a qualified professional.
- C. Third party review required.
- D. Minimum Report Contents. A critical areas report must include a habitat assessment prepared in accordance with [Regional Guidance for Floodplain Habitat Assessment and Mitigation](#) (FEMA Region X, 2013), or as hereafter amended. The assessment must determine if the project would adversely affect:
  - 1. The primary constituent elements identified when a species is listed as threatened or endangered;
  - 2. Essential fish habitat designated by the National Marine Fisheries Service;
  - 3. Fish and wildlife habitat conservation areas;
  - 4. Vegetation communities and habitat structures;
  - 5. Water quality;
  - 6. Water quantity, including flood and low flow depths, volumes and velocities;
  - 7. The channel's natural planform pattern and migration processes;
  - 8. Spawning substrate, if applicable; and/or
  - 9. Floodplain refugia, if applicable.
- E. If the assessment concludes that the activity is expected to have an adverse effect on water quality and/or aquatic or riparian habitat or habitat functions, the applicant must provide a plan to mitigate those impacts, in accordance with Regional Guidance for Floodplain Habitat Assessment and Mitigation, FEMA Region X, 2013.
- F. The following activities do not require completion of a habitat assessment:

**Commented [LBG146]:** These are all covered in the general provisions exemptions. Need to review and clean up.

1. Repair of existing building in its existing footprint, including damage by fire or other casualties;
2. Removal of noxious weeds;
3. Replacement of nonnative vegetation with native vegetation;
4. Ongoing activities such as lawn and garden maintenance;
5. Removal of hazard trees;
6. Normal maintenance of public utilities and facilities;
7. Restoration or enhancement of floodplains, riparian areas and streams that meets federal and state standards.

## DEFINITIONS

"Alteration" means any human activity that results or is likely to result in an impact upon the existing condition of a critical area or its buffer. Alterations include, but are not limited to, grading, filling, dredging, draining, channelizing, applying herbicides or pesticides or any hazardous substance, discharging pollutants, grazing domestic animals, paving, constructing, applying gravel, modifying for surface water management purposes, cutting, pruning, topping, trimming, relocating or removing vegetation or any other human activity which results or is likely to result in an impact to existent vegetation, hydrology, wildlife or wildlife habitat. Alterations do not include walking, fishing or any other passive recreation or similar activities.

"Aquifer" means a body of soil or rock that contains sufficient saturated material to conduct groundwater and yield usable quantities of groundwater to wells or springs.

"Base flood" means a flood having a one percent chance of being equaled or exceeded in any given year, often referred to as the "100-year flood".

"Base flood elevation" means the water surface elevation of the base flood in relation to the North American Vertical Datum of 1988.

"Best available science" means current scientific information used in the process to designate, protect, or restore critical areas that is derived from a valid scientific process as defined by WAC 365-195-900 through 925. Sources of best available science are included in "Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas" published by the Washington State Department of Commerce.

"Best management practices (BMPs), critical areas" means physical or structural tools and/or management practices which, when used singularly or in combination, prevent or reduce adverse impacts to critical areas or their buffers.

"Buffer" is an area contiguous to a critical area that is required to protect the critical area and provide for the continued maintenance, functioning, and/or structural stability of a critical area.

"Critical aquifer recharge areas" are areas with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge.

"Critical areas" means critical aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, streams, and wetlands.

"Ditches" are artificial drainage features created in uplands through purposeful human action, such as irrigation and drainage ditches, grass-lined swales, and canals. Purposeful creation must be demonstrated through documentation, photographs, statements, and/or other evidence.

"Enhancement" means an action which increases the functions and values of a stream, wetland, or other critical area or buffer.

**Commented [LBG147]:** This section is still being developed.

**Commented [LBG148]:** Coastal Geologic Services recommends referencing all elevations to the North American Vertical Datum of 1988 for consistency with tide gauges and professional surveyors. This is currently the codified datum for the City of Anacortes in Ch. 1.16.

**Commented [LBG149]:** From DOE Wetlands Guidance for CAO Updates

**Commented [GL150]:** [WAC 365-190-030](#)

**Commented [GL151]:** For consideration...

"Erosion" means the process by which soil particles are mobilized and transported by natural agents such as wind, rain-splash, frost action or surface water flow.

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

"Federal Emergency Management Agency (FEMA) floodway" means the channel of the stream and that portion of the adjoining floodplain which is necessary to contain and discharge the base flood flow without increasing the base flood elevation more than one foot.

"Fish and wildlife habitat conservation areas" are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including season ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. These areas do not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

"Floodway, zero rise" means the channel of a stream and that portion of the adjoining floodplain which is necessary to contain and discharge the base flood flow without any measurable increase in flood height. A measurable increase in base flood height means a calculated upward rise in the base flood elevation, equal to or greater than .01 foot, resulting from a comparison of existing conditions and changed conditions directly attributable to development in the floodplain. This definition is broader than that of the FEMA floodway, but always includes the FEMA floodway. The boundaries of the 100-year floodplain, as shown on the Flood Insurance Study for \_\_\_\_\_, are considered the boundaries of the zero-rise floodway unless otherwise delineated by a critical area study.

"Floodplain" means the total area subject to inundation by the base flood.

"Frequently flooded areas" are lands in the floodplain subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater. These areas include, but are not limited to streams, rivers, lakes, coastal areas, wetlands, and areas where high groundwater forms ponds on the ground surface.

"Functions and values" means the beneficial services provided by critical areas to society, including, but not limited to, improving and maintaining water quality, providing fish and wildlife habitat, supporting terrestrial and aquatic food chains, reducing flooding and erosive flows, wave attenuation, historical or archaeological importance, educational opportunities, and recreation. These beneficial roles are not listed in order of priority.

**Commented [GL152]:** [WAC 365-190-030\(5\)](#)

**Commented [GL153]:** [WAC 365-190-030\(6a & c\)](#)

**Commented [GL154]:** [WAC 365-190-030\(8\)](#)

**Commented [GL155]:** As part of SMP updated, consider expanding this definition to include areas that are subject to potential effects of high tides with strong winds, sea level rise, and extreme weather events resulting from global climate change.

**Commented [LBG156]:** DOE Wetlands Guidance for CAO Updates

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

**Commented [GL157]:** Definition from RCW 36.70a.030(9). Updated 2010.

**"Groundwater"** means water in a saturated zone or stratum beneath the surface of the land or below a surface water body.

**"Habitats of local importance"** designated as fish and wildlife habitat conservation areas include those areas found to be locally important by the City of Anacortes.

**Commented [GL158]:** [WAC 365-190-030\(6\)\(b\)](#)

**"Hazard tree"** means.....

**"In-lieu-fee program"** means an agreement between a regulatory agency (state, federal or local) and a single sponsor, generally a public natural resource agency or non-profit organization. Under an in-lieu-fee agreement, the mitigation sponsor collects funds from an individual or a number of individuals who are required to conduct compensatory mitigation required under a wetland regulatory program. The sponsor may use the funds pooled from multiple permittees to create one or a number of sites under the authority of the agreement to satisfy the permittees' required mitigation.

**Commented [LBG159]:** 19.70.130 Mitigation requirements

**"Landslide"** means an episodic downslope movement of a mass including, but not limited to, soil, rock or snow.

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

**Commented [GL160]:** WAC 365-190-030(10)

**"Mine hazard areas"** are those areas directly underlain by, adjacent to, or affected by mine workings such as adits, tunnels, drifts, or airshafts.

**Commented [GL161]:** WAC 365-190-030(12)

**"Mitigation"** means the use of any or all of the following actions listed in descending order of preference:

1. Avoiding the impact by not taking a certain action;
2. Minimizing the impact by limiting the degree or magnitude of the action by using appropriate technology or by taking affirmative steps to avoid or reduce the impact;
3. Rectifying the impact by repairing, rehabilitating or restoring the affected critical area or buffer;
4. Reducing or eliminating the impact over time by preserving or maintenance operations during the life of the development proposal;
5. Compensating for the impact by replacing, enhancing or providing substitute critical areas and environments;
6. Monitoring the impact and taking appropriate corrective measures.

**"Mitigation"** means avoiding, minimizing, or compensating for adverse critical areas impacts, using the sequential order of preference listed in 19.70.130, Mitigation requirements.

"Monitoring" means evaluating the impacts of development proposals on biologic, hydrologic and geologic systems and assessing the performance of required mitigation through the collection and analysis of data for the purpose of understanding and documenting changes in natural ecosystems, functions and features including, but not limited to, gathering baseline data.

"Native Growth Protection Area/ Easement" (NGPA/E) means.....

"Native vegetation" means plant species that occur naturally in a particular region or environment and were present before European colonization.

"Noxious weed" means any plant which is highly destructive, competitive, or difficult to control by cultural or chemical practices, limited to those plants on the state noxious weed list contained in Chapter [16-750 WAC](#) and those regulated by Skagit County.

"Primary association" means the fundamental link between a species and land or aquatic area where anadromous fish, endangered, threatened or sensitive species breed or feed.

"Qualified Professional" means the following means an individual or entity with experience and training in the scientific discipline appropriate for the relevant critical area in accordance with [WAC 365-195-905\(4\)](#). A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or related field that is relevant to the applicable critical area type, and two years of related work experience. For particular critical area types:

A qualified professional for wetlands must be a Professional Wetland Scientist that is certified through the Society of Wetland Scientists Professional Certification Program.

A qualified professional for fish and wildlife habitat conservation areas or frequently flooded areas must be a biologist with experience preparing reports for the relevant type of habitat.

A qualified professional for geologically hazardous areas must be an engineer or geologist, licensed in the State of Washington, with experience analyzing geologic, hydrologic, and groundwater flow systems, and who has experience preparing reports for the relevant type of hazard.

A qualified professional for critical aquifer recharge areas must be a professional engineer, licensed in the State of Washington, trained and qualified to analyze geologic, hydrologic, and groundwater flow systems; or by a licensed hydrogeologist or a licensed geologist who has relevant training and experience analyzing geologic, hydrologic and groundwater flow systems.

"Repair or maintenance" means an activity that restores the character, scope, size, and design of a serviceable area, structure, or land use to its previously authorized and undamaged condition. Activities that change the character, size, or scope of a project beyond the original design and drain, dredge, fill, flood, or otherwise alter critical areas are not included in this definition.

"Replacement" means.....

"Restoration" means measures taken to restore an altered or damaged natural feature, including: (a) Active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the

**Commented [LBG162]:** DOE Wetlands Guidance for CAO Updates

**Commented [LBG163]:** DOE Wetlands Guidance for CAO Updates

**Commented [LBG164]:** From Skagit County.

**Commented [GL165]:** Not currently specified in AMC.

**Commented [GL166]:** [AMC 17.70.030](#)

**Commented [GL167]:** [AMC 17.70.550\(A\)](#); Except FFAs added to this definition

**Commented [GL168]:** [AMC 17.70.230\(A\)](#)

**Commented [GL169]:** [17.70.120\(B\)](#) plus modifications recommended by GeoEngineers

**Commented [LBG170]:** DOE Wetlands Guidance for CAO Updates

**Commented [LBG171]:** DOE Wetlands Guidance for CAO Updates

functioning condition that existed prior to an unauthorized alteration; and (b) Actions performed to re-establish structural and functional characteristics of a critical area that have been lost by alteration, past management activities, or catastrophic events.

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

**"Shoreline jurisdiction"** means.....

**"Slope"** means an inclined ground surface, the inclination of which is expressed as a ratio or percentage of vertical distance to horizontal distance by the following formula:  $((\text{vertical distance} / \text{horizontal distance}) \times 100) = \% \text{ Slope}$

**"Special Flood Hazard Area"** means the land in the floodplain that is subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

**"Species of local importance"** are those species that are of local concern designated by the City due to their population status or their sensitivity to habitat manipulation.

**"Stream"** means an area where open surface water produces a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices, or other entirely artificial watercourses, unless they are used by salmonids or are used to convey a watercourse naturally occurring prior to construction. A channel or bed need not contain water year-round, provided there is evidence of at least intermittent flow during years of normal rainfall.

**"Unavoidable impacts"** means adverse impacts that remain after all appropriate and practicable avoidance and minimization has been achieved.

**"Volcanic hazard areas"** include areas subject to pyroclastic flows, lava flows, and inundation by debris flows, lahars, mudflows, or related flooding from volcanic activity.

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

**"Wetland Mitigation Bank"** means a site where wetlands are restored, created, enhanced, or in exceptional circumstances, preserved, expressly for the purpose of providing compensatory mitigation in advance of unavoidable impacts to wetlands or other aquatic resources that typically are unknown at the time of certification to compensate for future, permitted impacts to similar resources.

**Commented [GL172]:** WAC 365-190-030(18)

**Commented [LBG173]:** From AMC 17.70.030.

**Commented [GL174]:** WAC 365-190-030(19)  
DOE Wetlands Guidance for CAO Updates

**Commented [GL175]:** DOE Wetlands Guidance for CAO Updates

**Commented [LBG176]:** DOE Wetlands Guidance for CAO Updates

**Commented [GL177]:** WAC 365-190-030(21)

**Commented [GL178]:** RCW 36.70A.030(21)  
WAC 365-190-030(22)

**Commented [LBG179]:** DOE Wetlands Guidance for CAO Updates

"Wetland mosaic" means an area with a concentration of multiple small wetlands, in which each patch of wetland is less than one acre; on average, patches are less than 100 feet from each other; and areas delineated as vegetated wetland are more than 50% of the total area of the entire mosaic, including uplands and open water.

**Commented [LBG180]:** DOE Wetlands Guidance for CAO  
Updates

## "OPEN SPACE" CONNECTIVITY

