

**CITY OF SUMAS
PROPOSED UPDATES TO CRITICAL AREAS REGULATIONS**

Chapter 15.20 - Critical Areas

Update Purpose and Intent

15.20.020 Purpose and intent.

A. The intent of this chapter is to identify and define the types and qualities of certain critical areas within the Sumas community which contribute to or affect public health, safety and general welfare; and to protect those critical areas deemed important by the citizens of Sumas, the state of Washington, and the federal government. Critical areas addressed in this chapter include:

1. Geologically hazardous areas;
2. ~~Upland-Fish and~~ wildlife habitat conservation areas; ~~and~~
3. Aquifer recharge areas; ~~and~~
4. ~~Wetlands.~~

B. The purpose of this chapter is to provide understandable and reasonable requirements for the use and development of land in proximity to critical areas, while protecting such critical areas based on the best available science. The requirements set forth herein are adopted in order to:

1. Minimize development impacts and protect the beneficial uses, natural functions and values of critical areas;
2. Prevent erosion and loss of slope and soil stability caused by grading or alteration of earth surfaces and removal of trees, shrubs and root systems of vegetative cover;
3. Protect the public against potentially avoidable losses from landslide, subsidence, and erosion; and
4. Meet the requirements of the Washington Growth Management Act (Chapter 36.70A RCW) with respect to the protection of critical areas. (Ord. 1400 § 1 (Exh. A) (part), 2004)

Update Relationship to Other Regulations

15.20.040 Relationship to other regulations.

A. The regulations contained in this chapter shall apply as an overlay to other regulations established by the city. In the event of any conflict between these regulations and any other regulations, the more restrictive shall apply.

B. Regulation of frequently flooded areas as required by Chapter 36.70A RCW and Chapter 365-190 WAC is provided through the flood damage prevention ordinance codified in Chapter 14.30.

C. Regulation of most wetlands is provided through the shoreline master program codified in Chapter 15.04. [See Section 15.20.050, below, that addresses applicability of this chapter within shoreline jurisdiction.](#)

D. Regulation of [most fish and wildlife](#) habitat conservation areas and ~~of~~ riparian wildlife habitat conservation areas is provided through the shoreline master program codified in Chapter 15.04. ~~Only upland wildlife habitat conservation areas not subject to shoreline master program jurisdiction are regulated pursuant to this chapter.~~ [See Section 15.20.050, below, that addresses applicability of this chapter within shoreline jurisdiction.](#)

E. Compliance with the provisions of this chapter shall not be construed as constituting compliance with any other applicable regulation.

F. These regulations are additional to, and coordinate with, the Sumas comprehensive plan, the shoreline master program, the flood damage prevention ordinance, and other applicable regulations adopted by the city of Sumas. (Ord. 1400 § 1 (Exh. A) (part), 2004)

Update Applicability

15.20.050 Applicability and jurisdiction.

This chapter shall apply to all land [and water areas](#), all land uses and development, and all structures and facilities within the city of Sumas, except as specifically exempted under Section 15.20.090; [provided, that upon the effective date of an updated shoreline master program adopted by the city and approved by the Washington Department of Ecology pursuant to RCW 90.58 and WAC 173-26, this chapter shall only apply to those areas within the city lying outside of shoreline jurisdiction as established in chapter 15.04 of this title, except to the extent that specific provisions contained herein have been incorporated by reference into the updated shoreline master program.](#) (Ord. 1400 § 1 (Exh. A) (part), 2004)

Update Detailed Study Requirements

15.20.200 Detailed study.

A. If a detailed study is determined to be necessary, the applicant shall be responsible for making arrangements for preparation of the study by a qualified consultant for the type of critical area(s) involved.

B. The detailed study shall include a thorough investigation of the identified critical area(s), resulting in the submission of a report which, at a minimum, shall include the following:

1. Complete description of the proposed development;
2. Site plan of existing conditions at the project site, drawn accurately to scale, showing the type, location, boundary, and extent of critical areas and critical area buffers (the plan must show

property boundaries, north arrow, topography, and the environs within two hundred feet of the project parcel);

3. Description of the surrounding properties and uses;
4. Detailed description of each critical area, its functions, values and/or associated hazard;
5. Discussion of the impacts likely to result from the project, including probable impact on the function, value or hazard associated with the critical area resulting from the proposal;
6. Proposed mitigation measures or a mitigation plan consistent with Section 15.20.230(B); and
7. Site plan of proposed conditions at the project site, using the existing-conditions plan described above as a base map;
8. Qualifications of consultant(s) who prepared the study along with a description of the methods used.

C. The zoning administrator may approve modifications to the content requirements of the study where [the administrator makes a finding that](#) more or less information is deemed necessary to adequately address the critical area, the project's potential impacts, and proposed mitigation. [Furthermore, the zoning administrator may waive the requirement for preparation of a detailed study when the administrator makes a finding, based on review of information available from reliable sources, that no critical area or critical area buffer or setback will be impacted by the proposed activity. All such findings shall be made in writing and shall be included in the project file.](#) (Ord. 1400 § 1 (Exh. A) (part), 2004)

Add Wetland and Fish and Wildlife Regulations

15.20.260 Wetlands - Designation and classification.

- A. Designation. Wetlands shall be identified and delineated according to the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0, 2010 or as revised).
- B. Rating (Classification). Wetlands shall be rated (classified) as Category I, Category II, Category III, or Category IV based upon *Washington State Department of Ecology's Wetlands Rating System for Western Washington* (2014) or most recent update.

15.20.270 Wetlands indicators.

The administrator shall use the following as indicators of the need for a wetland detailed study:

- A. The site is located within an area listed as a wetland in the city critical areas inventory or critical area maps;

- B. Documentation through any public resource information source that a wetland exists on or adjacent to the site;
- C. A finding by a qualified wetland biologist that the presence of a wetland is likely;
- D. A reasonable belief by the zoning administrator based on local information that a wetland may exist on or adjacent to the site. Such a belief shall be supported through consultation with a qualified consultant.

15.20.280 Wetlands – Detailed study requirements.

- A. All development subject to the provisions of this chapter that is within a designated wetland area or within an area about which the Administrator has information indicating that a wetland may be present or within a distance of 200 feet of any such area shall be required to submit a detailed study report prepared by a qualified wetland biologist.
- B. Detailed study reports, when required, shall include the following information:
 1. Project description;
 2. Site plan or plans identifying the extent and boundaries of all wetlands as determined according to the methodology identified in Section 15.20.260(A) of this chapter and identifying the location of the proposed activity. The Administrator may require that the delineated wetland boundaries be surveyed by a professional land surveyor and the results of said survey be provided to the City in a digital format acceptable to the City.
 3. A wetland community description and classification (rating) prepared according to the classification system identified in Section 15.20.260(B).
 4. An assessment of wetland functions and values which addresses the following: soils, vegetation, hydrology, fish and wildlife habitat, and aesthetics.
 5. Mitigation plan demonstrating how the proposed project (including any proposed mitigation) is able to mitigate impacts to wetlands in conformance with the mitigation sequence outlined in Subsection 15.20.300(A), the performance requirements set forth in Section 15.20.290, and the mitigation requirements set forth at Section 15.20.300, including demonstrating how the proposal will result in no net loss of ecological functions and values.
- C. The Administrator may request additional information regarding the proposed development or activity if deemed necessary to determine the project’s impacts and sufficiency of any proposed mitigation.

15.20.290 Wetlands - Performance requirements.

- A. Basic Requirement.

Except as otherwise allowed pursuant to this Chapter, development or other regulated activities are prohibited within a regulated wetland or its standard buffer unless the detailed study report demonstrates that the proposal will not degrade the functions and values of the subject wetland and buffer or that all impacts to these areas will be fully mitigated. The following requirements shall apply:

1. Category I Wetlands. Regulated activities are prohibited within a Category I wetland and its standard buffer. Buffer reductions are prohibited.
2. Category II Wetlands. Regulated activities are prohibited within a Category II wetland and its standard buffer. Reduction of the standard buffer adjacent to a Category II wetland shall be permitted only where consistent with subsection (E), below, and only when all impacts are compensated at the expense of the developer through implementation of a mitigation plan

prepared by a qualified wetland biologist consistent with the requirements set forth in Section 15.20.300.

3. Category III Wetlands. Regulated activities are prohibited within a Category III wetland and its standard buffer. Filling of a Category III wetland or reduction of the standard buffer adjacent to a Category III wetland shall only be permitted where consistent with subsection (E), below, and only when all impacts are compensated at the expense of the developer through implementation of a mitigation plan prepared by a qualified wetland biologist consistent with the requirements set forth in Section 15.20.300.
4. Category IV Wetlands. Regulated activities are prohibited within a Category IV wetland and its standard buffer, except as follows. Filling of a Category IV wetland or reduction of the standard buffer adjacent to a Category IV wetland shall only be permitted where consistent with Subsection (E), below, and only when all impacts are compensated at the expense of the developer through implementation of a mitigation plan prepared by a qualified wetland biologist consistent with the requirements set forth in Section 15.20.300.

B. Buffers.

Buffers are upland areas adjacent to wetlands that are intended to provide sufficient separation between the aquatic feature and the surrounding areas and uses to protect the wetlands from disturbance from human activities. Buffers also provide vital upland habitat for wildlife species that require wetlands as part of their life cycle. Buffers shall be measured horizontally in a landward direction from the delineated wetland edge; provided that wetland buffers shall not extend into and beyond substantially improved surfaces, such as lawfully established structures and impervious surfaces.

C. Standard Buffers.

The following standard buffers shall be established for all wetlands based on classification (rating) and level of function for wildlife habitat. Standard buffers are assumed to be comprised of a relatively intact native vegetation community that is adequate to protect the functions and values of the wetland at the time of the proposed activity.

High level of function for wildlife habitat (wetlands with habitat function scores of 8 or 9 on the wetland rating form).	
Wetland Category	Standard Buffer Width
Category I	250 feet
Category II	150 feet
Category III	100 feet
Category IV	50 feet

Moderate level of function for wildlife habitat (wetlands with habitat function scores of 5 to 7 on the wetland rating form).	
Wetland Category	Standard Buffer Width
Category I	150 feet
Category II	125 feet
Category III	75 feet
Category IV	50 feet

Low level of function for wildlife habitat (wetlands with habitat function scores of 4 or less on the wetland rating form).	
Wetland Category	Standard Buffer Width
Category I	100 feet

Category II	100 feet
Category III	75 feet
Category IV	50 feet

D. Increased Buffers.

If the standard buffer is not comprised of a relatively intact native vegetation community sufficient to protect the functions and values of the wetland, the Administrator shall increase the standard buffer OR the applicant may choose to enhance the standard buffer to meet the above standard. Any such buffer enhancement shall be undertaken at the sole expense of the applicant and shall be based on and incorporated into a mitigation plan prepared by a qualified biologist consistent with the requirements established at Subsection 15.20.300(G). The Administrator shall also increase the required buffer above the standard buffer width if it is determined that unique circumstances exist, either in terms of the sensitivity of the wetland or the intensity of the proposed land use, such that an increased buffer is necessary to protect the functions and values of the wetland.

E. Buffer Reductions.

1. Buffer Reduction Based on Mitigation. Where compensatory mitigation is provided, standard buffers may be reduced, provided that the standard buffer is not reduced by more than 25 percent for Category II wetlands, and not by more than 25 percent for Category III and Category IV wetlands; provided that, standard buffers shall not be reduced by more than 25 percent for wetlands having a habitat functions score of over 4 on the wetland rating form. Reduction of the standard buffer of a Category I wetland is prohibited. Buffer reductions shall only be permitted when all impacts to wetlands and their required buffers are compensated at the expense of the applicant through implementation of a mitigation plan prepared by a qualified wetland biologist consistent with Section 15.20.300(G), below. Except as otherwise allowed pursuant to this Chapter, filling of any wetland, except a Category III or IV wetland, or reduction of a wetland buffer by more than the percentages stated above, shall require approval of a critical areas variance.
2. Buffer Averaging. Standard buffers may be reduced through the use of buffer averaging provided that the total buffer area is not reduced below the area that would result from use of the standard buffer, and provided, further, that the standard buffer is not reduced by more than 25 percent, and the use of buffer averaging will improve the overall protection of the wetland. Reduction of the standard buffer of a Category I wetland is prohibited. Buffer averaging may not be utilized in combination with buffer reductions based on mitigation.

F. Limitation on Subdivision.

Properties located partially or wholly within a wetland or wetland buffer shall not be subdivided in such a way that would increase the impacts to the resource that would result from development of the proposed lots or parcels.

15.20.300 Wetlands - Mitigation requirements.

- A. When a regulated activity is proposed within a wetland or wetland buffer, the applicant shall demonstrate to the satisfaction of the Administrator that all reasonable efforts have been made to avoid, minimize and/or compensate for potential impacts consistent with the following mitigation sequence
1. Avoiding the impact altogether by not taking a certain action;
 2. Minimizing the impacts by limiting the degree or magnitude of an action or by otherwise adjusting the action so as to reduce or avoid impacts;
 3. Rectifying the impact by repairing, rehabilitating or restoring the affected area;

4. Reducing or eliminating the impact over time through preservation and/or maintenance through the course of the action; and
 5. Compensating for the adverse impact by replacing, enhancing, or providing similar substitute resources or environments and monitoring the adverse impact and the mitigation project and taking appropriate corrective measures;
- B. Except as otherwise allowed in this Chapter, all projects that result in permanent loss or degradation of wetland functions and values due to a proposed reduction in wetland or buffer area shall provide compensatory mitigation to offset proposed actions.

C. Mitigation Ratios.

The following ratios shall be used as a guide to determine the acreage of wetland or buffer to be created, restored or enhanced in relation to the acreage of wetland or buffer area lost:

Wetland Category	Area Created/Restored : Area Lost	Area Enhanced : Area Lost
Category I	6:1	12:1
Category II - forested	3:1	9:1
Category II – scrub/shrub or emergent; Category III	2:1	6:1
Category IV	1.5:1	3:1

- D. Compensatory mitigation shall be provided on-site or off-site in the location that will provide the greatest ecological benefit and have the greatest likelihood of success, provided that mitigation occurs as close as possible to the impact area and within the same watershed as the permitted alteration. This provision may be waived upon demonstration through a watershed- or landscape-based analysis that mitigation within an alternative sub-basin of the same basin or within an approved mitigation bank would have the greatest ecological benefit and the greatest likelihood of success.
- E. All wetlands created, restored or enhanced as part of compensatory mitigation required pursuant to this Chapter shall be provided with buffers of sufficient size to protect their functions and values.
- F. All mitigation areas shall be protected and managed to prevent degradation and ensure long-term protection of critical area functions and values. Permanent protection shall be achieved through deed restriction, protective covenant or other protective measure.

G. Mitigation Plan.

Where preparation of a mitigation plan is required, said plan shall be prepared by a qualified wetland biologist consistent with the Department of Ecology guidance document, Guidance on Wetland Mitigation in Washington State, and shall be approved by the Administrator. The mitigation plan shall be prepared based on the best available science and shall address the following:

1. The characteristics of the wetland;
2. The characteristics of the watershed contributing to the wetland;
3. The functions and values of the wetland to be protected by the buffer;
4. The characteristics of the buffer;
5. The intensity of the proposed adjacent land use;
6. The functions that the standard buffer is intended to provide at the specific location;

7. Proposed measures to reduce the adverse effects of adjacent land uses, such as lighting and noise restrictions, buffer fencing and signage, conservation easements, use of integrated pest management and limitations on application of pesticides, and use of low impact development techniques;
8. Proposed mitigation measures together with an analysis of the anticipated effectiveness of the proposed mitigation measures to protect the functions and values of the affected wetland and wetland buffer. Such mitigation shall include compensation for lost time when the wetland is unavailable to perform its function;
9. Proposed monitoring requirements to ensure the effectiveness of the proposed mitigation; and
10. Proposed bonding to insure the completion and effectiveness of the proposed mitigation.

H. Completion of Mitigation.

Where feasible, mitigation projects shall be completed prior to activities that will disturb wetland or buffer areas. In all other cases, mitigation shall be completed as quickly as possible following disturbance and prior to use or occupancy of the activity or development unless such timing is found to be infeasible due to factors such as the optimal time of year for planting. The Administrator may require the posting of a performance bond or other form of surety to insure that all required mitigation, including required monitoring and repair, is completed in a timely fashion and consistent with the approved mitigation plan.

15.20.310 Activities allowed in wetlands, streams, and buffers.

The following activities may be permitted as specified without the issuance of a critical areas variance when all reasonable measures have been taken to avoid adverse effects on functions and values, compensatory mitigation is provided for all unavoidable adverse impacts, and the amount and degree of alteration are limited to the minimum needed to accomplish the project purpose:

- A. Surface water discharge into Category II, III, and IV wetlands and their buffers, Category I wetland buffers, and/or streams and their buffers when no other alternatives for discharge are feasible and the discharge is designed to minimize physical, hydrologic and ecological impacts to the wetland or stream.
- B. Utility lines in Category II, III, and IV wetlands and their buffers, Category I wetland buffers, and/or streams and their buffers when the following criteria are met:
 1. No feasible conveyance alternative is available;
 2. The project is designed and constructed to minimize physical, hydrologic and ecological impacts;
 3. The utility line is located as far from the wetland or stream edge as possible and in a manner that minimizes disturbance of soils and vegetation;
 4. Clearing, grading, and excavation activities are limited to the minimum necessary to install the utility line and the area is restored following utility installation; and
 5. Buried utility lines are constructed in a manner that prevents adverse impacts to subsurface drainage, such as through the use of trench plugs.
- C. Public roads, bridges, and trails in Category II, III, and IV wetlands and their buffers, Category I wetland buffers, and streams and their buffers when no feasible alternative alignment is available and the facility is designed and constructed to minimize physical, hydrologic and ecological impacts, including placement on elevated structures as an alternative to fill, where feasible.

- D. Storm water management facilities, limited to detention / retention / treatment ponds, media filtration facilities, and lagoons or infiltration basins, within a Category II, III or IV wetland buffer or stream buffer where the following criteria are met:
1. No other feasible alternative location exists;
 2. The width of the buffer between the storm water facility and the wetland or stream edge is not less than twenty-five feet;
 3. The facility is located, constructed, and maintained in a manner that minimizes adverse effects on the buffer and adjacent wetland or stream;
 4. The storm water facility meets applicable County or state storm water management standards; and
 5. Low impact development approaches have been considered and implemented to the maximum extent feasible.
- E. Storm water conveyance or discharge facilities such as dispersion trenches, level spreaders, and outfalls within a Category II, III, or IV wetland buffer or stream buffer where the following criteria are met:
1. Due to topographic or other physical constraints, there is no feasible location for the facility outside the buffer;
 2. The discharge facility is located as far from the wetland or stream edge as possible and is designed and constructed in a manner that minimizes disturbance of soils and vegetation;
 3. The discharge outlet is designed to prevent erosion and promote infiltration where feasible;
 4. The discharge water meets state water quality standards; and
 5. Low impact development approaches have been considered and implemented to the maximum extent feasible.
- F. Passive recreation facilities that are part of a non-motorized trail system or environmental education program including walkways, wildlife viewing structures, and trails, in wetland and stream buffers provided that all of the following criteria are met:
1. Trails shall not exceed ten feet in width and shall be made of pervious material where feasible;
 2. A minimum buffer of fifteen feet is maintained between the trail or facility and the wetland or stream edge; and
 3. The trail is constructed and will be maintained in a manner that minimizes disturbance of the buffer and the adjacent wetland or stream.

15.20.320 Fish and wildlife habitat conservation areas - Designation.

Areas that meet any of the following criteria shall be designated as fish and wildlife habitat conservation areas (HCA) and shall be subject to the provisions of this Chapter:

- A. Rivers, streams and creeks identified as Waters of the State pursuant to Title 222 WAC.
- B. Areas with which federally and/or state listed species have a primary association.
- C. State priority habitats and areas with which state priority species have a primary association.
- D. Naturally occurring ponds under 20 acres in size.

The foregoing notwithstanding, HCAs shall not include drainage ditches, irrigation canals and other similar artificial features that are within the boundaries of and maintained by a drainage improvement district, irrigation district or other similar agency.

15.20.330 Fish and wildlife HCA indicators.

The zoning administrator shall use the following as indicators of the need for a fish and wildlife HCA detailed study:

- A. The site is located within an area listed as a fish and wildlife HCA in the city critical areas inventory or critical area maps;
- B. Documentation through any public resource information source that a fish and wildlife HCA exists on or adjacent to the site;
- C. A finding by a qualified biologist that the presence of a fish and wildlife HCA is likely;
- D. A reasonable belief by the zoning administrator based on local information that a fish and wildlife HCA may exist on or adjacent to the site. Such a belief shall be supported through consultation with a qualified consultant. (Ord. 1400 § 1 (Exh. A) (part), 2004)

15.20.340 Fish and wildlife habitat conservation areas – Detailed study requirements.

- A. All development subject to the provisions of this chapter that is within a designated HCA or within an area about which the Administrator has information indicating that a HCA may be present or within a distance of 200 feet of any such area shall be required to submit a detailed study report prepared by a qualified biologist.
- B. A Fish and Wildlife HCA detailed study report shall be prepared by a qualified fish and/or wildlife biologist and shall include the following:
 - 1. A. Identification of the type, location and extent of the habitat area on the project site;
 - 2. B. A habitat description and assessment of the functions and values of the habitat area, including a discussion of the species in question and the related plant and animal species, soils and hydrology.
 - 3. C. A regulatory analysis, including a discussion of any federal, state, tribal and/or local requirements or management recommendations that have been developed for the species and/or habitats in question.
 - 4. A mitigation plan, including a discussion of how the proposal and any proposed mitigation measures is sufficient to avoid or minimize adverse impacts to identified species and habitats.

15.20.350 Fish and wildlife habitat conservation areas - Performance requirements.

- A. Basic Requirement.

A regulated Fish and Wildlife HCA or its standard buffer shall only be altered if the detailed study demonstrates that the proposal will not degrade the functions and values of the subject habitat.

- B. Buffers.

Buffers are upland areas adjacent to fish and wildlife HCAs that are intended to provide sufficient separation between the habitat feature and the surrounding areas and uses to protect the habitat from disturbance from human activities. Buffers also provide vital upland habitat for wildlife species that require stream habitat as part of their life cycle. Buffers shall be measured horizontally in a landward direction from the ordinary high water mark (OHWM), or top of bank where noted, for stream habitats and from the outermost edge of upland habitat areas; provided that HCA buffers

shall not extend into and beyond substantially improved surfaces, such as lawfully established structures and impervious surfaces.

C. Standard Buffers.

1. The following standard buffers shall be established for the following fish and wildlife HCAs based on designation and classification. Standard buffers are assumed to be comprised of a moderately intact native vegetation community that is adequate to protect the functions and values of the resource at the time of the proposed activity.

Stream Habitat - Standard Buffers.

The following standard buffers shall be established for all Stream Habitats based on their classification:

River/Stream	Standard Buffer
Sumas River / Johnson Creek	100 feet. From the OHWM
Sumas Creek	50 feet from the top of bank
Bone Creek	50 feet from the top of bank

2. Non-Stream Habitats.

The Administrator shall determine the appropriate buffer widths for other habitat conservation areas based on the best available information. Buffer widths for non-stream habitat conservation areas shall be as set forth in the following table:

Areas with which federally listed species have a primary association; and State Priority Habitats and areas with which Priority Species have a primary association.	Buffers shall be based on recommendations provided by the Washington Department of Fish and Wildlife PHS Program; provided that local and site specific factors shall be taken into consideration and the buffer width based on the best available information concerning the species/habitat(s) in question and/or the opinions and recommendations of a qualified professional with appropriate expertise.
Natural Ponds	Buffers shall extend fifty (50) feet landward from the ordinary high water mark (OHWM) of ponds under 20 acres in size.

D. Increased Buffers.

If the standard buffer is not comprised of a moderately intact native vegetation community, the Administrator shall increase the standard buffer to protect the functions and values of the resource and buffer areas OR the applicant may choose to enhance the standard buffer to meet the above standard. Any such buffer enhancement shall be undertaken at the sole expense of the applicant and shall be based on and incorporated into a mitigation plan prepared by a qualified biologist consistent with the requirements established at Section 15.20.360. The Administrator shall also increase the required buffer above the standard buffer width if it is determined that unique circumstances exist, either in terms of the sensitivity of the habitat or the intensity of the proposed land use, such that an increased buffer is necessary to protect the functions and values of the resource.

E. Buffer Reductions.

1. Buffer Reduction Based on Mitigation.

Where compensatory mitigation is provided, standard buffers may be reduced, provided that the standard buffer is not reduced by more than 40 percent. Buffer reductions shall only be permitted when all impacts to the habitat and their required buffers are compensated at the expense of the developer through implementation of a mitigation plan prepared by a qualified biologist consistent with section 15.20.360, below. Except as otherwise allowed pursuant to this Chapter, reduction of a HCA buffer by greater than the percentage stated above, shall require approval of a critical areas variance.

2. Buffer Averaging.

Standard buffers may be reduced through the use of buffer averaging provided that the total buffer area is not reduced below the area that would result from use of the standard buffer, and provided, further, that the standard buffer is not reduced by more than 40 percent, and the use of buffer averaging will improve the overall protection of the resource. Buffer averaging may not be utilized in combination with buffer reductions based on mitigation.

F. Limitation on Subdivision.

Properties located partially or wholly within a fish and wildlife habitat conservation area shall not be subdivided in such a way that would increase the impacts to the resource that would result from development of the proposed lots or parcels.

15.20.360 Fish and wildlife habitat conservation areas - Mitigation requirements.

- A. When a regulated activity is proposed within a fish and wildlife habitat conservation area or its associated buffer, the applicant shall demonstrate to the satisfaction of the Administrator that all reasonable efforts have been made to avoid, minimize and/or compensate for potential impacts consistent with the mitigation sequence established at Subsection 15.20.300(A).
- B. All projects that result in permanent loss or degradation of habitat functions and values due to a proposed reduction in a habitat conservation area or buffer area shall provide compensatory mitigation to offset proposed actions.
- C. Compensatory mitigation shall be provided on-site or off-site in the location that will provide the greatest ecological benefit and have the greatest likelihood of success, provided that mitigation occurs as close as possible to the impact area and within the same watershed as the permitted alteration. This provision may be waived upon demonstration through a watershed- or landscape-based analysis that mitigation within an alternative sub-basin of the same basin or within an approved mitigation bank would have the greatest ecological benefit and the greatest likelihood of success.
- D. All habitat conservation areas created, restored or enhanced as part of compensatory mitigation required pursuant to this Chapter shall be provided with buffers of sufficient size to protect their functions and values.
- E. All mitigation areas shall be protected and managed to prevent degradation and ensure long-term protection of critical area functions and values. Permanent protection shall be achieved through deed restriction, conservation easement, protective covenant or other protective measure.
- F. Mitigation Plan.

Where preparation of a mitigation plan is required, said plan shall be prepared by a qualified fisheries, wildlife or natural resource biologist and shall be approved by the Administrator. The mitigation plan shall be prepared based on the best available science and shall address the following:

1. The characteristics of the habitat conservation area;
2. The characteristics of the watershed within which the habitat area is located;
3. The functions and values of the habitat conservation area to be protected by the buffer;

4. The characteristics of the buffer;
 5. The functions that the standard buffer is intended to provide at the specific location;
 6. The intensity of the proposed adjacent land use;
 7. Proposed measures to reduce the adverse effects of adjacent land uses, such as lighting and noise restrictions, buffer fencing and signage, conservation easements, use of integrated pest management and limitations on application of pesticides, and use of low impact development techniques;
 8. Proposed mitigation measures together with an analysis of the anticipated effectiveness of the proposed mitigation measures to protect the functions and values of the affected habitat conservation area and buffer;
 9. Proposed monitoring requirements to ensure the effectiveness of the proposed mitigation; and
 10. Proposed bonding to insure the completion and effectiveness of the proposed mitigation.
- G. Completion of Mitigation.

Where feasible, mitigation projects shall be completed prior to activities that will disturb habitat conservation areas or buffers. In all other cases, mitigation shall be completed as quickly as possible following disturbance and prior to use or occupancy of the activity or development unless such timing is found to be infeasible due to factors such as the optimal time of year for planting. The Administrator may require the posting of a performance bond or other form of surety to insure that all required mitigation, including required monitoring and repair, is completed in a timely fashion and consistent with the approved mitigation plan.

Delete Old Upland Wildlife HCA Provisions

~~15.20.320 Upland wildlife habitat conservation areas designation.~~

~~Upland wildlife habitat conservation areas (HCA) shall be designated based on meeting any one of the following criteria:~~

~~A.—Areas with which endangered, threatened, and sensitive species have a primary association;~~

~~B.—Habitats and species of local importance that have been designated by the city at the time of application;~~

~~C.—State Natural Area Preserves and Natural Resource Conservation Areas. (Ord. 1400 § 1 (Exh. A) (part), 2004)~~

~~15.20.340 Upland wildlife HCA indicators.~~

~~The zoning administrator shall use the following as indicators of the need for a wildlife HCA detailed study:~~

~~A.—The site is located within an area listed as a wildlife HCA in the city critical areas inventory and critical area maps;~~

~~B.— Documentation through any public resource information source that a wildlife HCA exists on or adjacent to the site;~~

~~C.— A finding by a qualified wildlife biologist that the presence of a wildlife HCA is likely;~~

~~D.— A reasonable belief by the zoning administrator based on local information that a wildlife HCA may exist on or adjacent to the site. Such a belief shall be supported through consultation with a qualified consultant. (Ord. 1400 § 1 (Exh. A) (part), 2004)~~

~~15.20.350 Upland wildlife HCA detailed study requirements.~~

~~A wildlife HCA detailed study, if required, shall be prepared by a qualified wildlife biologist and shall include the following, in addition to the minimum requirements established in Section 15.20.200(B):~~

~~A.— Description of the biotic and abiotic conditions of the entire parcel and its environs that includes, at a minimum, a description of soils, vegetation and hydrology.~~

~~B.— A description and an assessment of the functions and values of the habitat area, including a discussion of the following:~~

~~1.— The species in question and the related plant and animal species and habitat;~~

~~2.— Soils;~~

~~3.— Hydrology;~~

~~4.— Buffer size and function;~~

~~5.— Enhancement potential;~~

~~6.— Presence of sensitive, threatened or endangered plants or animals;~~

~~7.— Uniqueness of the habitat to the area or in general;~~

~~8.— Water quality functions;~~

~~9.— Habitat diversity;~~

~~10.— Wildlife corridors and linkages to other habitats;~~

~~11.— Aesthetics or other appropriate functions.~~

~~C.— A regulatory analysis, including a discussion of any federal, state, tribal and/or local requirements or management recommendations that have been developed for the species and/or habitats in question. (Ord. 1400 § 1 (Exh. A) (part), 2004)~~

~~15.20.360 Upland wildlife HCA performance requirements.~~

~~At the time of adoption of the ordinance codified in this chapter, no regulated upland wildlife HCAs have been identified within the city of Sumas or its urban growth area. Should such an area be identified at some time in the future, the applicable performance requirements shall be as follows:~~

~~A.—Bald Eagle Habitat. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). A habitat management plan shall be developed whenever a project is proposed near a verified nest territory or communal roost.~~

~~B.—Performance requirements for all other upland wildlife habitats shall be established at the time such habitats are identified within the city of Sumas. (Ord. 1400 § 1 (Exh. A) (part), 2004)~~

Update Geologically Hazardous Areas Regulations

15.20.380 Geologically hazardous areas classification and designation.

Geologic hazard areas shall be classified as steep slopes, earthquake-sensitive areas and volcanic debris flow areas based on the following criteria:

A. Steep Slopes. Steep slopes shall include all areas with a slope inclination greater than or equal to thirty-five (35) percent with a vertical relief of ten or more feet. Steep slopes shall include, but not be limited to, areas shown as being underlain by the following soil type, as defined in the U.S.D.A. Natural Resource Conservation Service’s Soil Survey of Whatcom County Area, Washington: 157 Squalicum Gravelly Loam.

B. Earthquake-Sensitive Areas. Earthquake-sensitive areas shall include all areas underlain by the following soil types, as defined in the Soil-U.S.D.A. Natural Resource Conservation Service’s 1992 Soil Survey of Whatcom County Area, Washington: 144 Shalcar soil, 116 Pangborn muck, 107 Mt. Vernon fine sandy loam, 123 Puget silt loam, 22 Briscot silt loam, 115 Oridia silt loam, 162 Sumas silt loam.

C. Volcanic Debris Flow Areas. Volcanic debris flow areas shall include all areas within the one-hundred-year floodplain as designated in Chapter 14.30, Flood Damage Prevention. Due to the relatively low frequency of catastrophic volcanic debris flow events, the protective measures contained in Chapter 14.30 are deemed sufficient to reduce potential risks from such events to acceptable levels, and no further study shall be required.

Areas that meet any of the classification criteria established above shall be designated as geologic hazard areas and shall be subject to the provisions of this chapter. (Ord. 1400 § 1 (Exh. A) (part), 2004)

15.20.390 Geologically hazardous areas indicators.

The zoning administrator shall use the following as indicators of the need for a geologically hazardous area detailed study:

A. The site is located within ~~forty~~ fifty (50) feet of an area shown as steep slope or as an earthquake-sensitive area on the city critical area maps. (Ord. 1400 § 1 (Exh. A) (part), 2004)

B. The administrator makes a determination based on a site visit or other documentation that the site, although not shown as such on the city critical area maps, has the potential to meet the criteria established under subsection (A), above.

15.20.400 Geologically hazardous areas detailed study requirements.

A geologically hazardous area detailed study shall be prepared by a ~~registered professional~~ geologist or geotechnical engineer or other professional with similar training and experience and shall include the following, in addition to the minimum requirements established in Section 15.20.200(B):

A. An assessment of the geologic and where applicable, the engineering characteristics of the proposed site.

B. A geologic and, where applicable, geotechnical analysis of the project in relation to the proposed site, including discussion of potential impacts on the hazard area, the project site and adjacent properties. (Ord. 1400 § 1 (Exh. A) (part), 2004)

15.20.410 Geologically hazardous areas performance requirements.

Alteration of a steep slope or earthquake-sensitive area or a site within fifty feet of such area shall only be permitted if the detailed study indicates that the project has been designed such that the risks associated with the hazard area have been reduced to within acceptable levels. ~~Such~~ Where determined to be necessary based on the nature of the proposed activity and the site characteristics, any such mitigation of risks of a geotechnical nature shall be certified by a geotechnical engineer. (Ord. 1400 § 1 (Exh. A) (part), 2004)

Update Aquifer Recharge Designation Criteria

15.20.420 Aquifer recharge area designation.

Aquifer recharge areas shall be designated based on meeting any one of the following criteria:

A. Wellhead protection areas designated per Chapter 246-290 WAC, including, but not limited to, the Sumas wellhead protection area as established through the City of Sumas Wellhead Protection Program adopted on May 28, 1996;

B. Sole source aquifers designated by the U.S. EPA per the Federal Safe Drinking Water Act;

C. Areas designated for special protection as part of a groundwater management program per Chapter 90.44, 90.48 or 90.58 RCW or Chapter 173-100 or 173-200 WAC. (Ord. 1400 § 1 (Exh. A) (part), 2004)

Update Critical Areas Definitions

15.20.480 Definitions.

“Adjacent” or “adjacent to” generally means within a distance of ~~fifty-two~~ [two hundred](#) feet from a critical area or, in some circumstances involving ~~upland fish and~~ wildlife habitat conservation areas, within a greater distance within which the project is likely to impact the critical area.

“Agriculture” or “agricultural activities” means those activities directly pertaining to the production of crops or livestock including but not limited to cultivation, harvest, grazing, animal waste storage and disposal, fertilization, the operation and maintenance of farm and stock ponds, drainage ditches, irrigation systems and canals, and normal maintenance, operation and repair of existing serviceable structures, facilities, or improved areas.

“Aquifer” means any geologic formation capable of yielding a significant amount of ground water to a well, spring or other withdrawal works in sufficient quantity for beneficial use.

“Aquifer recharge areas” means areas where the prevailing geologic conditions allow infiltration rates which contribute significantly to the replacement of groundwater and which create a high potential for contamination of groundwater resources that serve as a source of potable water supplies.

“Artificial watercourse” means ditches and other water conveyance systems, not constructed from natural watercourses, which are artificially constructed and actively maintained for irrigation and drainage [by an irrigation or drainage district](#). Artificial watercourses include lateral field ditches used to drain farmland where the ditch did not replace a natural watercourse. [Artificial watercourses shall not be considered fish and wildlife habitat conservation areas.](#)

“Biologist” means a person having specific relevant expertise who has a minimum of a Bachelor of Science degree in biological sciences or a related field from an accredited college or university or equivalent relevant training in wildlife biology and substantial demonstrated experience as a practicing biologist.

“Buffer” or “buffer area” means a naturally vegetated, undisturbed or revegetated zone immediately adjacent to a critical area that helps protect the critical area from adverse impacts to its functions and values or that helps provide the margin of safety necessary to minimize risk to the public.

“Critical areas” means the following areas as defined and regulated in this chapter: wetlands ~~not subject to shoreline master program jurisdiction~~, geologically hazardous areas, ~~upland fish and~~ wildlife habitat conservation areas ~~not subject to shoreline master program jurisdiction~~, and aquifer recharge areas.

“Endangered species” means a species, native to the state of Washington, that is designated by the responsible state or federal fish or wildlife agency as endangered.

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

“Geologist” means a person who has received a degree in geology from an accredited college or university, or a person who has equivalent education and training and substantial demonstrated experience as a practicing geologist.

“Geotechnical engineer” means a person who is licensed as a civil engineer with the state of Washington and who has recent, related experience as a professional geotechnical engineer.

“Groundwater” means all waters that exist beneath the land surface or beneath the bed of any body of surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves.

“Habitats of local importance” means a seasonal range or habitat element with which a designated species of local importance has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.

“Native vegetation” means plant species which are indigenous to the area.

“Natural watercourse” means any stream in existence prior to settlement that originated from a natural source.

“Ongoing agriculture” means the continuation of any existing agricultural activity as defined in this section, including crop rotations.

“Primary association” means habitat used by a plant or animal species that is necessary for survival, but does not include incidental use areas.

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

“Zoning administrator” means the Sumas zoning administrator and/or their duly authorized agent. (Ord. 1400 § 1 (Exh. A) (part), 2004)

Update Limitations in the Special Flood Risk Zone

14.30.200 Special flood risk zone.

Development other than the following is prohibited in the special flood risk zone:

(1) Minor structures and additions for which a building permit is not required and which create no new residences;

(2) Minor fills and excavations of less than twelve cubic yards which will not raise the level of land above that of the surrounding area;

(3) Normal maintenance, resurfacing and rebuilding at comparable grade of bridges, streets and accessways;

(4) Underground improvements;

(5) Maintenance, repair, alterations and like replacement of existing improvement;

(6) Other minor development which causes no significant impoundment or displacement of floodwaters, such as open fences, signs and small unenclosed structures;

(7) Developments wherein any floodwater blockage effect is at least equally balanced by excavation or removal of structures elsewhere in the special flood risk zone such that, in the opinion of the city utility superintendent or his designee with such evidence as he shall require, the overall capacity to convey floodwaters is not reduced.

Such excavations or structures removed shall not then be eligible for replacement under subsection (5) of this section. Documentation of development in accordance with this part shall be retained by the city to demonstrate no net floodwater blockage increase.

The city utility superintendent or his/her designee may require that suitable notification be provided for any development undertaken pursuant to this subsection as a result of the excavation or removal of structures elsewhere in the special flood risk zone indicating that such excavations or structures removed are not eligible for replacement, including the recording thereof.

(8) Elevated structures which allow floodwaters to flow underneath and which meet the following criteria:

(A) All structures shall be elevated so that the lowest supporting member is located no lower than one foot above the one-hundred-year flood elevation, with all space below the lowest supporting member open so as not to impede the flow of water, except for breakaway walls as provided below.

(B) Breakaway walls are allowed below the base flood elevation provided they are not a part of the structural support of the building and are designed so as to break away in the event of flood without damage to the structural integrity of the building on which they are to be used. If breakaway walls are to be utilized, such enclosed space shall not be used for human habitation.

(C) All structures shall be securely anchored on piling, columns, or foundation walls oriented to the axis of the flow path as determined by the city superintendent. Said support elements shall be certified by a registered professional engineer or architect as capable of withstanding all applied loads of the one-hundred-year flood flow.

(D) There shall be no fill used for structural support, [except where such fill is offset by an equal or greater quantity of excavation and removal of material from the floodplain.](#)

If existing elevation can be shown to be higher than the base flood elevation then that area shall be considered outside (or exempt from) the special flood risk zone. (Ord. 1373 § 1, 2003: Ord. 1035 § 5.1, 1991)

Add New Chapter 15.12 Addressing Stormwater Management

**Chapter 15.12
STORM WATER MANAGEMENT**

Sections:

15.12.010 Stormwater management – Manual adopted by reference.

15.12.010 Stormwater management – Manual adopted by reference.

The Washington Department of Ecology “Stormwater Management Manual for Western Washington” (2014), or as thereafter updated and/or republished, is hereby adopted by reference for use by city personnel in reviewing stormwater site plans, checking best management practices, considering best available science, and providing technical guidance to project proponents. The requirements, thresholds, definitions, best management practice selection processes, and best management practice design criteria of the Stormwater Management Manual for Western Washington, or an equivalent manual, shall apply to all development activity in the city requiring a permit or approval of any nature.