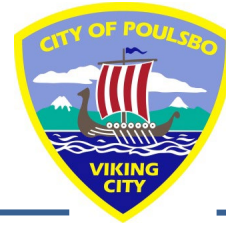


# City of Poulsbo

## Planning & Economic Development



To: Planning Commission  
From: Nikole Coleman, AICP, Planning Manager  
Date: August 13, 2025  
RE: 2025 Critical Areas Ordinance Update, Phase 1 | Background, Requirements, and Next Steps

This memo provides background on the state requirements for critical areas regulation, outlines the history of the City of Poulsbo's Critical Areas Ordinance (CAO), explains the rationale for the 2025 review, and outlines the goals for this current update process. The intent is to prepare the Planning Commission for your upcoming review and deliberation on Phase I of the CAO update, which begins on August 26, 2025.

### State Requirements for Critical Areas Ordinances

The Washington State Growth Management Act (GMA, [RCW 36.70A](#)), adopted in 1990, requires all counties and cities planning under the Act to identify, designate, and protect critical areas, which include:

- [Wetlands](#) (click for an info card with more information)
- [Fish and Wildlife Conservation Areas](#)
- [Critical Aquifer Recharge Areas](#)
- [Frequently Flooded Areas](#)
- [Geologically Hazardous Areas](#)

In accordance with [RCW 36.70A.172\(1\)](#), jurisdictions must incorporate Best Available Science (BAS) into the development of regulations intended to protect these areas. The GMA also requires local governments to periodically review and, if necessary, revise their comprehensive plans and development regulations—including the CAO—on a 10-year cycle.

The [Washington State Department of Commerce](#) (Commerce), in coordination with the Departments of Ecology (Ecology) and Fish and Wildlife (WDFW), provides guidance to assist jurisdictions in complying with these mandates. The most recent technical guidance, including a [Critical Areas Checklist](#) (2024) and Best Available Science documents, informs the City's current review.

Poulsbo's CAO is codified in [Chapter 16.20](#) of the Poulsbo Municipal Code. The current ordinance was last comprehensively updated in 2017. The CAO provides the regulatory framework for development review and environmental protection in areas designated as critical under the GMA.

### Why the CAO is Being Updated in 2025

Poulsbo is required to complete its next GMA periodic review and adopt any necessary CAO updates by December 31, 2025, in compliance with RCW 36.70A.130. As part of this effort, the city is reviewing its CAO against state requirements, recent changes to scientific guidance, and updated regulatory expectations from Commerce, Ecology, and WDFW.

Key drivers of the 2025 update include:

- New Best Available Science guidance
- Changes in state law and administrative rules since 2017
- Commerce's 2024 Critical Areas Checklist, which identifies required and recommended updates
- Updated mapping and inventory data for streams and wetlands

### Phased Approach to Updating the CAO

To manage workload and provide adequate time for thoughtful review, the City is completing the CAO update in two phases:

- Phase I (2025): Required Amendments

This phase focuses on amendments required to bring the CAO into compliance with state law and BAS. These include revised stream buffers, updated definitions, and clarifications to ensure consistency with state-mandated standards. Planning Commission review begins August 26, 2025, with adoption anticipated in November 2025.

- Phase II (2026): Discretionary Amendments

Phase II will include discretionary changes aimed at improving implementation, usability, and alignment with local planning priorities. Topics may include buffer averaging procedures, low-impact development integration, streamlining permit processes, and strengthening adaptive management strategies. This phase is anticipated to begin in winter 2026.

### Proposed Amendments for Phase I

Key revisions involve updating definitions, clarifying applicability, and enhancing protections for wetlands and fish and wildlife habitat conservation areas (FWHCAs). The draft also integrates updated mapping, buffer standards, mitigation sequencing, and development standards to better reflect the scientific understanding of habitat protection and riparian function. These changes are not optional - they are required to maintain legal defensibility and ensure environmental resilience.

#### General Provisions and Definitions

- Updated applicability section (16.20.115) to:
  - Update CAO map numbers and names per recently adopted Comprehensive Plan.
  - Update to reference D.2, Comprehensive Plan Maps: Definitions and Citations
- Added letter “P” to general exemptions (16.20.120) to:
  - Allow the maintenance, operation, or repair of parks, trails and publicly improved recreation areas as long as any such alteration does not involve the expansion of improvements into previously unimproved areas or new clearing of native vegetation beyond routine pruning and related activities, and the activity has been minimized to the extent feasible.
- Expanded definitions (16.20.155):
  - Added or revised terms like “adaptive management,” “anadromous fish,” “riparian management zone,” “ecosystem function,” “ecosystem values” and “species of local importance”
  - Aligns “Candidate species (state-listed)” with WDFW Priority Habitat and Species List

#### Wetlands (Section 200)

- Revised wetland buffer widths and habitat scores (Table 16.20.230.B):
  - Adjusted habitat score ranges for buffer width tables to match 2018 Ecology guidance (e.g., <6 points, 6–7 points, 8–9 points)
- Wetland alternations (16.20.240):
  - Updated wetland replacement ratios per 2018 Ecology guidance (Table 16.20.240)

#### Fish and Wildlife Habitat Conservation Areas (FWHCAs) (Section 300)

- Replace “buffer” with “riparian management zone” throughout section.
  - Include Channel Migration Zones (CMZs) in buffer areas (WDFW 2020)
  - Increase buffers per WDFW Best Available Science guidance, as outlined below and visualized on the map [here](#).

Table 16.20.315—Fish and Wildlife Habitat Conservation Area Development Standards		
Riparian Management Zone Setback Requirements		
Water Type	RMZ Width <i>Current</i> (feet, each side of stream)	RMZ Width <i>Proposed</i> (feet, each side of stream)
F1 (salmonids)	200	200
F2 (nonsalmonids)	150	150
Np	100	100
Ns 1 (connected to S, F, Np)	75	100
Ns 2 (connected to S, F, Np)	50	100

South Fork Dogfish Creek Stream-Reach-Specific RMZ Requirements		
Tidewater/estuarine*	100	100
Lower forested	75, or top of adjacent slope, whichever is greater	100
Urban/commercial	50 for new development and redevelopment; extent of existing constraints for existing development	100
Canyon	Park boundary or top of slope, whichever is closest to stream, otherwise 100 or top of steep slope, whichever is greater	Park boundary or top of slope, whichever is closest to stream, otherwise 100 or top of steep slope, whichever is greater
Headwater	50	100

- Amended building setback from 25 feet to 15 feet.
- Removed “additional protections required...” as this section is repetitive.

### Next Steps

Planning Commission review of the draft Phase I amendments will begin at a public workshop on August 26, 2025. Following Planning Commission recommendations, the ordinance will be forwarded to City Council for review and final adoption. A tentative schedule is included below.

TASK	DATE
Planning Commission Workshop 6 p.m.   Council Chambers and via Zoom	August 26, 2025
Planning Commission Workshop 6 p.m.   Council Chambers and via Zoom (if needed)	September 23, 2025
Planning Commission Public Hearing 6 p.m.   Council Chambers and via Zoom	October 7, 2025 (special meeting)
City Council Workshop 5 p.m.   Council Chambers and via Zoom	October 29, 2025
City Council Workshop 5 p.m.   Council Chambers and via Zoom (if needed)	November 5, 2025
City Council Public Hearing 5 p.m.   Council Chambers and via Zoom	November 12, 2025
<i>*All dates and times subject to change, please check the project website for up-to-date information*</i>	

### Property Owner Notification

As part of our public outreach efforts for the 2025 Critical Areas Ordinance update, postcard notifications were mailed to property owners whose parcels may be impacted by proposed increases to critical area buffer widths. These notifications were targeted to ensure that potentially affected property owners are aware of the changes and have an opportunity to participate in the public review process.

### Project Documents

Full project review documents can be viewed on the project website: <https://cityofpoulsbo.com/criticalareasupdate/>

## **Chapter 16.20: CRITICAL AREAS**

### **Section 100. General Provisions and Administration**

#### **16.20.105 Purpose.**

It is the intent of the city of Poulsbo that the beneficial structure, value and functions (RCW 36.70A.172(1) and WAC 365-195-825(2)(b)) of critical areas be preserved, and potential damage or public costs associated with the inappropriate use of such areas be minimized by reasonable regulation of uses within, adjacent to or directly affecting such areas. Further, the purpose of this chapter is to identify and protect critical areas as required by the Growth Management Act of 1990 (Title 36, Laws of 1990, as amended), which are wetlands, fish and wildlife habitat conservation areas, areas subject to frequent flooding, geologically hazardous areas, and critical aquifer recharge areas.

#### **16.20.110 Identification of critical areas.**

The critical areas in the city of Poulsbo are hereby further divided into the following types:

- A. Wetland critical areas;
- B. Fish and wildlife habitat conservation critical areas;
- C. Geologically hazardous areas;
- D. Critical aquifer recharge areas;
- E. Frequently flooded areas.

#### **16.20.115 Applicability.**

- A. The city of Poulsbo shall not grant any permit, license or other development approval to alter the condition of any land, water or vegetation, or to construct or alter any structure or improvement, nor shall any person alter the condition of any land, water or vegetation, or construct or alter any structure or improvement, for any development proposal regulated by this chapter, except in compliance with the provisions of this chapter. Failure to comply with the provisions of this chapter shall be considered a violation and subject to enforcement procedures as provided for in this chapter.
- B. This title applies to all uses and activities within areas or adjacent to areas designated as regulated critical areas and/or their buffers unless identified as exempt in Section 16.20.120. Such activities include, but are not limited to:
  - 1. Removing, excavating, disturbing, or dredging soil, sand, gravel, minerals, organic matter, or materials of any kind;
  - 2. Dumping, discharging, or filling with any material;
  - 3. Draining, flooding, or disturbing the water level or water table;
  - 4. Driving pilings or placing obstructions;
  - 5. Constructing, demolishing, or altering the size of any structure or infrastructure that results in disturbance of a critical area or the addition of any impervious surface coverage to a site that results in disturbance of a critical area;
  - 6. Destroying or altering vegetation through clearing, grading, harvesting, shading, or planting vegetation that would alter the character of a critical area;
  - 7. Activities that result in significant changes in water temperature and physical or chemical characteristics of water sources, including quantity and pollutants; and
  - 8. Any other activity that has a potential to significantly adversely impact or alter a critical area or established buffer not otherwise exempt from the provisions of this chapter.

9. Regarding frequently flooded areas, the provisions of this chapter shall apply to any activity that would result in change to the flood storage capacity of a floodplain or flood fringe area, or cause an increase in the base flood elevation, unless otherwise exempt.

- C. Requirements for critical areas are in addition to, or to be combined with, requirements of other development regulations, including, but not limited to, the Poulsbo zoning ordinance, tree cutting and clearing ordinance, ~~clearing and~~ grading ordinance, subdivision ordinance and the shoreline master program. In case of conflict with other development regulations or other critical area requirements, the more restrictive provision or combinations of provisions shall apply. Further, any parts of wetland or nonwetland fish and wildlife critical areas also included in the one-hundred-year floodplain by Chapter 15.24, Floodplain Management, shall also be subject to the provisions of that chapter.
- D. Uses and activities in critical areas or their buffers and building setbacks from the critical area buffer, for which no other land use or development permit or approval is required by other city ordinance, remain subject to the development standards and other requirements of this section, and a critical area permit shall be required unless specifically identified as exempt.
- E. Any development proposal that includes a critical area or its buffer, or is within three hundred feet of a critical area, is subject to review under the provisions of this chapter.
- F. The location and extent of all mapped critical areas shown on the city of Poulsbo critical area maps<sup>1</sup> are approximate and shall be used as a general guide only for the assistance of property owners and city administrators. The type, extent and boundaries shall be determined in the field by a qualified specialist or specialists according to the requirements of this chapter. The critical area maps are adopted as part of this chapter and are incorporated herein by this reference.

1. The city of Poulsbo critical area maps are titled:

Figure ~~CAONE-1~~, Wetlands Critical Area Map—Hydric Soils and Delineated Wetlands;  
Figure ~~CAO-2~~, Fish and Wildlife Habitat Conservation Areas—DNR Hydrology Water Type Map;  
Figure ~~NE-2~~, Critical Aquifer Recharge Areas;  
Figure ~~NE-3~~, Potential Geological Hazard Areas;  
Figure ~~CAONE-34~~, Fish and Wildlife Habitat Conservation Areas;  
Figure ~~CAO-4~~, Southfork Dogfish Creek Reach Map;  
Figure ~~CAO-5~~, Geological Hazard Areas Map;  
Figure ~~CAO-6~~, Aquifer Critical Areas Map.

2. Critical areas in the city of Poulsbo are to be located, classified and mapped based on the Comprehensive Plan Appendix D.2, Comprehensive Plan Maps: Definitions and Citations, as amended. one or more of the following information sources:

- a. ~~National Wetlands Inventory, U.S. Fish and Wildlife Services, 2016.~~
- b. ~~Soil Survey of Kitsap County Area, Washington, U.S.D.A. Soil Conservation Services, in cooperation with Washington State Department of Natural Resources and WSU Agricultural Research Center, 1977.~~
- c. ~~Coastal Zone Atlas, Volume Ten, Kitsap County, State of Washington Department of Ecology, 1979.~~
- d. ~~The Department of Ecology's Washington State Wetland Rating System for Western Washington, Revised 2014.~~
- e. ~~Corps of Engineers Wetlands Delineation Manual, 1987, and the supplement to this manual: Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2.0), 2010.~~
- f. ~~U.S. Department of Agriculture Soil Conservation Service, Erosion Hazard Soil Units, Kitsap County.~~

- ~~g. — Map: “Quaternary Geology and On-Site Sewage Feasibility, Kitsap County, Washington, in Quaternary Geology and Stratigraphy of Kitsap County, Washington,” Jerald D. Deeter, 1979.~~
  - ~~h. — Kitsap County Critical Area Maps developed pursuant to their Growth Management Act planning process.~~
  - ~~i. — Kitsap County Ground Water Management Plan, April 1991.~~
  - ~~j. — Project-specific wetland delineations as filed at the city of Poulsbo planning department.~~
  - ~~k. — Washington State Department of Natural Resources Forest Practices Division, Water Types Maps.~~
  - ~~l. — Poulsbo GIS map as Figure 1 in the Fishman Environmental Services Report “City of Poulsbo Report on Best Available Science and Recommended Protection Measures for Fish and Wildlife Habitat,” April 2003.~~
  - ~~m. — Washington State Department of Fish and Wildlife.~~
  - ~~n. — Priority Habitats and Species List, Washington Department of Fish and Wildlife, 2008, updated 6/2016.~~
  - ~~o. — U.S. Geological Survey Scientific Investigation Report prepared in cooperation with Kitsap Public Utility District, 2014/15.~~
  - ~~p. — Hydric Soils, U.S. Department of Agriculture, Soil Conservation Service in cooperation with the Washington State Department of Natural Resources and Washington State University Agricultural Research Center, 1977.~~
3. In the event of a conflict between the mapped areas and the criteria or standards of this chapter, this chapter shall apply. In the event that a boundary determination made by a qualified specialist finds that a critical area is not present on the property, the critical area designation shall be considered for removal from the map. In the event that a critical area which meets the criteria or standards for a critical area is found on a property not mapped as a critical area, the property shall be deemed to contain a critical area and shall be treated as if it had been included on the appropriate critical area map.
4. The planning director shall have the authority to issue revised critical area maps when new or revised information becomes available regarding the presence or absence of critical areas within the city or urban growth boundary.

#### **16.20.120 General exemptions.**

The following activities are exempt from the requirements of this chapter. All exempted activities shall use reasonable methods to avoid potential impacts to critical areas. To be exempt from this chapter does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity may be considered a violation of this chapter and subject to enforcement and restoration under Section 16.20.150.

The following developments, activities, and associated uses shall be exempt from the provisions of this chapter; provided, that they are otherwise consistent with the provisions of other local, state, and federal laws and requirements:

- A. Emergency activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventative action in a time frame too short to allow for compliance with the requirements of this chapter.

Emergency actions that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the city of Poulsbo within one working



day following commencement of the emergency activity. Within thirty days, the director shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then the enforcement provisions of Section 16.20.150 shall apply. Upon cessation of the emergency, restoration of the critical areas and buffers impacted by the emergency action shall be required in a timely manner. Upon abatement of the emergency situation, any permit that would have been required to be obtained under the Poulsbo Municipal Code shall be required.

- B. Existing and ongoing agricultural activities on lands containing critical areas. For the purpose of this chapter, “existing and ongoing” means that the activity has been conducted within the past five years. Any expansion of agricultural activities shall conform to the provisions of this chapter.
- C. Normal and routine maintenance and operation of existing retention/detention facilities, biofilters and other stormwater management facilities, irrigation and drainage ditches, farm ponds, manure lagoons and livestock water ponds; provided, that such activities shall not involve expansions or alterations that would increase the impact on or expand such uses further into critical areas not currently being used for such activity.
- D. Structural alterations to buildings, permitted under the underlying zoning district, that do not alter the structural footprint or introduce new adverse impacts to a critical area.
- E. Normal and routine maintenance or repair of existing utility structures within a right-of-way or existing utility corridor or easements, including cutting, removal and/or mowing of vegetation above the ground that utilizes best management practices and does not expand the use or activity further into the critical area.
- F. Installation, construction, replacement, operation or alteration in improved public road right-of-way of all electric facilities, lines, equipment or appurtenances; this does not include substations, water and sewer lines, all natural gas, cable communications and telephone facilities, lines, pipes, mains, equipment or appurtenances.
- G. Forest practices conducted pursuant to Chapter 76.09 RCW, except Class IV (general conversions) and conversion option harvest plans (COHP).
- H. Where a threat to human life or property is demonstrated, the director may allow removal of danger or hazard trees within a critical area or its buffer, subject to the following criteria:
  - 1. Tree removal is the minimum necessary to balance protection of the critical area and its buffer with the protection of life and property;
  - 2. The critical area or its buffer shall be replanted as determined by the director. The director shall coordinate review with the Washington State Department of Fish and Wildlife as determined necessary to assure habitat protection. The director may require the applicant to consult with a professional forester or a certified arborist prior to tree removal. Danger tree abatement may be achieved by felling or topping the tree. Habitat needs may require leaving the fallen tree in the riparian corridor or maintaining a high stump.
- I. To qualify for exemption under this section, the construction of pedestrian trails shall be permeable ~~unpaved and established as a nature path~~ when located in the buffer or critical area; should be generally parallel to the perimeter of the critical area or provided at specific points; located only in the outer twenty-five percent of the buffer area as feasible; are not intended for motorized use; and are no wider than five feet, unless additional width is necessary for safety along a precipice, steep hillside, or other hazardous area. All trail construction shall avoid damaging significant trees and other habitat elements to the greatest degree possible, and does not cross or alter any regulated streams or drainages. Trails proposed to be located in a landslide hazard area or its setback shall be constructed in a manner that does not increase the risk of landslide or erosion.

Trails that do not meet the parameters of this exemption may be permitted through the underlying land use permit or critical areas permit, subject to the standards of Section 16.20.235(G) for wetlands, and Section 16.20.320(F) for trails proposed to be located in a fish and wildlife habitat conservation area buffer.

- J. Normal and routine maintenance of existing structures, landscaping and gardens, provided they comply with all other regulations in this chapter. Expansions, alterations, or repair in excess of fifty percent of the market value of the improvement shall be reviewed under the provisions of Section 16.20.125, Standards for existing development.
- K. Interrupted Wetland and Fish and Wildlife Habitat Conservation Area Buffers.
  - 1. Where a legally established, preexisting use of the buffer exists (such as a road or structure that extends into the current regulated buffer), those proposed activities that are within the wetland or stream buffer, but are separated from the critical area by an existing permanent substantial improvement, which serves to eliminate or greatly reduce the impact of the proposed activity upon the critical area, are exempt from establishing full width of the buffer; provided, that impacts to the critical area do not increase.

If a development or improvement is proposed that may result in increased impacts to the existing critical area buffer, even if separated by an existing permanent improvement (such as a road or structure), it shall be evaluated and additional buffer may be required along the impact area of the interruption. To determine if additional buffer is required, a functional analysis may be required. In determining whether a functional analysis is necessary, the planning director shall consider the hydrologic and habitat connection potential and the extent and permanence of the interruption.
  - 2. Where a legally established, preexisting structure or use is located within a regulated buffer area and where the regulated buffer is fully paved and does not conform to the interrupted buffer provision above, the buffer will end at the edge of pavement, adjacent to the critical area.
- L. The following can be removed by hand or hand-held light equipment; provided, that appropriate methods are used to protect native vegetation and water quality:
  - 1. English ivy may be removed from plants on which it is adhered or rolled up off the ground provided ground disturbance is minimal and does not cause erosion.
  - 2. Regulated noxious weeds as listed on the Kitsap County noxious weed list that are required to be eradicated (Class A and Class B) as specified by the Kitsap County Noxious Weed Board.
  - 3. Noxious weeds (Class A and B) removal in a critical area buffer when the total area is one thousand square feet or less and slopes are less than fifteen percent.
  - 4. Refuse and debris, provided materials are on the soil surface and provided ground and/or vegetation disturbance is minimal and does not cause erosion.
  - 5. Additional noxious weeds (Class A and B) removal can occur through a critical area permit and buffer enhancement plan.
- M. Watershed restoration projects that conform to the provisions of RCW 89.08.460 shall be reviewed without fee and approved within forty-five days per RCW 89.08.490.
- N. Fish enhancement projects that conform to the provisions of RCW 77.55.181 shall be reviewed without fee and comments provided as specified in RCW 77.55.181.
- O. Site investigative work necessary for land use application submittals such as surveys, soil logs, percolation tests, and other related activities. Critical area impacts shall be minimized and disturbed areas shall be immediately restored.
- P. Maintenance, operation, or repair of parks, trails and publicly improved recreation areas as long as any such alteration does not involve the expansion of improvements into previously unimproved areas or new



clearing of native vegetation beyond routine pruning and related activities, and the activity has been minimized to the extent feasible.

#### **16.20.125 Standards for existing development.**

Existing development containing a critical area which was lawfully constructed, approved or established prior to the effective date of the ordinance codified in this chapter, but which does not conform to present regulations or standards, may continue as follows:

- A. A legally established, existing structure that does not meet the dimensional standards of this chapter may not be enlarged or altered in any manner unless such enlargement or alteration is in conformance with the following provisions.

A critical area permit, a Type II review, shall be required for any proposal which includes reconstruction or remodeling in excess of fifty percent of the market value.
- B. Routine maintenance and repair of preexisting legally established structures as authorized in Section 16.20.120(J). Repair in excess of fifty percent of the market value of the structure shall be considered reconstruction. Normal repair and maintenance does not require a critical area permit.
- C. A legally established structure that has been made nonconforming due to the adoption of this code may be remodeled up to fifty percent of the market value so long as all of the following provisions are met:
  - 1. The remodel shall not introduce any new, or expand existing, impacts to a critical area unless such impacts are fully mitigated as required for reconstruction in subsection (E)(1) of this section; and
  - 2. All other standards and requirements contained in the Poulsbo Municipal Code are met.
- D. Residential structures, including multifamily, in a residential zoning district, destroyed by a catastrophe or fire, may be reconstructed up to the original size, placement and density. Structural repair must be initiated within two years of the catastrophe and all of the following provisions apply:
  - 1. The structure does not necessarily need to be rebuilt on the original footprint if it is requested by the property/homeowner and it is determined that an alternative location on the lot will provide greater protection to the critical area; and
  - 2. Best management practices shall be employed to assure reconstruction does not negatively impact the critical area.
- E. Preexisting legally established structures that have been made nonconforming due to the adoption of this code and that are located outside a flood hazard area and active landslide hazard area may be remodeled beyond fifty percent of the market value or reconstructed; provided, that such reconstruction and/or remodeling does not increase the footprint area nor extend beyond the existing ground coverage toward a critical area and:
  - 1. The reconstruction shall be appropriately mitigated to ensure the existing value and function of the critical area is not degraded; further, historic impacts of the existing site development shall be mitigated as per subsection F of this section; and
  - 2. The reconstruction and/or enlargement meets all other standards and requirements contained in the Poulsbo Municipal Code.
- F. Where mitigation is required in subsection (E)(1) of this section, the applicant shall provide mitigation measures to reduce historic impacts on the critical area which may include requirements to enhance vegetative areas adjacent to the critical area and retrofit existing impervious areas for minimum stormwater quality treatment. Where mitigation opportunities on-site are limited or improvements off-site can be shown to better enhance the critical area at a watershed scale, off-site mitigation measures may be required.

- G. Additional provisions affecting expansions of existing development along Poulsbo Creek are located in Section 16.20.315(F).

**16.20.130 Reasonable use exception.**

If the application of this chapter would deny all reasonable use of the property, the applicant may apply for a reasonable use exception pursuant to this section.

- A. A request for a critical area reasonable use exception shall be filed with the director and shall be combined with the underlying development permit. The reasonable use exception request shall be considered a Type III application.
- B. The review authority, in granting a reasonable use exception, must determine that all of the following criteria are met:
1. Application of this chapter would deny all reasonable use of the property;
  2. There is no other reasonable use with less impact on the critical area;
  3. The proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal site;
  4. Any alterations permitted to these critical areas shall be the minimum necessary to allow for reasonable use of the property;
  5. The inability to derive reasonable use of the property is not the result of actions by the applicant after the effective date of the ordinance codified in this chapter;
  6. Diminished value shall not be considered denial of all reasonable use; and
  7. The proposal will result in no net loss of critical area functions and values consistent with best available science.
- C. Any authorized alteration of a critical area or buffer under this section shall be subject to conditions established by the city and shall require mitigation under an approved special report pursuant to Section 700 of this chapter.

**16.20.133 Public agency and utility exception.**

- A. A request for a critical area public agency and utility exception may be made if the application of this chapter would prohibit a development proposal by a public agency or public utility. The public agency and utility exception shall be considered a Type III application.
- B. The review authority, in granting a public agency and utility exception, must determine that all of the following criteria are met:
1. There is no other practical alternative to the proposed development with less impact on the critical areas;
  2. The application of this chapter would unreasonably restrict the ability to provide services to the public;
  3. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
  4. The proposal will result in no net loss of critical area functions and values consistent with the best available science; and
  5. The proposal is consistent with other applicable regulations and standards.
- C. Any authorized alteration of a critical area under this section may be subject to conditions established by the city and shall require mitigation under an approved special report pursuant to Section 700 of this chapter.

#### **16.20.135 Notice to title.**

Project proponent(s) may be required to file a notice to title with the Kitsap County auditor on all development proposals subject to this chapter, and containing any critical area or its buffer. After review of the development proposal, the director will establish critical area development conditions in accordance with this chapter. These standards will be identified on the approved notice to title. The proponent shall submit proof that the required notice has been filed before the director will issue the underlying permit's notice of decision.

#### **16.20.140 Appeals.**

Appeals shall be as set forth in Title 19. Appeals shall be of the underlying development permit, in which the aspects of the appeal may apply to the provisions or requirements of this chapter.

#### **16.20.145 Application requirements.**

Application requirements and process shall be as set forth in Title 19. The type of permit process shall be that of the underlying development permit.

#### **16.20.150 Enforcement.**

- A. Authorization. The director is authorized to enforce this chapter, and to designate city employees as authorized representatives of the city to investigate suspected violations of this chapter, and to issue notices of infractions. In the event of a violation of this chapter, the director shall be authorized to require complete or partial restoration of the critical area including compensatory mitigation to rectify any net loss to the structure and function of the critical area.
- B. Right of Entry. When it is necessary to make an inspection to enforce the provisions of this chapter, or when the director or his/her designee has reasonable cause to believe that a condition exists on property which is contrary to, or in violation of, this chapter, the director or his/her designee may enter the property to inspect, pursuant to the provisions of Section 1.16.050.
- C. Stop Work Orders. Whenever any work or activity is being done contrary to the provisions of this chapter or conditions of an approved permit, the director or his/her designee may order the work stopped by notice in writing, served on any persons engaged in doing or causing such work to be done, or by posting the property, and any such persons shall forthwith stop such work or activity until authorized by the director or his/her designee to proceed. A failure to comply with a stop work order shall constitute a gross misdemeanor.
- D. Penalties. The violation of any provision of this chapter or permit condition, where such violation constitutes a first offense, shall constitute a civil infraction. The director may issue a notice of infraction in accordance with Chapter 1.16. Any person who violates or fails to comply with any of the provisions of this chapter or permit conditions, where such person has been adjudged by the Poulsbo municipal court to have committed a previous violation of such provision, shall be guilty of a misdemeanor. Each violation shall constitute a separate offense for each and every day or portion thereof during which the violation is committed, continued or permitted.
- E. Imminent and Substantial Dangers. Notwithstanding any provisions of these regulations, the director or his/her designee may take immediate action to prevent an imminent and substantial danger to the public health, welfare, safety or the environment by the violation of any provision of this chapter.

#### **16.20.155 Definitions.**

The definitions in this section shall be used when administering the regulations in this chapter. The definition of any word or phrase not listed in this section which is in question when administering the regulations shall be defined from one of the following sources:

- A. Chapter 36.70A RCW;
- B. Chapter 365-190 WAC;

- C. Legal definitions from case law;
- D. The common dictionary.

"Adaptive management" means using scientific methods to evaluate how well regulatory and nonregulatory actions protect the sensitive area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. Management policy may be adapted based on a periodic review of new information.

"Adjacent" means any development that includes a critical area or its buffer or any development proposal within three hundred feet of a critical area.

"Agricultural practices" means activities related to vegetation and soil management, such as tilling of soil, control of weeds, control of plant diseases and insect pests, soil maintenance and fertilization as well as animal husbandry. Agricultural practices shall not include removing trees, diverting or impounding water, excavation, ditching, draining, culverting, filling, grading, and similar activities that introduce new adverse impacts to wetlands.

"Alteration" means a human-induced action, which changes the existing condition of a critical area. Alterations include but are not limited to grading; grubbing; dredging; channelizing; cutting, clearing, relocating or removing vegetation, except noxious weeds identified by the Washington State Noxious Weed Control Board or the Kitsap County Cooperative Extension; applying herbicides or pesticides or any hazardous or toxic substance; discharging pollutants; grazing domestic animals; modifying for surface water management purposes; or any other human activity that changes the existing vegetation, hydrology, wildlife or wildlife habitat.

"Anadromous fish" means fish species that spend most of their lifecycle in salt water but return to freshwater to reproduce whose life cycle includes time spent in both fresh and salt water.

"Applicant" means the person, party, firm, corporation or legal entity, or agent thereof, that proposes a development of property in the city of Poulsbo.

"Aquaculture practices" means the harvest, culture or farming of food fish, shellfish, or other aquatic plants and animals including fisheries enhancement and the mechanical harvesting of shellfish and hatchery culture.

"Aquifer" means a saturated body of rock, sand, gravel or other geologic material that is capable of storing, transmitting and yielding water to a well.

"Aquifer recharge" means the process by which water is added to an aquifer. It may occur naturally by the percolation (infiltration) of surface water, precipitation, or snowmelt from the ground surface to a depth where the earth materials are saturated with water. The aquifer recharge can be augmented by "artificial" means through the addition of surface water or by the injection of water into the underground environment.

"Aquifer recharge area" means those areas overlying aquifer(s) where natural or artificial sources of water can move downward to an aquifer(s).

"Aquifer vulnerability" means the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential as indicated by the type of activities occurring on a project area.

"Bank stabilization" means lake, stream and open water shoreline modification, including vegetation enhancement, used for the purpose of retarding erosion, protecting channels or shorelines, and retaining uplands.

"Bench (geologic)" means a relatively flat and wide landform along a valley wall.

"Best available science" means scientifically valid information in accordance with WAC 365-195-905, now or as amended hereafter, that is used to develop and implement critical areas policies or regulations.

"Best management practices" means conservation practices or systems of practices and management measures that:

1. Control soil loss and reduce water quality degradation caused by nutrients, pathogens, bacteria, toxic substances, pesticides, oil and grease, and sediment; and
2. Minimize adverse impacts to surface water and groundwater flow, circulation patterns, and to the chemical, physical, and biological characteristics of critical areas.

“Bog” means a low-nutrient, acidic wetland with organic soils and characteristic bog plants, as described in Washington State Wetland Rating System for Western Washington: 2014 Update.

“Buffer” means a nonclearing native vegetation area which is intended to protect the functions and values of critical areas.

“Building setback” for purposes of this chapter is an additional distance between the required critical area buffer and the footprint or foundation of a building, a structure or other development on a site.

“Candidate species (state-listed)” means species under review by the Department of Fish and Wildlife for possible listing as endangered, threatened or sensitive. A species will be considered for state candidate designation if sufficient scientific evidence suggests that its status may meet criteria defined for endangered, threatened, or sensitive in WAC 232-12-297. Currently listed state threatened or state sensitive species may also be designated as a state candidate species if their status is in question. State candidate species will be managed by the Department of Fish and Wildlife, as needed, to ensure the long-term survival of populations in Washington. ~~They are listed in WDFW Policy 4802.~~ See the current WDFW Priority Habitats and Species list for Kitsap County for all listed and candidate species.

“Channel migration zone (CMZ),” as defined by WAC 173-26-020~~(6)~~, as now or hereafter amended, means the area along a river within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings.

“Clearing” means the destruction, disturbance or removal of vegetation by physical, mechanical, chemical or other means.

“Compensation” means replacement of project-induced critical area (e.g., wetland) losses of acreage or functions, and includes, but is not limited to, restoration, creation, or enhancement.

“Conversion option harvest plan (COHP)” means a plan for landowners who want to harvest their land but wish to maintain the option for conversion pursuant to WAC 222-20-050. Conversion to a use other than commercial timber operation shall mean a bona fide conversion to an active use which is incompatible with timber growing.

“Corps of Engineers” means U.S. Army Corps of Engineers.

“Creation” means actions performed to intentionally attempt to establish a critical area at a site where it did not formerly exist.

“Critical aquifer recharge areas” means those land areas with a critical recharging effect on aquifers used for portable 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 (WAC 365-190-030(3)).

“Critical area buffer” means an area of protection around a critical area.

“Critical area permit” means a ~~Type-II~~ permit that is associated with uses and activities proposed in critical areas, buffers or **building** setbacks, for which no other land use development permit or approval is required by other city ordinances or requirements.

Critical Area Protection Easement. See “Easement.”

“Critical areas” include the following areas and ecosystems: (1) wetlands; (2) areas with a critical recharging effect on aquifers used for potable water; (3) fish and wildlife habitat conservation areas; (4) geologically hazardous areas; and (5) frequently flooded areas.

“Danger tree” means any tree of any height, dead or alive, that presents a hazard to the public because of rot, root stem or limb damage, lean or any other observable condition created by natural process or manmade activity consistent with Chapter 296-54 WAC.

“Detention facilities” means stormwater facilities including all appurtenances associated with their designed functions, maintenance and security that are designed to store runoff while gradually releasing it at a predetermined controlled rate.

“Development” means all structures, alteration or modifications of the natural landscape above and below ground, on a particular site.

“Development proposal site” means, for purposes of this chapter, the legal boundaries of the parcel or parcels of land on which an applicant has applied for authority from the city of Poulsbo to carry out a development proposal.

“Director” shall mean the director of the city of Poulsbo planning department or a duly authorized designee.

“Draining (related to wetland)” means any human activity that diverts or reduces wetland groundwater and/or surface water sources so that functions and values are lost or the area no longer meets the definition of a wetland.

“Easement” or “critical area protection easement” means an agreement conveyed through a deed, or shown on the face of a plat or site plan, for the purpose of perpetual or long-term conservation.

“Ecosystem functions” are the products, physical and biological conditions, and environmental qualities of an ecosystem that result from interactions among ecosystem processes and ecosystem structures. Ecosystem functions include, but are not limited to, sequestered carbon, attenuated peak streamflow, aquifer water level, reduced pollutant concentrations in surface and ground waters, cool summer in-stream water temperatures, and fish and wildlife habitats, WAC 365-196-210 (14).

“Ecosystem values” means the cultural, social, economic, and ecological benefits attributed to ecosystem functions, WAC 365.196.210 (15).

“Endangered species (state-listed)” means a species native to the state of Washington that is seriously threatened with extirpation throughout all or a significant portion of its range within the state. Endangered species are legally designated in WAC 232-12-014.

“Enhancement” means actions performed to improve the condition of existing degraded critical areas (e.g., wetlands or streams) so that the functions they provide are of a higher quality; provided, that this activity does not significantly degrade another existing function or value.

“Erosion” means the process whereby the land surface is worn away by the action of water, wind, ice or other geologic agents and by processes such as gravitational creep or events such as landslides. Natural or geologic erosion occurs as an ongoing process that acts on all land surfaces to some degree. Human activities such as removing vegetation, increasing stormwater runoff or decreasing slope stability often accelerate or aggravate natural erosion processes.

“Excavation” means removal of earth material.

“Existing and ongoing agriculture” includes those activities conducted on lands defined in RCW 84.34.020(2) or defined as agricultural practices in this chapter, for example, the operation and maintenance of existing farm and stock ponds or drainage ditches, operation and maintenance of ditches, irrigation systems including irrigation laterals, canals, or irrigation drainage ditches, changes between agricultural activities, such as rotating crops or grasses used for grazing, and normal maintenance, repair, or operation of existing serviceable structures, facilities, or improved areas; provided, that alteration of the contour of wetlands or streams by leveling or filling, other than



that which results from normal cultivation, or draining of wetlands shall not be considered normal or necessary farming or ranching activities.

“Existing use or structure” means a use of land or structure which was lawfully established or built and which has been lawfully continued but which does not conform to the regulations of the zone in which it is located as established by Title 18, this chapter, or amendments thereto.

“Exotic” means any species of plant or animal that is not indigenous (native) to an area.

“Extraordinary hardship” means that strict application of this chapter and/or programs adopted to implement this chapter by the regulatory authority would prevent all reasonable use of the parcel.

“Farm pond” means an open-water habitat of less than five acres and not contiguous with a stream, river, pond, lake or marine water created from a nonwetland site in connection with agricultural activities.

“Feeder bluff” means an eroding and/or retreating shore bluff that is part of natural coastal processes yielding sediment to area beaches.

“Filling” or “fill” means a deposit of earth or other natural or manmade material placed by artificial means, including, but not limited to, soil materials, debris, or dredged sediments.

“Fish and wildlife habitat” means those areas identified as being of critical importance to the maintenance of fish, wildlife, and plant species, including: areas within which endangered, threatened, and sensitive species have a primary association; habitats and species of local importance; commercial and recreational shellfish areas; kelp and eelgrass beds; forage fish spawning areas; naturally occurring ponds and their submerged aquatic beds that provide fish or wildlife habitat; waters of the state; lakes, ponds, streams or rivers planted with game fish by a government or tribal entity, or private organization; state natural area preserves and natural resources conservation areas.

“Fish and wildlife habitat conservation areas” means areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Counties and cities may also designate locally important habitats and species. Fish and wildlife habitat conservation areas does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company (WAC 365-190-030).

“Fisheries biologist” means a person with experience and formal training in the principles of fisheries management and with practical knowledge in fish population surveys, stream surveys and other related data analyses of fisheries resources. Qualifications of a fisheries biologist include but are not limited to:

1. Certification by the American Fisheries Society;
2. A Bachelor of Science degree in fisheries or the biological sciences from an accredited institution and two years of professional fisheries experience; or
3. Five or more years of professional experience as a practicing fisheries biologist with a minimum three years of professional field experience.

“Floodplain” means the floodway and the special flood hazard areas having the potential to flood once every one hundred years, or having a one percent chance of being equaled or exceeded in any given year.

“Floodway” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

“Forage fish” includes anchovy, herring, sand lance and smelt.

“Forest practices,” as defined in WAC 222-16-010(21), as amended, means any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber, including but not limited to:

1. Road and trail construction;
2. Harvesting, final and intermediate;
3. Precommercial thinning;
4. Reforestation;
5. Fertilization;
6. Prevention and suppression of diseases and insects;
7. Salvage of trees; and
8. Brush control.

Forest practices shall not include preparatory work such as tree marking, surveying and road flagging; or removal or harvest of incidental vegetation from forest lands such as berries, ferns, greenery, mistletoe, herbs, mushrooms, and other products which cannot normally be expected to result in damage to forest soils, timber or public resources.

“Frequently flooded areas” means 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 not limited to, streams, rivers, lakes, coastal areas, wetlands, and areas where high groundwater forms ponds on the ground surface. (WAC 365-190-030).

“Functions,” “beneficial functions,” or “valuable functions” means the beneficial roles served by critical areas including, but not limited to, the following which are normally associated with wetlands: water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, wave attenuation, historical and archaeological value protection, aesthetic value, and recreation. These beneficial functions are not listed in order of priority.

Geological Report. See “Geotechnical report.”

“Geologically hazardous areas” means areas as defined in WAC 365-190-030 and 365-190-120 that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to siting commercial, residential or industrial development consistent with public health or safety concerns. Development in geologic hazard areas may be permitted when an approved geotechnical or geological report indicates that the development can be engineered to pose no significant threat to public health or safety.

“Geologist” means a person who is licensed by Washington State and has a Bachelor of Science degree in geologic sciences or a related field from an accredited college or university and/or has a minimum of five years of experience under the direction of a professional geologist.

“Geotechnical engineer” means a practicing geotechnical/civil engineer licensed and bonded as a professional civil engineer with the state of Washington, with professional training and experience in geotechnical engineering, including at least four years of professional experience in evaluating geologically hazardous areas.

“Geotechnical report” and “geological report” mean a study of potential site development impacts related to retention of natural vegetation, soil characteristics, geology, drainage, groundwater discharge, and engineering recommendations relating to slope and structural stability. The geotechnical report shall be prepared by or in conjunction with a licensed geotechnical engineer meeting the minimum qualifications of this chapter. Geological reports may contain the above information with the exception of engineering recommendations, and may be prepared by a geologist (see Section 700 of this chapter, Special Reports).

“Grading (construction)” means any excavating, filling or removing of the surface layer or any combination thereof.

“Groundwater” means water in a saturated zone or stratum beneath the surface of land or water.

“Grubbing” means the removal of vegetative matter from underground, such as sod, stumps, roots, buried logs, or other debris, and shall include the incidental removal of topsoil to a depth not exceeding twelve inches.

“Habitat” means the specific area or environment in which a particular type of plant or animal lives. An organism’s habitat provides all the basic requirements for life.

“Habitat management plan” means a report prepared by a professional wetland biologist, wildlife biologist or fisheries biologist which discusses and evaluates critical fish and wildlife habitat functions and evaluates the measures necessary to maintain, enhance and improve habitat conservation on a proposed development site.

“Habitat of local importance” means a seasonal range or habitat element with which a given species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. These might include areas of high relative density or species richness, breeding habitat, winter range, and movement corridors. These might also include habitats that are of limited availability or areas of high vulnerability to alteration, such as cliffs, talus, and wetlands.

“Hazardous substance(s)” means any liquid, solid, gas or sludge, including any materials, substance, product, commodity or waste, regardless of quantity, that exhibits any of the characteristics or criteria of hazardous waste; and including waste oil and petroleum products.

“Hydric soils” means soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.

“Hydrologist” or “hydrogeologist” means a person who has a Bachelor of Science degree in geologic sciences with an emphasis in hydrogeology from an accredited college or university and has a minimum of three years of experience in groundwater investigations, modeling and remediation and appropriate state licensing.

“Infiltration rate” means a general description of how quickly or slowly water travels through a particular soil type.

“Interdunal wetland” means a wetland that forms in the deflation plains and swales that are geomorphic features in areas of coastal dunes, as described in Washington State Wetland Rating System for Western Washington: 2014 Update.

“Interrupted buffer” means a critical area buffer width established by this chapter, where a legally established, nonconforming use of the buffer exists (e.g., a road or structures that lies within the width of the buffer required for the critical area).

“Investigation” means work necessary for land use application submittals such as surveys, soil logs, percolation tests or other related activities.

“Landslide hazard area” means an area potentially subject to risk of mass movement due to a combination of geologic, topographic and hydrologic factors.

“Liquefaction” means a process in which a water-saturated soil, upon shaking, suddenly loses strength and behaves as a fluid.

“Lot” means a single parcel of land, legally severed from a larger parcel, which is described and delineated in a long or short plat or which is described in a real estate conveyance.

“Low impact development” is a stormwater management and land development strategy applied at the parcel and/or subdivision scale that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic predevelopment hydrologic functions.

“Mitigation” means an action or set of actions undertaken to avoid, minimize or compensate for adverse critical area impacts. Mitigation includes the following steps, in sequential order (WAC 197-11-768):

1. Avoiding the impact altogether by not taking a specific action or part of an action.

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
4. Reducing or eliminating the impact 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.
6. Monitoring the impact and taking the appropriate corrective measures.

“Native vegetation” means vegetation indigenous to the Puget Sound coastal lowlands.

“Natural environment” is an area having a unique asset or feature considered valuable for its natural or original condition which is relatively intolerant of intensive human use.

“Natural systems” means physical features or phenomena of nature sensitive, in varying degrees, to man’s disruptive activity.

“Normal maintenance” includes those usual acts to prevent a decline, lapse or cessation from a lawfully established condition. Normal maintenance includes removing debris from, and cutting or manual removal of vegetation in, crossing and bridge areas. Normal maintenance does not include the use of fertilizer or pesticide application in wetlands, fish and wildlife habitat conservation areas, or their buffer areas or resource management areas. Maintenance does not include redigging existing drainage ditches in order to drain land in or adjacent to a regulated wetland or its buffer.

“Normal repair” means to restore a development to a state comparable to its original conditions within a reasonable period after decay or partial destruction except where repair involves total replacement which is not common practice or causes substantial adverse effects to the critical area.

“Open space” means any land area the preservation of which land would: (1) conserve and enhance natural or scenic resources; (2) protect streams or water supply; (3) promote the conservation of regulated critical areas.

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

“Out-of-kind compensation” means to replace a critical area (e.g., wetland) with a substitute critical area (e.g., wetland) whose characteristics do not closely approximate those destroyed or degraded by a regulated activity. It does not refer to replacement “out-of-category,” such as replacement of wetland loss with new stream segments.

“Permeability” means the capacity of an aquifer or confining bed to transmit water.

“Permit” means any substantial development, variance, conditional use permit, or revision authorized under Chapter 90.58 RCW or Poulsbo Municipal Code requirements.

“Pond” is a naturally existing or artificially created body of standing water less than twenty acres in size and not defined as “shorelines of the state” by Chapter 90.58 RCW (Shoreline Management Act).

“Practicable alternative” means an alternative that is available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes, and having less impact to critical areas. It may include an area not owned by the applicant which could reasonably have been or be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity.

“Priority habitat” means habitat type or elements with unique or significant value to one or more species as classified by the State Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element.

“Priority species” include species requiring protective measures for their survival due to their population status, sensitivity to habitat alteration, and/or recreational, commercial or tribal importance.

“Public access” means physical or visual admittance of the critical area environment.

“Public facilities” means facilities which are owned, operated and maintained by a public agency.

“Public project of significant importance” means a project funded by a public agency, department or jurisdiction which is found to be in the best interests of the citizens of the city of Poulsbo and is so declared by the city of Poulsbo city council in a resolution.

“Public right-of-way” means any road, alley, street, avenue, arterial, bridge, highway, or other publicly owned ground or place used or reserved for the free passage of vehicular and/or pedestrian traffic or other services, including utilities.

“Public utility” means a business or service, either governmental or having appropriate approval from the state, which is engaged in regularly supplying the public with some commodity or service which is of public consequence and need such as electricity, gas, sewer and/or wastewater, water, transportation or communications.

“Ravine” means a V-shaped landform generally having little to no floodplain and normally containing steep slopes and is deeper than ten vertical feet as measured from the centerline of the ravine to the top of the slope. Ravines are created by the wearing action of streams.

“Reasonable alternative” means an activity that could feasibly attain or approximate a proposal’s objectives, but at a lower environmental cost or decreased level of environmental degradation.

Reasonable Use. A property is deprived of all reasonable use when the owner can realize no reasonable return on the property or make any productive use of the property. “Reasonable return” does not mean a reduction in value of the land, or a lack of a profit on the purchase and sale of the property, but rather, where there can be no beneficial use of the property; and which is attributable to the implementation of this chapter.

“Reasonable use exception” means the process by which the city determines allowable use of a property which cannot conform to the requirements of this chapter.

“Refuse” means material placed in a critical area or its buffer without permission from any legal authority. Refuse includes, but is not limited to, stumps, wood and other organic debris, as well as tires, automobiles, construction and household refuse. This does not include large woody debris used with an approved enhancement plan.

“Regulated use or activity” means any development proposal which includes or directly affects a critical area or its buffer or is occurring within two hundred feet of a critical area.

“Residential development” means the construction or exterior alteration of one or more buildings, structures or portions thereof which are designed for or used to provide a place of abode for human beings. Residential development includes one- and two-family detached structures, multifamily structures, condominiums, townhouses, mobile home parks, and other similar group housing, together with accessory uses and structures common to residential uses. Residential development does not include hotels, motels, bed and breakfasts, or any other type of overnight or transient housing or camping facilities.

“Restoration” means the return of a critical area to a state in which its functions and values approach its unaltered state as closely as possible.

“Retention facilities” means drainage facilities designed to store runoff for gradual release by evaporation, plant transpiration, or infiltration into the soil. Retention facilities shall include all such drainage facilities designed so that none or only a portion of the runoff entering the facility will be eventually discharged as surface water. Retention facilities shall include all appurtenances associated with their designed function, maintenance and security.

“Riparian area” means an area that includes the land which supports riparian vegetation and may include some upland, depending on site conditions. These generally occur adjacent to water bodies where specific measures are needed to protect fish and wildlife habitat.

“Riparian management zone” means a delineable area defined in a land use regulation; often synonymous with riparian buffer contiguous or adjacent to a stream that is required for the continued maintenance, function, and structural stability of the stream. Functions of the Riparian Management Zone include shading, uptake of nutrients, stabilization of banks, protection from intrusion, large wood delivery, pollution removal, or maintenance of wildlife.

“Road” or “street” means any vehicular right-of-way which: (1) is an existing state, county or municipal roadway; or (2) is a publicly owned easement; or (3) is shown upon a plat or short plat approved pursuant to the Poulsbo Municipal Code; or (4) is a private access greater than fifty feet in length serving more than one property through right of use or easement. The road or street shall include all land within the boundaries of the road right-of-way which is improved.

“Salmonid” means a member of the fish family salmonidae. This family includes Chinook, coho, chum, sockeye and pink salmon; rainbow, steelhead and cutthroat trout; brown trout; brook and Dolly Varden char, kokanee, and whitefish.

“Sensitive species (state-listed)” means a species, native to the state of Washington, that is vulnerable or declining and is likely to become endangered or threatened in a significant portion of its range within the state without cooperative management or the removal of threats. Sensitive species are legally designated in WAC 232-12-011.

“Shorelines” means all of the water areas of the state, including reservoirs, and their associated wetlands, together with the lands underlying them; except (1) shorelines of state-wide significance, (2) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments, and (3) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes.

“Shorelines of state-wide significance” means those areas designated under RCW 90.58.030(2)(e) (see city of Poulsbo shoreline management master program).

“Single-family dwelling” means a building or structure which is intended or designed to be used, rented, leased, let or hired out to be occupied for living purposes by one family and including accessory structures and improvements.

Slope—Measurement. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.

“Special flood hazard area” means the area adjoining the floodway which is subject to a one percent or greater chance of flooding in any year, as determined by engineering studies acceptable to the city of Poulsbo. The coastal high hazard areas are included within special flood hazard areas.

“Species of concern” are species classified as endangered, threatened, sensitive, candidate, or monitored by the Washington Department of Fish and Wildlife.

“Species of local importance” are those species that are of local concern due to their population status or their sensitivity to habitat alteration or that are game species.

“Stream types” means the water typing system established by the Washington State Department of Natural Resources as established in WAC 222-16-030 and 222-16-031.

“Streams” means those areas in the city of Poulsbo where the surface water flow is sufficient to produce a defined channel or bed. A defined channel or bed is an area which demonstrates clear evidence of the passage of water and includes but is not limited to bedrock channels, gravel beds, sand and silt beds and defined-channel swales. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches,



canals, storm or surface water runoff devices or other artificial watercourses unless they are used by salmon or used to convey streams naturally occurring prior to construction.

Street. See “Road.”

“Susceptibility (groundwater)” means the potential an aquifer has for groundwater contamination, based on factors which include but are not limited to depth of aquifer, soil permeability, topography, hydraulic gradient and conductivity, and precipitation.

“Swale” means a shallow drainage conveyance with relatively gentle side slopes, generally with flow depths less than one foot.

“Threatened species (state-listed)” means a species, native to the state of Washington, that is likely to become endangered in the foreseeable future throughout a significant portion of its range within the state without cooperative management or the removal of threats. Threatened species are legally designated in WAC 232-12-011.

“Toe of slope” means a distinct topographic break in slope. Where no distinct break exists, this point shall be the lowermost limit of the landslide hazard area as defined and classified in Section 400 of this chapter.

“Top of slope” means a distinct topographic break in slope. Where no distinct break in slope exists, this point shall be the uppermost limit of the landslide hazard area as defined and classified in Section 400 of this chapter.

“Unavoidable and necessary impacts” are those impacts to critical areas that remain after an applicant proposing to alter such an area has demonstrated that no practicable alternative exists for the proposed project.

“Utilities” means services which produce or carry electric power, gas, sewage, water, communications, oil, etc.

“Utility corridor or easement” means public right-of-way or other dedicated utility easements on which one or more utility lines are located. Utilities include electric, gas, sewer, and water lines.

“Vegetation” means any and all living plant species growing at, below, or above the soil surface.

“WAC” means the administrative rules implementing state laws.

“Water-dependent use” means a use or portion of a use which requires direct contact with the water and cannot exist at a nonwater location due to the intrinsic nature of its operations. Examples of water-dependent uses may include ship cargo terminal loading areas, ferry and passenger terminals, barge loading facilities, ship building and dry docking, marinas, aquaculture, float plane facilities, and sewer outfalls.

“Water-related use” means a use or a portion of a use which is not intrinsically dependent on a waterfront location but whose operation cannot occur economically without a waterfront location. Examples of water-related uses may include warehousing of goods transported by water, seafood processing plants, hydroelectric generating plants, gravel storage when transported by barge, oil refineries where transport is by tanker, and log storage.

“Wetland mosaic” means groups of isolated wetlands, any of which may be smaller than any of the regulated categories, but which in aggregate may be as valuable as any of the regulated categories.

“Wetland of high conservation value” means a wetland that has been identified by scientists from the Washington Natural Heritage Program (WHNHP) as an important ecosystem for maintaining plant diversity in Washington State.

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

artificial wetlands intentionally created from nonwetland areas created to mitigate the conversion of wetlands. (WAC 365-190-030~~(22)~~).

“Wetlands report” means a wetland delineation characterization and analysis of potential impacts to wetlands utilizing the current approved Corps of Engineers Wetland Delineation manual (1987 or as amended) and associated supplements, consistent with applicable provisions of this chapter.

“Wetlands specialist” means a person with experience and formal training in wetland issues and with practical knowledge in wetland delineations, classifications, functional assessments and mitigation plans. Qualifications of a wetlands specialist include but are not limited to:

1. Certification as a professional wetland scientist (PWS) or wetland professional in training (WPIT) through the Society of Wetland Scientists;
2. Bachelor of Science or Arts or equivalent degree in biology, botany, environmental studies, fisheries, soil science, wildlife or related field from an accredited institution and two years of professional field experience; or
3. Five or more years of professional experience as a practicing wetlands biologist with a minimum three years of professional experience delineating wetlands.

“Wildlife biologist” means a person with experience and formal training in the principles of wildlife management and with practical knowledge in the habits, distribution and environmental management of wildlife. Qualifications of a wildlife biologist include but are not limited to:

1. Certification as a professional wildlife biologist through the Wildlife Society;
2. Bachelor of Science or Bachelor of Arts degree in wildlife management, wildlife biology, ecology, zoology, or a related field, from an accredited institution and two years of field experience; or
3. Five or more years of experience as a practicing wildlife biologist with a minimum of three years of practical field experience.

## **Section 200. Wetlands**

### **16.20.200 Applicability.**

Wetlands located outside of the city’s shoreline jurisdiction are regulated by the provisions of this chapter. Wetlands located within the city’s shoreline jurisdiction are regulated by the city’s shoreline master program.

### **16.20.205 Purpose.**

This section applies to all regulated uses within, or adjacent to, areas designated as wetlands, as categorized in Section 16.20.215. Under the conditions of this section, the city may deny development purposes that would irreparably impact regulated wetlands. The intent of this section is to:

- A. Achieve no net loss of wetland acreage, functions and values. Mitigation measures, as conditions of permits, must have a reasonable expectation of success;
- B. Plan wetland uses and activities in a manner that allows property holders to benefit from wetland property ownership wherever allowable under the conditions of this section and chapter; and
- C. Preserve natural flood control, stormwater storage and drainage or stream flow patterns.

### **16.20.210 Wetland categories.**

Per RCW 36.70A.030~~(21)~~, wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adopted for life in saturation ~~saturated~~ soil conditions. Wetlands generally include swamps, estuaries, marshes, bogs and similar areas. Per WAC 173-22-035, for regulatory purposes, wetlands shall be

delineated in accordance with the approved federal wetland delineation manual and applicable regional supplements, adopted by the U.S. Army Corps of Engineers. The city of Poulsbo uses the Department of Ecology's Washington State Wetland Rating System for Western Washington, 2014 Update (Ecology Publication No. 14-06-029) or as amended hereafter, to categorize wetlands for the purposes of establishing wetland buffer widths, wetland uses and replacement ratios for wetlands. This system consists of four wetland categories generally designated as in Section 16.20.215.

#### **16.20.215 Regulated and nonregulated wetland classification.**

##### **A. Regulated Wetlands.**

1. Category I Wetlands. Category I wetlands are those that: (a) represent a unique or rare wetland type; or (b) are more sensitive to disturbance than most wetlands; or (c) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (d) provide a high level of function. Category I wetlands include relatively undisturbed estuarine wetlands larger than one acre, wetlands with a high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR, bogs, mature and old-growth forested wetlands larger than one acre, wetlands in coastal lagoons, interdunal wetlands that score eight or nine habitat points and are larger than one acre, and wetlands that perform many functions very well as demonstrated by a score of twenty-three to twenty-seven total points.
2. Category II Wetlands. Category II wetlands are difficult, though not impossible, to replace, and provide a moderately high level of functions. Category II wetlands include estuarine wetlands smaller than one acre or disturbed and larger than one acre, interdunal wetlands greater than one acre or are a mosaic of interdunal wetlands that are one acre or larger, and wetlands that perform functions well as demonstrated by a score of twenty to twenty-two.
3. Category III Wetlands. Category III wetlands are wetlands with a moderate level of function as demonstrated by a score of sixteen to nineteen points, and interdunal wetlands between one-tenth and one acre.
4. Category IV Wetlands. Category IV wetlands have the lowest levels of functions as demonstrated by a score of nine to fifteen points and are often heavily disturbed.
5. Wetlands intentionally created from nonwetland areas to mitigate conversion of other wetlands.

##### **B. Nonregulated Wetlands (RCW 36.70A.030~~(21)~~).**

1. Created Wetlands. Wetlands created intentionally from a nonwetland site that were not required to be constructed as mitigation for adverse wetland impacts. These may include, but are not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds as defined in this chapter, and landscape amenities.
2. Road-Construction-Related Wetlands. Wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. The applicant shall bear the burden of proving that the wetland meets these criteria.

#### **16.20.220 Application requirements.**

##### **A. Application Procedures for New Development. Any new development on a parcel or parcels containing a regulated wetland or its buffer, or within three hundred feet of a wetland or its buffer, shall provide the special reports listed below, as required by the department, prior to any development authorization by the department:**

1. Wetland assessment report (Section 16.20.725), if wetlands or buffers are within three hundred feet but outside of the parcel or parcels and no buffer impacts, reductions, or setback intrusions are proposed;

2. Wetland delineation report (Section 16.20.730) if wetland or buffers occur within the parcel or parcels;
3. Wetland mitigation report (Section 16.20.735), if wetland or buffer impacts are anticipated or if the director requires buffer enhancement; and
4. Erosion and sedimentation control measures as required by Poulsbo Municipal Code construction and development standards contained in Chapter 12.02.

The director may require additional reports or information to further identify potential impacts to any part of the environment.

#### **16.20.225 Determination of wetland boundaries.**

- A. Wetland delineation shall be conducted and results reviewed according to the requirements of the U.S. Army Corps of Engineers federal wetland delineation manual and applicable regional supplements. The applicant shall be responsible for hiring a qualified wetlands specialist to determine the wetland boundary through a field survey. This specialist shall stake or flag the wetland boundary. For all new development, and as required by the director, this line shall be surveyed by a professional land surveyor licensed in the state of Washington or recorded using a differential global positioning system. In the event that a global positioning system is used, wetland boundary information, including position accuracies, shall be provided to the city in an electronic data format acceptable to the city. The regulated wetland boundary and regulated buffer shall be identified on all grading, landscaping, site, utility or other development plans submitted in support of the project.
- B. Where the applicant has provided a delineation of a wetland boundary, the director shall require peer-reviewed verification of the wetland boundary by a qualified wetlands specialist at the cost of the applicant, and may require that adjustments to the boundary be made by a wetlands specialist. If a consensus cannot be reached between the applicant and the city of Poulsbo with respect to the location of the wetland boundary, the city may request assistance from the Department of Ecology.

#### **16.20.230 Wetland and buffer development standards.**

For the purpose of this chapter, a regulated wetland and its buffer is a critical area.

- A. Buffers. Buffers shall be undisturbed native species vegetation areas appropriate to the ecoregion, for the purpose of protecting the integrity, function, and value of wetland resources. If the existing buffer does not consist of vegetation adequate to provide the necessary protection, then either the buffer area should be planted or the buffer width should be increased. Any buffer enhancement proposed shall be through an approved buffer enhancement plan. No uses or activities shall be allowed within the buffer unless as otherwise allowed or permitted by this section. If the buffer has previously been disturbed, the director may require the disturbed buffer area be revegetated pursuant to an approved buffer enhancement plan (see also Section 16.20.740). No refuse, including but not limited to household trash, yard waste and commercial/industrial refuse, shall be placed in the buffer.
- B. Impact of Land Use. Different land use intensities can result in high, moderate, or low levels of impact to adjacent wetlands and buffers. Types of land uses are categorized into impact levels as shown on the following table:

<b>Table 16.20.230.A—Types of Land Uses</b>	
<b>Level of Impact from Land Use</b>	<b>Types of Land Uses Based on Common Use Categories</b>
High	Residential uses (greater than one unit per acre); schools; churches; public facilities, public/private services and government administrative uses (excluding parks, rights-of-way and utilities); lodging uses; personal, professional, product and automotive services; health care services; commercial and sales uses; animal clinics and kennels;

Table 16.20.230.A—Types of Land Uses	
Level of Impact from Land Use	Types of Land Uses Based on Common Use Categories
	marine-related uses; industrial uses; restaurant uses; museum, club and recreation hall uses; high-intensity parks, outdoor and indoor recreation (golf courses, ballfields, tennis clubs, swimming pools, etc.); conversion to high-intensity agriculture (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc.); hobby farms.
Moderate	Residential uses (less than one unit per acre); moderate-intensity parks and outdoor recreation (parks with biking, jogging, etc.); conversion to moderate-intensity agriculture (orchards, hay fields, etc.) and paved trails; building of logging roads; utility corridor or right-of-way shared by several utilities and including access/maintenance road.
Low	Forestry (cutting of trees only); low-intensity parks and open space (hiking, bird-watching, preservation of natural resources, etc.) and unpaved trails; utility corridor without a maintenance road and little or no vegetation management.

- C. Buffer Widths. All regulated wetlands shall be surrounded by a buffer as follows, based upon Appendix 8-C, Section 8C.2.3 of Wetlands in Washington State—Volume 2: Guidance for Protecting and Managing Wetlands (Ecology Publication No. 05-06-008):

Table 16.20.230.B—Wetland Buffer Width Standards			
Wetland Category and Characteristics		Buffer Width Standards	Other Measures Recommended for Protection
<b>Category I</b>			
Wetlands with a High Conservation Value			No additional surface discharges to wetland or its tributaries
	Low Impact Use	125 feet	No septic systems within 300 feet of wetland Restore degraded parts of buffer
	Moderate Impact Use	190 feet	
	High Impact Use	250 feet	
Bog			
	Low Impact Use	125 feet	No additional surface discharges to wetland or its tributaries Restore degraded parts of buffer
	Moderate Impact Use	190 feet	
	High Impact Use	250 feet	
Forested		Buffer to be based on score for habitat functions or water quality functions	If forested wetland scores high for habitat, need to maintain connections to other habitat area Restore degraded parts of buffer
Estuarine			
	Low Impact Use	100 feet	No recommendations at this time
	Moderate Impact Use	150 feet	
	High Impact Use	200 feet	
Coastal lagoon			
	Low Impact Use	100 feet	No recommendations at this time
	Moderate Impact Use	150 feet	

Table 16.20.230.B—Wetland Buffer Width Standards			
Wetland Category and Characteristics		Buffer Width Standards	Other Measures Recommended for Protection
	High Impact Use	200 feet	
Habitat score from 8—9 points			Maintain connections to other habitat areas Restore degraded parts of buffer
	Low Impact Use	150 feet	
	Moderate Impact Use	225 feet	
	High Impact Use	300 feet	
Interdunal with habitat score 8—9 points			Maintain connections to other habitat areas Restore degraded parts of buffer
	Low Impact Use	150 feet	
	Moderate Impact Use	225 feet	
	High Impact Use	300 feet	
Habitat score from 56—7 points			No recommendations at this time
	Low Impact Use	75 feet	
	Moderate Impact Use	110 feet	
	High Impact Use	150 feet	
Score for water quality 8—9 points and habitat score of 5 or less points			No additional surface discharges of untreated runoff
	Low Impact Use	50 feet	
	Moderate Impact Use	75 feet	
	High Impact Use	100 feet	
Category I wetlands not meeting any of the criteria			No recommendations at this time
	Low Impact Use	50 feet	
	Moderate Impact Use	75 feet	
	High Impact Use	100 feet	
Category II			
Estuarine			Maintain connections to other habitat areas
	Low Impact Use	75 feet	
	Moderate Impact Use	110 feet	
	High Impact Use	150 feet	
Interdunal			No recommendations at this time
	Low Impact Use	75 feet	
	Moderate Impact Use	110 feet	
	High Impact Use	150 feet	
Habitat score from 8—9 points			Maintain connections to other habitat areas
	Low Impact Use	150 feet	



Table 16.20.230.B—Wetland Buffer Width Standards			
Wetland Category and Characteristics		Buffer Width Standards	Other Measures Recommended for Protection
	Moderate Impact Use	225 feet	
	High Impact Use	300 feet	
Habitat score from <del>56</del> —7 points			No recommendations at this time
	Low Impact Use	75 feet	
	Moderate Impact Use	110 feet	
	High Impact Use	150 feet	
Score for water quality 8—9 points; habitat score less than <del>5</del> <u>6</u> points			No additional surface discharges of untreated runoff
	Low Impact Use	50 feet	
	Moderate Impact Use	75 feet	
	High Impact Use	100 feet	
Category II wetlands not meeting any of the criteria above			No recommendations at this time
	Low Impact Use	50 feet	
	Moderate Impact Use	75 feet	
	High Impact Use	100 feet	
Category III			
Habitat score from 8—9 points: use Category II buffers with habitat score 8—9 points			
Habitat score <del>56</del> —7 points			No recommendations at this time
	Low Impact Use	75 feet	
	Moderate Impact Use	110 feet	
	High Impact Use	150 feet	
Habitat score 3— <del>45</del> points			No recommendations at this time
	Low Impact Use	40 feet	
	Moderate Impact Use	60 feet	
	High Impact Use	80 feet	
Category IV			
Habitat score for all 3 functions is less than 16 points			No recommendations at this time
	Low Impact Use	25 feet	
	Moderate Impact Use	40 feet	
	High Impact Use	50 feet	

- D. Buffer Measurement. All buffers shall be measured on a horizontal plane from the regulated wetland edge as marked in the field by the wetlands specialist.
- E. Buffer Width Averaging. The widths of buffers may be averaged if this will improve the protection of wetland functions, or if it is the only way to allow for reasonable use of a parcel. Averaging may not be used in conjunction with any of the other provisions for reductions of buffers in subsection F of this section.
1. Averaging to improve wetland protection may be permitted when all of the following conditions are met:
    - a. The wetland has significant differences in characteristics that affect its habitat functions, such as wetland with a forested component adjacent to a degraded emergent component or a “dual-rated” wetland with a Category I area adjacent to a lower-rated area.
    - b. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower-functioning or less sensitive portion.
    - c. The total area of buffer after averaging is equal to the area required without averaging.
    - d. The buffer at its narrowest point is never less than three-quarters of the required width.
  2. Averaging to allow reasonable use of a parcel may be permitted when all of the following are met:
    - a. There are no feasible alternatives to the site design that could be accomplished without buffer averaging.
    - b. The averaged buffer demonstrates no net loss of ~~will not result in degradation of~~ the wetland’s functions and values as demonstrated verified in a mitigation by a report ~~from~~ by a qualified wetland professional.
    - c. The total buffer area after averaging is equal to the area required without averaging.
    - d. The buffer at its narrowest point is never less than three-quarters of the required width.
- F. Decreasing Buffer Widths. Per Section 8C.2.4.1 of Appendix 8-C, Wetlands in Washington State—Volume 2, wetland buffer widths required for “high” intensity land uses can be reduced to those required for “moderate” intensity land uses (see Tables 16.20.230.A and 16.20.230.B) under the following conditions:
1. For wetlands that score moderate or high for habitat (five to nine points for the habitat score), the width of the buffer can be reduced by no more than twenty-five percent if both of the following criteria are met:
    - a. A relatively undisturbed, vegetated corridor at least one hundred feet wide is protected between the wetland and any other priority habitats as defined by the Washington State Department of Fish and Wildlife. “Relatively undisturbed” and “vegetated corridor” are defined in the Western Washington Wetland Rating System. Priority habitats within the city may include:
      - i. Wetlands;
      - ii. Riparian zones;
      - iii. Cliffs;
      - iv. Estuary/estuary-like;
      - v. Marine/estuarine shorelines;
      - vi. Biodiversity and corridors. The corridor must be protected for the entire distance between the wetland and the priority habitat by some type of legal protection, such as a conservation easement.

- b. Measures to minimize the impacts of different land uses on wetlands, such as the examples in Table 16.20.230.C, are applied.
2. For wetlands that score less than five points for habitat, the buffer width can be reduced by no more than twenty-five percent applying measures to minimize the impacts of the proposed land uses, such as the examples in Table 16.20.230.C.

<b>Table 16.20.230.C—Examples of Measures to Minimize Impacts to Wetlands from Different Types of Activities</b>		
<b>Examples of Disturbances</b>	<b>Activities and Uses That Cause Disturbances</b>	<b>Examples of Measures to Minimize Impacts</b>
Lights	Parking lots, warehouses, commercial, manufacturing, residential areas	Direct lights away from wetland.
Noise	Manufacturing, commercial, residential areas	Locate activity that generates noise away from wetland.
Toxic runoff*	Parking lots, roads, manufacturing, commercial, residential areas, landscaping	Route all new untreated runoff away from wetland while ensuring wetland is not dewatered.
		Establish covenants limiting use of pesticides within 150 feet of wetland.
		Apply integrated pest management.
Stormwater runoff	Parking lots, roads, manufacturing, residential areas, commercial, landscaping	Retrofit stormwater detention and treatment for roads and existing adjacent development.
		Prevent channelized flow from lawns that directly enter the buffer.
Change in water regime	Impermeable surfaces, lawns, clearing and grading	Infiltrate or treat, detain and disperse into buffer new runoff from impervious surfaces and new lawns.
Pets and human disturbance	Residential areas	Use privacy fencing; plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion; place wetland and its buffer in a separate tract.
Dust	Clearing and grading	Use best management practices to control dust.
* These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present.		

3. Decision Criteria. Prior to approval, a buffer reduction proposal shall meet all of the decisional criteria listed below.
    - a. It will provide an overall improvement in water quality protection for the wetland; and
    - b. It will not adversely affect fish or wildlife species and will provide an overall enhancement to fish and wildlife habitat; and
    - c. It will provide a net improvement in drainage and/or stormwater detention capabilities; and
    - d. All exposed areas are stabilized with native vegetation, as appropriate; and
    - e. It will not lead to unstable earth conditions or create an erosion hazard; and
    - f. It will not be materially detrimental to any other property or the city as a whole.
- G. Increasing Buffer Widths. The director may increase buffer zone widths for a development project on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values, per Section

8C.2.5 of Appendix 8-C, Wetlands in Washington State, Volume 2. This determination shall be made only when the director demonstrates any one of the following through appropriate documentation:

1. The wetland site has known locations of endangered or threatened species, the width of the buffer should be increased to provide adequate protection for the species based on the requirements in Section 8C.2.5.3, as revised, of the Wetlands in Washington State, Volume 2;
2. The adjacent land is susceptible to severe erosion and erosion control measures alone will not effectively prevent adverse wetland impacts; and
3. The adjacent land on the development proposal site has minimal vegetative cover or slopes greater than thirty percent.

H. Building or Impervious Surface Setbacks. A building or impervious surface setback of fifteen feet is required from the edge of any wetland buffer. Minor structural or impervious surface intrusions into the areas of the setback, such as but not limited to fire escapes, open/uncovered porches, landing places, outside walkways, outside stairways, retaining walls, fences and patios, may be permitted if the department determines upon review of an analysis of buffer functions submitted by the applicant, that such intrusions will not adversely impact the wetland. The setback shall be identified on a site plan.

I. Signs and Fencing of Wetlands. This subsection applies to those wetlands and their buffers that are within three hundred feet of regulated development activities:

1. Wetland buffers shall be temporarily fenced or otherwise suitably marked, as required by the director, between the area where the construction activity occurs and the buffer. Fences shall be made of a durable protective barrier and shall be highly visible. Silt fences and plastic construction fences may be used to prevent encroachment on wetlands or their buffers by construction. Temporary fencing shall be removed after the site work has been completed and the site is fully stabilized per city approval.
2. The director may require that permanent signs and/or fencing be placed on the common boundary between a wetland buffer and the adjacent land. Such signs will identify the wetland buffer and may be required to contain other information related to wetland protection. The director may approve an alternative method of wetland and buffer identification if it provides adequate protection to the wetland and buffer.

J. Buffer Enhancement Plan. When a buffer is proposed to be averaged, reduced or increased, the applicant shall submit a buffer enhancement plan prepared by a qualified wetland specialist, and in conjunction with a mitigation plan, if required. The report shall assess the habitat, water quality, stormwater detention, groundwater recharge, shoreline protection, and erosion protection functions of the buffer; and assess the effects on those functions. The buffer enhancement plan shall also provide the following:

1. A map detailing the specific area of enhancement that shows the elevation contours of the site;
2. A planting plan that uses native plant species indigenous to this region including groundcover, shrubs and trees and designed to provide intensive vegetative planting to result in improved habitat and the screening of the wetland from adjacent disturbances;
3. Provisions for monitoring and maintenance over the monitoring period as required under Section 16.20.740.
4. The buffer enhancement plan shall document how the buffer will enhance the functions and values of the wetland. The planting plan shall be reviewed by a third-party consultant hired by the city at the applicant's expense, or by state resource agency staff person with the appropriate expertise. Such a review will include evaluation of the accuracy and scientific validity of the enhancement plan, and provide written comments including recommendations for additional documentation or revisions.

#### **16.20.235 Additional development standards.**

In addition to meeting the development standards in Section 16.20.230, the regulated uses identified below shall also comply with the standards of this section and other applicable state, federal and local ordinances.

- A. Docks. Construction of a dock, pier, moorage, float or launch facility may be permitted subject to criteria in the city's shoreline master program.
- B. Forest Practice, Class IV General, and Conversion Option Harvest Plans (COHPs). All timber harvesting and associated development activity, such as construction of roads, shall comply with the provisions of this chapter, including the maintenance of buffers around regulated wetlands.
- C. Agricultural Restrictions. In all development proposals which would permit introduction or expansion of agricultural uses, damage to regulated wetlands shall be avoided, and will be regulated as a development activity subject to the provisions of this section.
- D. Road/Street Repair and Construction. Public road or street repair, maintenance, expansion or construction may be allowed in wetlands or wetland buffers subject to the following development standards:
  - 1. No other reasonable or practicable alternative exists and the road or street crossing serves multiple properties wherever possible;
  - 2. Publicly owned or maintained road or street crossings provide for other purposes, such as utility crossings, pedestrian or bicycle easements, viewing points, etc.;
  - 3. The road or street repair and construction are the minimum necessary to provide safe roads and streets;
  - 4. Mitigation shall be performed in accordance with this chapter and specific project mitigation plan requirements; and
  - 5. Before beginning work in-water or within wetlands, it shall be the responsibility of the agency to ensure that all other required state and federal approvals have been obtained.
- E. Surface Water Management Low Impact Development (LID). A wetland or its buffer can be physically or hydrologically altered to meet the requirements of a stormwater management runoff treatment, LID or flow control best management practices (BMP), if the following criteria are met:
  - 1. The Category III or IV wetland has a habitat score of three to four points; and no other location is feasible; and
  - 2. There will be "no net loss" of functions and values of the wetland, and the location of such facilities will not degrade the functions or values of the wetland; and
  - 3. The wetland does not contain a breeding population of any native amphibian species; and
  - 4. 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" (<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; and
  - 5. The wetland lies in the natural routing of the runoff, and the discharge follows the natural routing; and
  - 6. 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
  - 7. 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.

A site-specific characterization through a wetland report is required to determine if an LID best management practice (BMP) is feasible for a project site and all of the criteria above are met. The special wetland report shall be prepared consistent with Section 16.20.725 and will be verified through peer review.

A wetland hydrology monitoring plan prepared by a qualified wetland specialist shall be required. The plan shall provide an analysis to demonstrate the baseline hydrologic conditions within the wetland, provide monitoring methods, provide a monitoring program to evaluate the hydrologic conditions post construction, and provide a reporting schedule for submitting monitoring reports to the city. The wetland hydrology monitoring plan shall be verified through peer review.

F. Trails and Trail-Related Facilities. Construction of public trails and trail-related facilities, such as benches and viewing platforms, may be allowed in wetlands or wetland buffers pursuant to the following guidelines:

1. Trails and related facilities shall, to the extent feasible, be placed on existing road grades, utility corridors, or any other previously disturbed areas outside of the buffer.
2. Trails and related facilities that are outside of the buffer shall be planned to minimize removal of trees, soil disturbance and existing hydrological characteristics, shrubs, snags and important wildlife habitat.
3. Viewing platforms and benches, and access to them, shall be designed and located to minimize disturbances of wildlife habitat and/or critical characteristics of the affected wetland.
4. Trails and related facilities shall generally be located outside required buffers. Where trails are permitted within buffers, they should be located in the outer twenty-five percent of the wetland buffer area as much as feasible, except where wetland crossings or viewing areas have been approved.
5. Trails shall generally be limited to pedestrian use unless other more intensive uses, such as bike or horse trails, have been specifically allowed and mitigation has been provided. Trail width shall not exceed five feet unless there is a demonstrated need, subject to review and approval by the director. Trails shall be constructed with pervious materials unless otherwise approved by the director and located in the outer twenty-five percent of the wetland buffer area as much as feasible.
6. Mitigation may be required to replace native vegetation removed for trail construction or enhance remaining areas of degraded buffer.

G. Utilities in Wetlands or Wetland Buffers.

1. The utility development authorized in Section 16.20.120 shall be allowed, subject to best management practices in wetlands and wetland buffers.
2. Construction of new utilities outside the road right-of-way or existing utility corridors or easements may be permitted in wetlands or wetland buffers, only when no reasonable alternative location is available and the utility corridor or easement meets the requirements for installation, replacement or vegetation and maintenance outlined below, and as required in the filing and approval of applicable permits and special reports (Section 700 of this chapter) required by this chapter.
3. Sanitary Sewer or On-Site Sewage Utility. Construction of sanitary sewer lines or on-site sewage systems may be permitted in regulated wetland buffers only when: (a) the applicant demonstrates it is necessary to meet state and/or local health code minimum design standards (not requiring a variance for either horizontal setback or vertical separation), and/or (b) there are no other practicable or reasonable alternatives available and construction meets the requirements of this section. Joint use of the sanitary sewer utility easement by other utilities may be allowed.



4. New utility corridors or easements shall not be allowed when the regulated wetland or buffer has known locations of federal- or state-listed endangered, threatened or sensitive species, heron rookeries or nesting sites of raptors which are listed as state candidate or state monitor, except in those circumstances where an approved habitat management plan indicates that the utility corridor or easement will not significantly impact the wetland or wetland buffer.
5. New utility corridor or easement construction and maintenance shall protect the regulated wetland and buffer environment by utilizing the following methods:
  - a. New utility corridors or easements shall be aligned when possible to avoid cutting trees greater than twelve inches in diameter at breast height (four and one-half feet), measured on the uphill side.
  - b. New utility corridors or easements shall be revegetated with appropriate native vegetation at preconstruction densities or greater, immediately upon completion of construction, or as soon thereafter as possible, if due to seasonal growing constraints. The utility shall ensure that such vegetation survives.
  - c. Any additional utility corridor or easement access for maintenance shall be provided as much as possible at specific points, rather than by parallel roads. If parallel roads are necessary, they shall be of a minimum width but no greater than fifteen feet; and shall be contiguous to the location of the utility corridor on the side away from the wetland. Mitigation will be required for any additional access through restoration of vegetation in disturbed areas.
  - d. The director may require other additional mitigation measures.
6. Utility corridor maintenance shall include the following measures to protect the regulated wetland and buffer environment:
  - a. Where feasible, painting of utility equipment such as power towers shall not be sprayed or sandblasted, nor should lead-based paints be used.
  - b. No pesticides, herbicides or fertilizers may be used in wetland areas or their buffers except those approved by the EPA and the Department of Ecology. Where approved, herbicides must be applied by a licensed applicator in accordance with the safe application practices on the label.
7. Before beginning work in-water or within wetlands, it shall be the responsibility of the utility to ensure that all other required state and federal approvals have been obtained.

#### **16.20.240 Wetland alterations.**

- A. Mitigation Sequencing. All regulated development activities proposed to impact wetlands or buffers shall be mitigated according to this title subject to the following sequential order (WAC 197-11-768). The applicant shall demonstrate to the satisfaction of the review authority that each step of this sequence has been adequately addressed prior to approving or permitting impacts to wetlands under this chapter.
  1. Avoiding the impact altogether by not taking a certain action or parts of an action;
  2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
  3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  4. Reducing or eliminating the impact 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;

6. Monitoring the impact and taking appropriate corrective measures; or
  7. Mitigating for individual actions may include a combination of the above measures.
- B. Mitigation for Regulated Activities in Wetland Buffers. A specific mitigation plan is required and the requirements are provided in Section 16.20.725. Appropriate implementation and timing of the mitigation plan shall be included as conditions of approval of the underlying land use permit.
- C. Mitigation for Regulated Activities in Wetlands. Compensatory mitigation shall be required for regulated activities that result in the loss of wetland acreage or in the reduction of wetland functions or habitat values. A specific mitigation plan is required and the requirements are provided in Section 16.20.725.
1. A compensatory mitigation plan shall be completed. The applicant shall submit a detailed mitigation plan for compensatory mitigation to the department.
  2. The detailed mitigation plan shall be prepared, signed, and dated by the wetlands specialist to indicate that the plan is in accordance with specifications as determined by the wetlands specialist. A signed original mitigation plan shall be submitted to the department.
  3. Approval of the detailed mitigation plan shall be signified through conditions of approval of the underlying land use permit and requiring appropriate implementation and timing of the mitigation plan.
  4. The mitigation project shall be completed according to a schedule agreed upon between the department and the applicant as included in the wetland mitigation plan and conditions of approval.
  5. Wetland mitigation shall occur according to the approved wetland mitigation plan and shall be consistent with provisions of this chapter and title.
  6. A wetlands specialist shall be on site during construction and plant installation phases of all mitigation projects.
  7. On completion of construction for the wetland mitigation project, the wetlands specialist shall submit an as-built report to the department for review and approval.
- D. Wetland Replacement Ratios.
1. The ratios presented here are based on the type of compensatory mitigation proposed (restoration, creation/establishment, or enhancement). These types of compensatory mitigation, listed in order of preference, are defined as follows:
    - a. Restoration. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into:
      - i. Reestablishment. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Activities could include removing fill material, plugging ditches, or breaking drain tiles. Reestablishment results in a gain in wetland acres and functions.
      - ii. Rehabilitation. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres.
    - b. Creation/Establishment. The manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site, where a

wetland did not previously exist. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species. Establishment results in a gain in wetland acres.

- c. **Enhancement.** The manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, floodwater retention or wildlife habitat. Activities typically consist of planting vegetation, controlling nonnative or noxious weeds (Class A and B), modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres.
  - d. **Preservation.** The removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This term includes the purchase of land or easements, repairing water control structures or fences, or structural protection. Preservation does not result in a gain of wetland acres (but may result in a gain in functions over the long term). Replacement ratios for preservation will be determined on a case-by-case basis, depending on the quality of the wetlands being lost or degraded and the quality of the wetlands being preserved.
2. The following ratios appearing below in Table 16.20.240, Wetland Mitigation Replacement Ratios, as found in Wetland Mitigation in Washington State—Part 1: Agency Policies and Guidance (Ecology Publication No. 06-06-011a). These ratios shall be used to determine the appropriate amounts of restored, established, or enhanced wetland that will be required to replace impacted wetlands. The first number specifies the amount of wetland area requiring restoration, establishment, or enhancement and the second number specifies the amount of wetland area altered.

<b>Table 16.20.240—Wetland Mitigation Replacement Ratios—</b>					
<b>Wetland Category</b>	<b>Reestablishment or Creation</b>	<b>Rehabilitation Only</b>	<b>Reestablishment or Creation (R/C) and Rehabilitation (RH)</b>	<b>Reestablishment or Creation (R/C) and Enhancement (E)</b>	<b>Enhancement Only</b>
All Category IV	1:5:1	3:1	1:1 R/C and 1:1 RH	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1 R/C and 2:1 RH	1:1 R/C and 4:1 E	8:1
Category II-estuarine	Case-by-case	4:1 rehabilitation of an estuarine-wetland	Case-by-case	Case-by-case	Case-by-case
Category II-interdunal	2:1 compensation- has to be interdunal wetland	4:1 compensation- has to be interdunal wetland	1:1 R/C and 2:1 RH- compensation has to be interdunal wetland	Not considered an option*	Not considered an option*
All other Category II	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	12:1
Category I forested	6:1	12:1	1:1 R/C and 10:1 RH	1:1 R/C and 20:1 E	24:1
Category I based on score for functions	4:1	8:1	1:1 R/C and 6:1 RH	1:1 R/C and 12:1 E	16:1
Category I natural	Not considered	6:1 rehabilitation of	Not considered	R/C not considered	Case-by-case

<b>Table 16.20.240—Wetland Mitigation Replacement Ratios—</b>					
<b>Wetland Category</b>	<b>Reestablishment or Creation</b>	<b>Rehabilitation Only</b>	<b>Reestablishment or Creation (R/C) and Rehabilitation (RH)</b>	<b>Reestablishment or Creation (R/C) and Enhancement (E)</b>	<b>Enhancement Only</b>
heritage-site	possible**	a natural heritage-site	possible**	possible**	
Category I coastal-lagoon	Not considered-possible**	6:1 rehabilitation-of-a-coastal-lagoon	Not considered-possible**	Not considered-possible**	Case-by-case
Category I bog	Not considered-possible**	6:1 rehabilitation-of-a-bog	Not considered-possible**	Not considered-possible	Case-by-case
Category I estuarine	Case-by-case	6:1 rehabilitation-of-an-estuarine-wetland	Case-by-case	Case-by-case	Case-by-case
<p>*—— Due to the dynamic nature of interdunal systems, enhancement is not considered an ecologically appropriate action.</p> <p>**—— Natural heritage sites, coastal lagoons, and bogs are considered irreplaceable wetlands because they perform some special functions that cannot be replaced through compensatory mitigation. Impacts to such wetland would therefore result in a net loss of some functions no matter what kind of compensation is proposed.</p>					

<b>Table 16.20.240—Wetland Mitigation Replacement Ratios</b>				
<b>Wetland Category</b>	<b>Reestablishment or Creation</b>	<b>Rehabilitation Only</b>	<b>Preservation</b>	<b>Enhancement Only</b>
<u>All other Category IV wetlands</u>	<u>1.5:1</u>	<u>3:1</u>	<u>6:1</u>	<u>6:1</u>
<u>Category III and IV Interdunal wetlands</u>	<u>1.5:1</u>	<u>3:1 (limited circumstances)</u>	<u>6:1</u>	<u>Not considered an option*</u>
<u>All other Category III wetlands</u>	<u>2:1</u>	<u>4:1</u>	<u>8:1</u>	<u>8:1</u>
<u>All other Category II wetlands</u>	<u>3:1</u>	<u>6:1</u>	<u>12:1</u>	<u>12:1</u>
<u>Category II estuarine</u>	<u>4:1 (reestablishment only)</u>	<u>8:1</u>	<u>16:1</u>	<u>Case-by-case</u>
<u>Category II coastal lagoon</u>	<u>3:1 (reestablishment only)</u>	<u>6:1</u>	<u>12:1</u>	<u>Not considered an option*</u>
<u>Category II interdunal</u>	<u>2:1</u>	<u>4:1 (limited circumstances)</u>	<u>8:1</u>	<u>Not considered an option*</u>
<u>All other Category I wetlands</u>	<u>4:1</u>	<u>8:1</u>	<u>16:1</u>	<u>16:1</u>
<u>Category I forested</u>	<u>6:1</u>	<u>12:1</u>	<u>24:1</u>	<u>24:1</u>
<u>Category I estuarine</u>	<u>4:1 (reestablishment only)</u>	<u>8:1</u>	<u>16:1</u>	<u>Case-by-case</u>
<u>Category I interdunal</u>	<u>4:1</u>	<u>8:1 (limited circumstances)</u>	<u>16:1</u>	<u>Not considered an option*</u>
<u>Category I coastal lagoon</u>	<u>4:1 (reestablishment only)</u>	<u>8:1</u>	<u>16:1</u>	<u>Case-by-case</u>
<u>Bogs</u>	<u>N/A</u>	<u>N/A</u>	<u>24:1</u>	<u>N/A</u>
<u>Wetlands of High Conservation Value</u>	<u>Consult with WA DNR</u>	<u>Consult with WA DNR</u>	<u>24:1</u>	<u>Consult with WA DNR</u>
<p>* Due to the dynamic nature of interdunal systems, enhancement is not considered an ecologically appropriate action.</p> <p>** Natural heritage sites, coastal lagoons, and bogs are considered irreplaceable wetlands because they perform some special functions that cannot be replaced through compensatory mitigation. Impacts to such wetland would therefore result in a net loss of some functions no matter what kind of compensation is proposed.</p>				

- The director may increase or decrease the ratios based on one or more of the following:

- a. Replacement ratios may be increased under the following circumstances:
    - i. Uncertainty exists as to the probable success of the proposed restoration or creation;
    - ii. A significant period of time will elapse between impact and establishment of wetland functions at the mitigation site;
    - iii. Proposed compensation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or
    - iv. The impact was an unauthorized impact.
  - b. Replacement ratios may be decreased under the following circumstances:
    - i. Documentation by a wetland specialist demonstrates that the proposed compensation actions have a very high likelihood of success based on prior experience. For example, demonstrated prior success with similar compensation actions as those proposed, and/or extensive hydrologic data to support the proposed water regime;
    - ii. Documentation by a qualified wetland specialist demonstrates that the proposed compensation actions will provide functions and values that are significantly greater than the wetland being impacted; or
    - iii. The proposed mitigation actions are conducted in advance of the impact and are shown to be successful.
  - c. Compensatory mitigation should not result in the creation, restoration or enhancement of an atypical wetland. An atypical wetland is defined as a wetland whose design does not match the type of wetland that would be found in the geomorphic setting of the proposed site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Any designs that provide exaggerated morphology (such as excavating a permanently inundated pond in a seasonally saturated or inundated wetland) or require a berm or engineered structures to hold back water would be considered atypical.
- E. Compensatory Mitigation. Unless it is demonstrated that a higher level or ecological functioning would result from an alternative approach, compensatory mitigation for ecological functions shall be in-kind and either on-site, or within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration except when all of the following apply:
- 1. There are no reasonable on-site or in-sub-drainage-basin opportunities (e.g., on-site options would require elimination of high-functioning upland habitat), or on-site and in-sub-drainage-basin opportunities do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts; and
  - 2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and
  - 3. Off-site locations shall be in the same sub-drainage basin unless:
    - a. Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the city or Kitsap County and strongly justify location of mitigation at another site;
    - b. Credits from a state-certified wetland mitigation bank are used as compensation and the use of credits is consistent with the terms of the bank's certification; or
    - c. Fees are paid to an approved in-lieu-fee program to compensate for the impacts.

- F. Advance Mitigation. Compensatory mitigation in advance of proposed impacts may be allowed on a case-by-case basis where the applicant demonstrates consistency with approved state and/or federal advance mitigation programs and policies. Approval of an advance mitigation plan is not a guarantee of future project approval or authorization.
- G. Monitoring Requirements. The city of Poulsbo shall require monitoring reports on an annual basis for a minimum of five years and up to ten years, or until the director determines that the mitigation project has met the performance standards specified in the wetland mitigation plan. The wetland mitigation plan shall provide specific performance standards for monitoring the mitigation project. The performance standards shall be project-specific and use best available science to aid the director in evaluating whether or not the project has achieved success.

## **Section 300. Fish and Wildlife Habitat Conservation Critical Areas**

### **16.20.305 Purpose.**

This section applies to all uses and activities regulated under this chapter within or adjacent to areas designated as fish and wildlife habitat conservation areas, as categorized in Section 16.20.310. The purpose of this chapter is to:

- A. Preserve existing ecological functions of fish and wildlife habitat conservation areas normally associated with streams, riparian areas (freshwater areas and estuarine areas not regulated by the city's shoreline master program), wetland and upland wildlife habitat;
- B. Preserve natural flood control, stormwater storage and drainage or stream flow patterns;
- C. Control siltation, protect nutrient reserves and main stream flows and stream quality; and
- D. Prevent turbidity and pollution of streams.

### **16.20.310 Fish and wildlife habitat conservation area—Designations.**

The following designations shall be used in classifying fish and wildlife habitat conservation areas:

- A. South Fork of Dogfish Creek Stream/Riparian Corridor Conservation Areas. The following reaches of stream channel and riparian area of the South Fork of Dogfish Creek:
  - 1. Headwater. Between the northernmost extent of the drainage north of NE Lincoln Road and Wilderness Park;
  - 2. Canyon. Between the east end of Wilderness Park and SR 305;
  - 3. Urban/Commercial. Between SR 305 (culvert south of NE Lincoln Road) and culvert north of NE Liberty Road;
  - 4. Lower Forested. Between SR 305 (culvert north of NE Liberty Road) and the confluence with Dogfish Creek main stem, north of Bond Road; and
  - 5. Main Stem. Dogfish Creek between the junction of South Fork and Liberty Bay, to the boundary of the city's shoreline jurisdiction.
- B. Streams. All streams which meet the criteria for Types F, Np and Ns waters as set forth in WAC 222-16-030 of the DNR Water Typing System, as now or hereafter amended. Type S waters are regulated through Chapter 16.08, Shoreline Master Program.
- C. Lakes Less Than Twenty Acres in Surface Area. Those lakes which meet the criteria for Types F, Np and Ns waters as set forth in WAC 222-16-030, as now or hereafter amended. This includes lakes and naturally occurring ponds less than twenty acres in surface area and their submerged aquatic beds, and lakes and ponds planted with game fish by a governmental or tribal authority.



- D. Habitats recognized by federal or state agencies for federal- and/or state-listed endangered, threatened, sensitive and candidate/monitored species which presence is documented in maps or databases available to city of Poulsbo.
- E. Areas targeted for preservation by federal, state and/or local government which provide fish and wildlife habitat benefits, such as important waterfowl areas identified by the U.S. Fish and Wildlife Service or Washington Department of Fish and Wildlife.
- F. Areas that contain habitats and species of local importance.
- G. Habitats which include attributes such as comparatively high wildlife density, high wildlife species richness, significant wildlife breeding habitat, seasonal ranges or movement corridors or limited availability and/or high vulnerability. These habitats may include caves, cliffs, islands, meadows, old-growth/mature forest, snag-rich areas, talus slopes, urban natural open space, Category I wetlands, and other wetlands that score high for habitat (eight to nine points).
- H. Areas of Rare Plant Species and High Quality Ecosystems. Areas of rare plant species and high quality ecosystems as identified by the Washington State Department of Natural Resources through the Natural Heritage Program.

#### **16.20.315 Development standards.**

The following development standards shall apply to fish and wildlife habitat conservation areas:

- A. Riparian Management Zones Buffers and Building Setbacks. RMZs Buffers and building setbacks shall be maintained along all identified fish and wildlife habitat conservation areas, as indicated in this section.
  - 1. Riparian Management Zones Buffers and building setbacks shall be maintained along all identified fish and wildlife habitat conservation areas. Distances shall be measured horizontally from the ordinary high water mark (OHWM) or from the top of the bank where the OHWM cannot be identified. Building setbacks shall be measured horizontally from the edge of the Riparian Management Zone (RMZ) buffer.
    - a. For streams in ravines with ravine sides ten feet or greater in height, the minimum RMZ buffer width shall be the minimum required or a width which extends twenty-five feet beyond the top of the slope, whichever is greater.
  - 2. Riparian Management Zones Buffers shall be retained in at least the quality of their existing condition. Where impacts or reductions of the standard RMZ buffer width are proposed, the director may require the remaining RMZ buffer be enhanced to protect the quality and function of the fish and wildlife habitat conservation area through a RMZ buffer enhancement plan. Refuse, including but not limited to household trash, yard waste, and commercial/industrial refuse, shall not be placed in the RMZ buffer.
  - 3. Riparian Management Zones Stream buffers shall include streamside wetlands and/or functional floodplains which provide overflow storage for stormwaters, provide groundwater recharge or discharge functions, or provide seasonal shelter and food for fish. In braided channels, the OHWM or top of bank shall be defined so as to include the entire stream feature.
  - 4. Riparian Management Zones shall also include the channel migration zone (CMZ), such that the buffer includes potential riparian habitat in the of event of stream migration.
- 54. Where wetlands and geologically hazardous areas occur on a site that contains a fish and wildlife habitat conservation area, refer to Sections 200, Wetlands, and 400, Geologically Hazardous Areas, of this chapter for additional development standards. In cases of differing standards, the more restrictive RMZ buffer or setback shall apply.
- 65. Building Setbacks. An additional building setback of fifteen ~~twenty-five~~ feet is required from the edge of all Riparian Management Zones fish and wildlife habitat conservation area buffers.

- a. If applicable, the required building setbacks may meet or contribute to specific yard setback requirements of Title 18.
  - b. Minor structural or impervious surface intrusions such as but not limited to fire escapes, open/uncovered porches, landing places, outside walkways, outside stairways, retaining walls fences, and patios may be permitted within the required building setback if the director determines, upon submittal of a habitat management plan, that such intrusions will not adversely impact the RMZ fish and wildlife habitat conservation area or its buffer. The setback shall be identified on the site plan or appropriate drawing.
76. New Development or Redevelopment. Standard RMZs buffers and building setbacks for fish and wildlife habitat conservation areas shall be required as per Table 16.20.315.

<b>Table 16.20.315—Fish and Wildlife Habitat Conservation Area Development Standards</b>		
<u>Riparian Management Zone Standard Buffers and Setback Requirements</u>		
<u>Water Type</u>	<u>RMZ Buffer Width</u> (feet, each side of stream)	<u>Building Setback</u> (feet, each side of RMZ buffer)
F1 (salmonids)	200	<u>25 15</u>
F2 (nonsalmonids)	150	<u>25 15</u>
Np	100	<u>25 15</u>
Ns 1 (connected to S, F, Np)	<u>75 100</u>	<u>25 15</u>
Ns 2 (connected to S, F, Np)	<u>50 100</u>	<u>25 15</u>
<b>South Fork Dogfish Creek Stream-Reach-Specific <u>RMZ Buffer</u> and Building Setback Requirements</b> <u>Stream reaches are mapped on Figures CAO-5 and CAO-6.</u>		
<b>Stream Reach</b>	<u>RMZ Buffer</u> (feet, each side of stream)	<b>Building Setback</b> (feet, each side of RMZ)
Tidewater/estuarine*	100 (a, b)	<u>25 15</u>
Lower forested	<u>100 75</u> , or top of adjacent slope, whichever is greater (a, b, c, d)	<u>25 15</u>
Urban/commercial	<u>100 50</u> for new development and redevelopment; extent of existing constraints for existing development (b, e)	<u>25 15</u>
Canyon	Park boundary or top of slope, whichever is closest to stream, otherwise 100 or top of steep slope, whichever is greater (a, b, f, g)	<u>25 15</u>
Headwater	<u>100 50</u> (b, h, i)	<u>25 15</u>
<b>Other Fish and Wildlife Habitat Conservation Areas</b>		
<u>Riparian Management Zone Buffer</u> widths and building setbacks for other regulated fish and wildlife habitat conservation areas not listed above will be determined on a case-by-case basis through a habitat management plan, which shall be based upon the most recent WDFW Priority Habitat and Species Management Recommendations.		
<b>Additional Protections Required for Properties within 300 Feet of the South Fork of Dogfish Creek</b>		
(a) Maintain a 50-foot no-cut area on both sides of stream, measured from outer edge of the buffer. (b) Maximum stormwater treatment required for new construction; retrofit existing impervious areas with minimum		

~~stormwater treatment when expansions or alterations trigger a major site plan amendment.~~  
~~(c) Maintain vegetation on hill slopes adjacent to stream.~~  
~~(d) Retain curb along SR 305 to direct stormwater runoff, and provide stormwater treatment facilities prior to runoff entering creek.~~  
~~(e) Pruning of riparian vegetation is prohibited. Removal of noxious weeds (Class A and B) and replanting of existing buffer areas with native riparian vegetation may be required at the time of major site plan amendments or redevelopment.~~  
~~(f) No tree cutting (except for removal of danger trees in accordance with Section 16.20.120(H)) on canyon side slopes and bottoms in Wilderness Park.~~  
~~(g) No tree cutting (except for removal of danger trees in accordance with Section 16.20.120(H)) or land clearing along both sides of stream between Wilderness Park and SR 305.~~  
~~(h) Retain forested wetland at downstream side of Lincoln Road.~~  
~~(i) Require on-site infiltration of stormwater, where soils are appropriate, for new construction; establish downspout disconnection program for existing development.~~  
~~\* Main stem segment also subject to shoreline regulations in Chapter 16.08 as appropriate.~~

B. Changes to Standard **Riparian Management Zone Buffers**.

1. Provisions for Decreasing the Standard **RMZ Buffers** Recommended through a Habitat Management Plan.
  - a. The director may decrease the standard **RMZ buffer** or building setback as recommended by a habitat management plan after consultation with the Washington State Department of Fish and Wildlife and the Suquamish Tribe, and determine that conditions are sufficient to protect the affected habitat. A habitat management plan shall be required. The director may reduce the **RMZ buffer** or building setback width by up to twenty-five percent, ~~but the buffer width shall not be less than fifty feet.~~
2. Provisions for Increasing **RMZ Standard Buffers**. The director may increase the **RMZ buffer** width whenever a specific development proposal has known locations of endangered or threatened species for which a habitat management plan indicates a larger **RMZ buffer** is necessary to protect habitat values for such species.
3. Conditional Alterations. The director may alter the **RMZ standard buffer**, and building setback for water-dependent structures and utilities within a stream or **RMZ its buffer** when no other reasonable or practical alternative exists. Any alteration of a **RMZ buffer** or building setback shall be the least necessary and shall require a habitat management plan which identifies and adequately protects any affected fish and wildlife conservation area.

- C. Fish and wildlife habitat conservation areas and required **RMZs buffers** shall be located within specified open space tracts. The specified open space tracts shall be identified on the underlying land use permit drawings and conditions of approval shall include provisions for preservation, maintenance and other requirements deemed necessary by the director and/or review authority.
- D. All development permits on sites with known locations of fish and wildlife habitat conservation areas, or sites within three hundred feet to known locations of fish and wildlife habitat conservation areas, shall submit a habitat assessment or management plan as specified in Section 700 of this chapter for approval. In the case of bald eagles, an approved bald eagle management plan by the Washington Department of Fish and Wildlife, meeting the requirements and guidelines of the bald eagle protection rules (WAC 220-610-100), as now or hereafter amended, shall satisfy the requirements for a habitat management plan.
- E. Habitat Assessment Report and Management Plan. For all regulated activity proposed on a site which contains or is within three hundred feet of fish and wildlife habitat conservation area, a habitat assessment shall be prepared by a qualified wildlife biologist. The habitat assessment shall identify the type of stream

and its prescribed RMZ buffer, an analysis of species or habitats known or suspected, and assessment of project impact or effect on habitat and water quality (see Section 16.20.750). If it is determined that a fish and wildlife habitat conservation area or its RMZ buffer does not occur on or within three hundred feet of the site, or if it is demonstrated that the project will comply with the standard RMZ buffer width and building setback requirements, the development may proceed without any additional requirements under this section. If it is determined that a fish and wildlife habitat conservation area does occur on or within three hundred feet of the site, and a modification (i.e., reduction, intrusion or impact) to the standard RMZ buffer width and/or building setback is proposed, a habitat management plan shall be prepared. (See Section 16.20.730.)

- F. Signs and Fencing. As a project condition of approval, the director or review authority may require the fish and wildlife habitat conservation area and RMZ buffer be permanently fenced, signed or an acceptable alternative, to further protect the conservation area. Timing, location and type of installation shall be identified in the condition of approval. Fencing shall be required when reductions of RMZ buffer or intrusions into building setback are approved.
- G. Provisions for Expansions of Existing Development along Poulsbo Creek. Existing development adjacent to Poulsbo Creek which was lawfully constructed, approved or established prior to the effective date of the ordinance codified in this chapter, but which does not conform to present regulations or standards, may be expanded as follows:
  - 1. A nonconforming single-family residence or mobile home may be enlarged up to fifty percent of its existing size as long as:
    - a. The new construction extends away from the critical area and related RMZ buffer and building setback, is located over an existing impervious area, or is a second/third-story addition located over the existing structure;
    - b. The reconstruction and/or enlargement shall be appropriately mitigated to ensure the existing value and function of the critical area is not degraded;
    - c. Mitigation and enhancement is required as per subsection (G)(2) of this section;
    - d. The structure(s) are located outside of a flood hazard area and active landslide hazard area; and
    - e. The reconstruction and/or enlargement meets all other dimensional standards and requirements contained in the Poulsbo Municipal Code.
  - 2. Requirements for mitigation and enhancement will be determined based on historic site impacts to the critical area, the scope of proposed alterations and require the preparation of a habitat management plan. Possible mitigation and enhancement may include, but shall not be limited to: prohibiting or limiting pruning of riparian vegetation; invasive plant removal and reestablishment of native trees and shrubs within existing RMZ buffer areas; instream habitat improvements such as spawning gravel or large woody debris; requiring minimum stormwater treatment for new construction; and retrofitting existing impervious areas with minimum stormwater treatment where feasible. In certain instances, off-site mitigation and/or enhancement may also be required to benefit the watershed.
  - 3. Proposals that proposed to utilize these requirements shall require a critical area permit per Title 19 Project Permit Application Procedures, a Type II review.

#### **16.20.320 Project-specific development standards.**

- A. Stream Crossings. Any private or public road expansion or construction which is allowed and must cross streams classified within this chapter shall comply with the following minimum development standards:
  - 1. Bridges or bottomless culverts shall be required for all streams which support fish life, unless a habitat management plan is submitted which demonstrates that other alternatives would not result

in significant impacts to the fish and wildlife habitat conservation area and as determined appropriate through the Hydraulic Project Approval process administered by the Washington State Department of Fish and Wildlife;

2. Crossings shall not occur in salmonid spawning areas unless no other feasible crossing site exists. For new development proposals, if existing crossings are determined to adversely impact salmon spawning or passage areas, new or upgraded crossings shall be located as determined necessary through coordination with the Washington Department of Fish and Wildlife;
3. Bridge piers or abutments shall not be placed in either the floodway or between the ordinary high water marks unless no other feasible alternative placement exists;
4. Crossings shall not diminish flood-carrying capacity;
5. Crossings shall serve multiple properties whenever possible;
6. Publicly owned or maintained road or street crossing shall provide for other purposes, such as utility crossing, pedestrian or bicycle easements, viewing points, whenever possible;
7. Where there is no reasonable alternative to providing a conventional culvert, the culvert shall be the minimum length necessary to accommodate the permitted activity. If located on a stream containing fish and wildlife habitat per WAC 222-16-030, the culvert shall be designed in accordance with the Washington Department of Fish and Wildlife's 2013 Water Crossing Guidelines (or as amended).

B. Stream Relocations. Stream relocations for the purpose of flood protection and/or fisheries restoration shall only be permitted when adhering to the following minimum performance standards and when consistent with Washington State Department of Fish and Wildlife's Hydraulic Project Approval, and any other local, state or federal permits:

1. The channel, bank and ~~RMZ buffer~~ should be replanted with native vegetation that replicates a natural, undisturbed riparian condition;
2. For those shorelands and waters prone to flooding, a professional engineer licensed in the state of Washington shall provide information demonstrating that the equivalent base flood storage volume and function will be maintained;
3. Relocated stream channels shall be designed to meet or exceed the functions and values of the stream to be relocated; and
4. Relocation proposal shall include an evaluation report addressing potential downstream impacts to public and private properties, critical areas and listed species; changes to hydroperiod, water quality, flooding frequency or severity; and any necessary downstream stormwater facility improvements associated with the relocation.

C. Pesticides, Fertilizers and Herbicides. No pesticides, herbicides or fertilizers may be used in fish and wildlife habitat conservation areas or their ~~RMZs buffers~~, except those approved by the EPA and approved under a DOE water quality modification permit for use in the specific fish and wildlife habitat conservation area environments. Where approved, herbicides must be applied by a licensed applicator in accordance with the safe application practices on the label.

D. Agricultural Restrictions. In all development proposals or activities which would permit introduction of agriculture to fish and wildlife habitat conservation areas, damage to the area shall be avoided by installation of fencing located not closer than the outer ~~RMZ buffer~~ edge.

E. Poulsbo Shoreline Master Program. All development along the saltwater shoreline defined as shorelines of the state shall be consistent with the city of Poulsbo shoreline master program, as now or hereafter amended.

- F. Trails and Trail-Related Facilities. Construction of public and private trails and trail-related facilities, such as benches, interpretative centers, and viewing platforms, may be allowed in fish and wildlife habitat conservation areas or RMZs buffers pursuant to the following standards:
1. Trails and related facilities shall, to the extent feasible, be placed on existing road grades, utility corridors, or other such previously disturbed areas outside of required RMZs buffers;
  2. Trails and related facilities shall be planned to be located generally outside of required RMZs buffers, and minimize removal of trees, shrubs, snags and important wildlife habitat;
  3. Viewing platforms, interpretive centers, benches and access to them shall be designed and located to minimize disturbance of wildlife habitat and/or critical characteristics of the affected conservation area;
  4. Trails and related facilities shall generally be located outside required RMZs buffers. Where trails are permitted within RMZs buffers, after exhausting items of subsections (F)(1), (2) and (3) of this section, shall be located in the outer twenty-five percent of the RMZ buffer as feasible, except where stream crossings or viewing areas have been approved;
  5. Trails shall generally be limited to pedestrian use unless other more intensive uses, such as bike or horse trails, have been specifically allowed and mitigation has been provided. Trail width shall not exceed five feet unless there is a demonstrated need, subject to review and approval by review authority. Trails shall be constructed with pervious materials unless otherwise approved by the review authority and located in the outer twenty-five percent of the RMZ buffer area as much as feasible.
  6. Mitigation may be required to replace native vegetation removed for trail construction or enhance remaining areas of degraded RMZ buffer.
  7. Stormwater controls may be required for larger, paved trails.
  8. Trails shall be located only with property owner agreement. If proposed as a public trail, access shall be executed by appropriate easements, dedication, acquisition or other acceptable legal mechanisms.
- G. Utilities. Placement of utilities within designated fish and wildlife habitat conservation areas and RMZs buffers may be allowed pursuant to the following standards:
1. The utility development authorized in Section 16.20.120 shall be allowed, subject to best management practices in fish and wildlife habitat conservation areas and RMZs buffers.
  2. Construction of new utilities outside the road right-of-way or existing utility corridors or easements may be permitted in fish and wildlife habitat conservation areas or their RMZs buffers, only when no reasonable alternative location is available and the utility corridor or easement meets the requirements for installation, replacement of vegetation and maintenance outlined below, and as required in the filing and approval of applicable permits and special reports (Section 700 of this chapter) required by this chapter.
  3. Sewer or On-Site Sewage Utility. Construction of sewer lines or on-site sewage systems may be permitted in fish and wildlife habitat conservation areas or their RMZs buffers when the applicant demonstrates it is necessary to meet state and/or local health code requirements, there are no other practicable alternatives available, and the construction meets the requirements of this section. Joint use of the sewer utility corridor by other utilities may be allowed.
  4. New utility corridors or easements shall not be allowed in fish and wildlife habitat conservation areas with known locations of federal- or state-listed endangered, threatened or sensitive species, heron rookeries or nesting sites of raptors which are listed as state candidate or state monitor, except in those circumstances where an approved habitat management plan indicates that the



utility corridor or easement will not significantly impact the fish and wildlife habitat conservation areas or RMZs buffers.

5. New utility corridor or easement construction and maintenance shall protect the environment of fish and wildlife habitat conservation areas and their RMZs buffers.
  - a. New utility corridors or easements shall be aligned when possible to avoid cutting trees greater than twelve inches in diameter at breast height (four and one-half feet), measured on the uphill side.
  - b. New utility corridors or easements shall be revegetated with appropriate native vegetation at preconstruction densities or greater, immediately upon completion of construction, or as soon thereafter as possible, if due to seasonal growing constraints. The utility shall ensure that such vegetation survives.
  - c. Any additional utility corridor or easement access for maintenance shall be provided as much as possible at specific points, rather than by parallel roads. If parallel roads are necessary, they shall be of a minimum width but no greater than fifteen feet; and shall be contiguous to the location of the utility corridor on the side away from the fish and wildlife habitat conservation area. Mitigation will be required for any additional access through restoration of vegetation in disturbed areas.
  - d. The director may require other additional mitigation measures.
6. Utility corridor maintenance shall include the following measures to protect the regulated fish and wildlife habitat conservation area and RMZ buffer environment:
  - a. Where feasible, painting of utility equipment such as power towers shall not be sprayed or sandblasted, nor should lead-based paints be used.
  - b. No pesticides, herbicides or fertilizers may be used in fish and wildlife habitat conservation areas or their RMZs buffers except those approved by the EPA and the Department of Ecology. Where approved, herbicides must be applied by a licensed applicator in accordance with the safe application practices on the label.
  - c. Refueling or maintenance of utility equipment shall not be conducted within a fish and wildlife habitat conservation area or its RMZ buffer.

H. Bank Stabilization. A stream channel and bank may be stabilized when naturally occurring earth movement threatens existing structures (defined as requiring a building permit pursuant to the International Building Code), public improvements, unique natural resources, public health, safety or welfare, or is the only feasible access to property; and when such stabilization results in maintenance of fish and wildlife habitat, flood control and improvement of water quality. Shoreline stabilization is regulated by the city's shoreline master program.

When bank stabilization is determined to be necessary, bioengineering or other nonstructural methods should be the first option for protection. The director may require that bank stabilization be designed by a professional engineer licensed in the state of Washington with demonstrated expertise in hydraulic actions. Bank stabilization projects may also require a Hydraulic Project Approval from the Washington Department of Fish and Wildlife and may be required to meet the design guidelines in WDFW's 2002 Integrated Streambank Protection Guidelines.

- I. Road/Street Repair and Construction. Public road or street repair, maintenance, expansion or construction may be allowed in fish and wildlife habitat conservation areas or their RMZs buffers subject to the following development standards:
  1. No other reasonable or practicable alternative exists;
  2. The road or street serves multiple properties wherever possible;

3. Publicly owned or maintained road or street crossings provide for other purposes, such as utility crossings, pedestrian or bicycle easements, viewing points, etc.;
4. The road or street construction is the minimum necessary, as required by the department, and shall comply with the department's guidelines to provide public safety and mitigated stormwater impacts;
5. Construction time limits shall be determined in consultation with WDFW in order to ensure habitat protection; and
6. Mitigation shall be performed in accordance with specific project mitigation requirements.

## **Section 400. Geologically Hazardous Areas**

### **16.20.405 Purpose.**

This section applies to all regulated uses included in this chapter within three hundred feet of areas designated as geologically hazardous areas, as defined or identified in WAC 365-190-030 and 365-190-120, and as categorized in Section 16.20.410. The intent of this section is to:

- A. Provide standards to protect human life and property from potential risks;
- B. Control erosion, siltation, and water quality to protect anadromous and resident fish and shellfish; and
- C. Reduce, mitigate or minimize potential impacts on public health and safety.

### **16.20.410 Geologically hazardous area categories.**

- A. Classification. The following categories shall be used in classifying geologically hazardous areas:
  1. Geologically Hazardous Areas.
    - a. Areas with slopes greater than thirty percent and mapped by the Coastal Zone Atlas or Quaternary Geology and Stratigraphy of Kitsap County as unstable (U), unstable old landslides (UOS) or unstable recent slides (URS).
    - b. Areas with slopes greater than thirty percent in grade and deemed by a qualified geologist or geotechnical engineer to meet the criteria of U, UOS, or URS.
  2. Areas of Geologic Concern.
    - a. Areas designated U, UOS, or URS in the Coastal Zone Atlas or Quaternary Geology and Stratigraphy of Kitsap County, with slopes less than thirty percent; or areas found by a qualified geologist to meet the criteria for U, URS, or UOS with slopes less than thirty percent; or
    - b. Slopes identified as intermediate (I) in the Coastal Zone Atlas or Quaternary Geology and Stratigraphy of Kitsap County, or areas found by a qualified geologist to meet the criteria of I; or
    - c. Slopes fifteen percent or greater, not classified as I, U, UOS, or URS, with soils classified by the U.S. Department of Agriculture Natural Resources Conservation Service as "highly erodible" or "potentially highly erodible"; or
    - d. Slopes of fifteen percent or greater with springs or groundwater seepage not identified in subsections (A)(2)(a) through (c) of this section; or
    - e. Seismic areas subject to liquefaction from earthquakes (seismic hazard areas) such as hydric soils as identified by the Natural Resources Conservation Service, and areas that have been filled to make a site more suitable. Seismic areas may include former wetlands which have been covered with fill; or

- f. Areas mapped as “severe” in all development limitations based on mapped soil units of the USDA Soil Conservation Service. These designations are listed in Table 10 of Soil Survey of Kitsap County Area, Washington.
- B. Site-Specific Determination—Geological and Geotechnical Report Provisions. Depending upon the site and proposed project, a geotechnical or geological report shall be required from the applicant to confirm or modify existing information about a specific site and for development proposals located within geologically hazardous areas and areas of geologic concern. The requirements for special reports are contained in Section 700 of this chapter. Project proponents are responsible for determining whether a geologically hazardous area exists and is regulated pursuant to this chapter.

**16.20.415 Allowable uses.**

- A. The director may limit the types, locations and intensity of proposed land uses and development if such limits are recommended by a geotechnical report prepared according to the requirements in Section 700 of this chapter.
- B. Critical facilities as defined below are restricted in geologically hazardous areas as defined in Section 16.20.410(A)(1). Critical facilities as defined below may be restricted from locating in areas of geologic concern as defined in Section 16.20.410(A)(2) unless no other location is feasible and if a geotechnical report prepared according to the requirements in Section 700 of this chapter is submitted.
  - 1. Critical facilities are those facilities that meet one or more of the following criteria:
    - a. Facilities that are essential to the health and welfare of the population, including services that protect life and property. Such facilities include, but are not limited to, hospitals, emergency clinics, police and fire stations, emergency vehicle and equipment storage facilities, emergency operations centers, aviation control centers, and utility facilities such as sewage treatment plants and electric transmission substations.
    - b. Facilities that are intended or likely to serve as public emergency shelter locations.
    - c. Facilities that produce, use or store highly volatile, flammable, explosive, toxic and/or water reactive materials.

**16.20.420 Development standards.**

- A. Approval. The director will review all submittals for clearing, grading and building on property containing geologically hazardous areas or areas of geologic concern. The director will consider any proposed mitigation measures included in a geotechnical report, if submitted. In cases where a special report indicates a significant risk to public health, safety or welfare, the city shall deny or require revision of the application.
- B. City Engineer Requirements. The city engineer, in conjunction with a clearing, grading or building permit application in geologically hazardous areas or areas of geologic concern, may require, but not be limited to, construction plans, details and specifications for clearing, grading, erosion and sedimentation control and stormwater drainage, and detailed hydrological, geotechnical, soils and drainage reports and analyses that address the potential concerns and mitigations for development in geologically hazardous area or area of geologic concern.
- C. Required Buffer. A standard buffer of twenty-five feet shall be established from the top, toe, and all edges of geologically hazardous areas and areas of geologic concern, unless otherwise specified through a geological report or site-specific determination. Existing vegetation shall be retained, or the buffer shall be replanted with appropriate native vegetation.
- D. Buffer and Building Setback Modifications. The minimum native vegetative buffer and/or building setback requirement may be decreased if a geotechnical report demonstrates that a lesser distance, and the

design and engineering, will adequately protect the proposed development and stabilize the potential hazard.

Should the report indicate a greater buffer and/or building setback than required by this section, the greater buffer and/or building setback shall be required.

- E. Time Limitations. For new or redevelopment, clearing and grading may be limited by the city engineer to the period between May 1st and October 1st, unless the applicant provides an erosion and sedimentation control plan prepared by a professional engineer licensed in the state of Washington that specifically identifies methods of erosion control for wet weather conditions.
- F. Field Marking Requirements. For new or redevelopment, the proposed clearing for the project and all critical area buffers shall be required to be marked in the field for inspection and approval by the city prior to beginning work. Field marking shall remain in place until construction is completed and final approval is granted by the city. The requirement for field marking will be identified as a condition of approval for the underlying development permit.
- G. Trees and Vegetation. The following requirements apply in geologically hazardous areas and areas of geologic concern:
  - 1. As a development permit condition, the director may require enhancement of native buffer vegetation and trees to increase protection of the hazard area by stabilizing slopes and preventing soil erosion. A management plan shall be prepared for such enhancement, and the installation shall require maintenance bonding for a minimum of five years to ensure that performance standards have been met.
  - 2. Removal of danger trees is allowed only if such activity is approved by the director, and requires a written determination by a certified arborist in the state of Washington that the trees proposed for elimination represent a legitimate safety hazard. The director may require that stumps and root systems be retained for soil retention and erosion control.
  - 3. Minor pruning of vegetation may be allowed only if such activity is approved by the director and is conducted according to a plan prepared by a certified arborist in the state of Washington and peer reviewed and approved by the city arborist.
- H. Roads and Utilities.
  - 1. Only the clearing necessary to install temporary erosion control measures will be allowed prior to clearing for roads and utilities construction;
  - 2. Clearing for roads and utilities shall be the minimum necessary and shall remain within marked construction limits;
  - 3. Clearing for overhead power lines shall be the minimum necessary for construction and will provide the required minimum clearances of the serving utility; and
  - 4. Where existing logging roads occur in geologically hazardous areas or areas of geologic concern, a geological or geotechnical report may be required prior to use as a temporary haul road or permanent access road under a conversion or conversion option harvest plan forest practices application.
- I. Seismic Hazard Areas Standards. Applications for new or redevelopment within seismic hazard areas may be required to provide a geotechnical report, addressing any fill or grading that has occurred on the subject parcel. Any fill placed for such development shall have documented construction monitoring as required by the International Building Code.

## Section 500. Critical Aquifer Recharge Areas

### 16.20.505 Purpose.

The intent of this section is to provide water quality protection associated with aquifer recharge areas through the regulation of land use activities that pose a potential contaminant threat or could increase the vulnerability of the aquifer.

### 16.20.510 Critical aquifer recharge area categories.

A critical aquifer recharge area (CARA) is a geographic area 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 (WAC 365-190-030). CARAs are established according to the following categories:

#### A. Wellhead Protection Zones.

1. The area inside the one-year time of travel zone for Group A water system supply wells, calculated in accordance with the Washington State Wellhead Protection Program.
2. For Group A water system supply wells, five-year time of travel zones in wellhead protection areas are also included as critical aquifer recharge areas when the well draws its water from an aquifer that is at or above sea level and is overlain by permeable soils listed in subsection (B)(1) of this section, without an underlying protective impermeable layer.

#### B. Aquifer Recharge Areas of Concern. Aquifer recharge areas of concern (ARAC) are those areas which provide recharge to current or potential potable water supplies and are vulnerable to contamination, and meet any one of the following criteria:

1. Highly Permeable Soils. Soils that have relatively high permeability and high infiltration potential may provide for groundwater recharge, but also may enhance transfer of contaminants from the surface to groundwater.

The general location and characteristics of soils are identified in the Soil Survey of Kitsap County. The following soil types are considered to have relatively high permeability and are aquifer recharge areas of concern:

Table 16.20.510.A—Soil Types	
Soil Type	Soil Map Units
Grove	11, 12, 13
Indianola	18, 19, 20, 21
Neilton	34, 35, 36
Norma	37, 38
Poulsbo/Ragner	41, 42, 43, 44, 45, 46, 47

2. Areas above Shallow Principal Aquifers. Surface areas above shallow principal aquifers which are not separated from the underlying aquifers by an impermeable layer that provides adequate protections to preclude the proposed land use from contaminating the shallow aquifer(s) below.
3. Areas with High Concentration of Group B Water System Wells and Private Domestic Wells. Locations with well concentrations of thirty-six map units or more within a one-mile radius of the proposed land use.

### 16.20.515 Development standards.

- A. Wellhead Protection Zones. Land uses identified in Table 16.20.515 shall require a hydrogeological report (see Section 700 of this chapter, Special Reports). The hydrogeological report shall include a detailed risk-benefit analysis that considers credible, worst-case scenarios, and shall evaluate potential impacts of a proposed land use or activity on both groundwater and surface water quality. Uses listed in Table 16.20.515 may only be permitted where 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 groundwater.
  1. Land uses or activities for new development that pose a significant hazard to the city's groundwater resources are prohibited and include (but are not limited to): landfills, wood treatment facilities, chrome platers, tank farms, facilities that treat, store, or dispose of hazardous waste, and chemical facilities that transfer or use large amounts of chemicals.
- B. Aquifer Recharge Areas of Concern.
  1. Applicants proposing operations that pose a potential threat to groundwater as listed in Table 16.20.515 in aquifer recharge areas of concern may be required to submit a hydrogeological report (see Section 700 of this chapter, Special Reports). The scope of the report shall be based on site-specific conditions.
  2. The need for additional information will be determined by the department, the health district and the affected water purveyor. Based on the results of the report, controls, mitigation, and/or other requirements will be established as a prerequisite for the development proposal being approved.
- C. Notification and Review.
  1. Affected water purveyors, tribes and the Kitsap County health district will be notified and invited to comment during the preliminary phases of the city's review process on the proposed land use and potential impacts. The purveyor may recommend appropriate mitigation to reduce potential impacts. The department will consider these recommendations to develop appropriate permit conditions.
  2. The department will also notify the health district and affected water purveyors through the environmental review process, when those development activities listed in Table 16.20.515 are proposed outside the areas designated critical aquifer recharge areas.
- D. Stormwater.
  1. Stormwater treatment and infiltration shall be required where soils permit and is determined feasible.
  2. Low impact development best management practices (BMP) are required for smaller developments exempted from requirements to construct stormwater facilities.
- E. Uses Requiring County, State or Federal Approval. Applicants shall provide the department with documentation of compliance with county, state and/or federal regulations associated with uses listed in Table 16.20.515.

**Table 16.20.515—Activities with Potential Threat to Groundwater**

*\*Note: Some uses may not be allowed by Title 18, Zoning.*

Above and below ground storage tanks  
 Hazardous material storage

Animal feed lots

Commercial operations  
 Gas stations/service stations/truck terminals



Petroleum distributors/storage Auto body repair shops/rust proofers Auto chemical supply storers/retailers Truck, automobile and combustion engine repair shops Dry cleaners Photo processors Auto washers (if not on sewer) Laundromats (if not on sewer) Beauty salons (if not on sewer) Food processors/meat packers/slaughterhouses Airport maintenance/fueling operation areas Junk and salvage yards Storing or processing manure, feed or other agriculture by-products by commercially permitted businesses Large-scale storage or use of pesticides, insecticides, herbicides, or fertilizers by commercial or agricultural operations
Deep injection wells Wastewater disposal wells Oil and gas activity disposal wells Mineral extraction disposal wells
Industrial operations Furniture strippers/painters/finishers Concrete/asphalt/tar/coal companies Industrial manufacturers: chemicals, pesticides/herbicides, paper, leather products, textiles, rubber, plastic/fiberglass, silicone/glass, pharmaceuticals, electrical equipment, sawmills Boat refinishers
Land application Wastewater application (spray irrigation) Wastewater by-product (sludge) application Petroleum refining waste application
Materials stockpiles
Mining and mine drainage
On-site septic system Of greater than 14,500 gpd capacity without pretreatment
Sand and gravel mining operations

## Section 600. Frequently Flooded Areas

### 16.20.605 Purpose.

The purpose of this section is to protect the public health, safety and welfare from harm caused by flooding. It is also the intent to prevent damage and/or loss to both public and private property. Pursuant to this purpose, the city uses floodplain management regulations contained in Chapter 15.24, adopted by reference, which designates special flood hazard areas and establishes requirements for these areas. Areas within the city's shoreline jurisdiction are regulated by floodway and floodplain regulations in the city's shoreline master program.

## Section 700. Special Reports

### 16.20.705 Purpose.

The following special reports may be required to provide environmental information and to present proposed strategies for maintaining, protecting and/or mitigating alterations or impacts to critical areas:

- A. Wetlands.
  - 1. Wetland assessment report.
  - 2. Wetland delineation report.
  - 3. Wetland mitigation plan.
  - 4. Wetland buffer enhancement plan.
  - 5. Wetland monitoring report.
- B. Fish and Wildlife Habitat Conservation Areas.
  - 1. Habitat assessment report.
  - 2. Habitat management plan.
- C. Geologically Hazardous Areas.
  - 1. Geotechnical report.
  - 2. Geological report.
- D. Critical Aquifer Recharge Areas.
  - 1. Hydrogeological report.

**16.20.710 When required.**

Special reports shall be submitted by the applicant and approved by the director when required by this chapter for the protection of a critical area, its buffer or RMZ and building setback. Refer to specific critical area protection standards for when special reports are required. The city shall retain a consulting specialist(s) who shall review all special reports for critical areas, and ensure their compliance with this chapter.

**16.20.715 Responsibility for completion.**

The applicant shall reimburse the city for the costs incurred in the preparation of special reports or tests and for the costs incurred by the city to engage technical consultants or staff for review and interpretation of data and findings submitted by or on behalf of the applicant.

**16.20.720 Qualifications of professionals.**

Any special report as described in this section prepared by a professional (as described in Section 100 of this chapter) shall include his or her resume, or other list of qualifications, to aid the director in assessing these qualifications

**16.20.721 Time limitations.**

Special reports submitted in accordance with this section shall be valid for a period of five years from the most recent date of issue identified on the face of the report, unless a longer or shorter period is specified by the city at the time the original report is prepared.

**16.20.725 Wetland assessment report.**

A wetland assessment report shall include, but not necessarily be limited to, the following:

- A. Vicinity map.
- B. When available, a copy of a National Wetland Inventory Map (U.S. Fish and Wildlife Service).
- C. A site map setting forth all of the following:
  - 1. Site boundary property lines and roads;
  - 2. Approximate boundary of wetland(s) within three hundred feet of the subject parcel or parcels;

3. Approximate extent of buffer width based on the category of the wetland;
4. An aerial photograph with overlays displaying the site boundaries and wetland delineation may be required;
5. Completed wetland rating forms and associated rating form maps;
6. A report that describes the wetland(s) within three hundred feet of the parcel or parcels, including the vegetation, communities, hydrologic support, habitat functions and connections/corridors, and other physical and biological attributes.

#### **16.20.730 Wetland delineation report.**

A wetland delineation report shall include, but not necessarily be limited to, the following:

- A. Vicinity map.
- B. When available, a copy of a National Wetland Inventory Map (U.S. Fish and Wildlife Service).
- C. A site map setting forth all of the following:
  1. Surveyed wetland boundaries based upon a delineation by a wetlands specialist or wetland boundaries recorded using a differential global positioning system, based upon a delineation by a wetlands specialist. In the event that a differential global positioning system is used, wetland boundary information, including position accuracies, shall be provided to the city in an electronic data format acceptable to the city;
  2. Site boundary property lines and roads;
  3. Internal property lines, rights-of-way, easements, etc.;
  4. Existing physical conditions of the site, including buildings, fences and other structures, roads, parking lots, utilities, water bodies, etc.;
  5. Contours at the smallest readily available intervals;
  6. Hydrologic mapping showing patterns of surface water movement and known subsurface water movement into, through, and out of the site area;
  7. Location of all test holes and vegetation sample sites, number to correspond with flagging in the field and field data sheets; and
  8. An aerial photograph with overlays displaying the site boundaries and wetland delineation may be required.
- D. A report which includes the following:
  1. Location information (legal description, parcel number and address);
  2. Delineation Report. The wetland boundaries on the site established by the delineation shall be staked and flagged in the field. If the wetland extends outside the site, the delineation report shall discuss all wetland areas within three hundred feet of the site, but need only delineate those wetland boundaries within the site;
  3. General site conditions including topography, acreage, and surface areas of all wetlands identified and water bodies within one-quarter mile of the subject wetland(s);
  4. Hydrological analysis, including topography, of existing surface and known significant subsurface flows into and out of the subject wetland(s); and
  5. Analysis of functional values of existing wetlands, including vegetation, fauna, and hydrologic conditions.
- E. A summary of proposed activity and potential impacts to the wetland(s).

- F. Recommended wetland category, based on results from the Washington State Department of Ecology's Wetland Rating System for Western Washington—Revised (2014) or as amended. Copies of the rating forms and maps must be appended to the report.
- G. Buffer boundaries, as determined by Table 16.20.230.B.
- H. Site plan of proposed activity, including location of all parcels, tracts, easements, roads, structures, and other modifications to the existing site. The location of all wetlands and buffers shall be identified on the site plan.
- I. Complete U.S. Army Corps of Engineers wetland determination data forms from the applicable regional supplement.

#### **16.20.735 Wetland mitigation plan.**

Whenever the director has determined that impacts to regulated wetlands or buffers are necessary and unavoidable, or a review of a regulated wetland or its buffer is proposed, or a reasonable use exception is applied, a mitigation plan shall be prepared:

- A. The applicant shall demonstrate that mitigation sequencing was applied to the project, in the following order:
  - 1. Avoiding the impact altogether by not taking a certain action or parts of actions. This may be accomplished by selecting a practicable alternative that does not involve wetlands or buffer impacts. The applicant must describe practicable alternatives to the project that avoid environmental impacts, and provide valid reasoning why those alternatives would not fulfill the purpose and need of the project.
  - 2. Minimizing impacts by limiting the degree of magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts. This may be accomplished by selecting a reasonable design alternative that avoids most environmental impacts, and minimizes others to the greatest extent possible.
  - 3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment. This may be accomplished by restoring the environmental functions of an area temporarily affected by a project.
  - 4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action. This may be done through operational constraints and/or modifications which result in the reduction or elimination of impacts over time. This typically is done in conjunction with other mitigating actions.
  - 5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments. This may be done by intentionally creating wetlands and wetland buffers at another location where none currently exist, improving existing wetlands and wetland buffers at another location, or otherwise providing a substitute wetland resource at another location as compensation for any unavoidable adverse wetland impacts. Compensation shall be accomplished in accordance with a mitigation plan, as prepared in accordance with the requirements outlined below, and as approved by the director.
  - 6. Monitoring the impact and taking appropriate corrective measures.
  - 7. Mitigating for individual actions may include a combination of the above measures.
- B. The overall goal of any mitigation plan shall be no net loss of regulated wetland functions and acreage.
- C. Those persons proposing wetland compensatory projects shall show that the compensation project is associated with an activity or development otherwise permitted and that the restored, created, or enhanced wetland will be as persistent as the wetland it replaces by accomplishing the following:

1. Demonstrate sufficient scientific expertise, supervisory capability, and financial resources to carry out the project;
  2. Demonstrate the capability for monitoring the site and for making corrections during this period, if the project fails to meet the stated goals and objectives; and
  3. Protect and manage or provide for the protection and management of the compensation area to avoid further development or degradation.
- D. Wetland mitigation plans shall be implemented by the project applicant, and include the following components:
1. **Baseline Information.** A written assessment and accompanying maps of the impacted wetland shall be produced by the applicant or applicant's consultant and shall include, at a minimum: existing wetland acreage; vegetative, faunal and hydrologic characteristics; soil and substrate conditions; and topographic elevations.
  2. If the compensation site is off site from the impacted wetland site, baseline information about it, in addition to the above information about the impacted wetland, shall be provided by the applicant and shall include existing wetland acreage; vegetative, faunal and hydrologic characteristics; soil and substrate conditions; and topographic elevations; the relationship of the compensation site within the watershed and to existing water bodies; detailed description of the site selection process and valid rationale for the selected site; existing and proposed compensation site conditions; buffers; and ownership.
  3. **Environmental Goals and Objectives.** The report shall identify goals and objectives and include:
    - a. The purposes of the compensation measures, including identification of compensation goals, identification of target evaluation species and resource functions, dates for beginning and completion of compensation measures, and a complete description of structure and functional relationships sought in the new wetland. The goals and objectives shall be related to the functions of the original wetland or, if out-of-kind, the type of wetland to be emulated; and
    - b. A review of the available literature and/or experience to date in restoring or creating the type of wetland proposed shall be provided. An analysis of the likelihood of success of the compensation project at duplicating the original wetland shall be provided based on the experiences of comparable projects, if any. An analysis of the likelihood of persistence of the created or restored wetland shall be provided based on such factors as: surface and groundwater supply and flow patterns; dynamics of the wetland ecosystem; sediment or pollutant influx and/or erosion; periodic flooding and drought, etc.; presence of invasive flora and fauna; potential human or animal disturbance; and previous comparable projects, if any.
    - c. **Performance Standards.** Specific criteria shall be provided for evaluating whether or not the goals and objectives of the mitigation plan are being achieved at various stages in the project and for beginning adaptive management or contingency measures. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance and diversity targets, habitat diversity indices, or other ecological, geological or hydrological criteria.
    - d. **Detailed Construction and Planting Plans.** Written specifications and descriptions of compensation techniques shall be provided including the proposed construction sequence, grading and excavation details, erosion, sediment and stormwater recharge control features needed for wetland construction and long-term survival; a planting plan specifying plant species, quantities, locations, size, spacing and density; the source of plant materials, propagules, or seeds; water and nutrient requirements for planting; where

appropriate, measures to protect plants from predation; specification of substrate stockpiling techniques and plating instructions; descriptions of water control structures and water-level maintenance practices needed to achieve the necessary hydrocycle/hydroperiod characteristics; etc. These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques of anticipated final outcome. The plan shall provide for elevations which are appropriate for the desired habitat type(s) and which provide sufficient tidal prism and circulation data.

- e. **Monitoring Program.** A program outlining the approach for monitoring construction of the compensation project and for assessing a completed project shall be provided. Monitoring must include sufficient information to adequately assess the progress of a project. Monitoring may include, but is not limited to: (i) establishing vegetation plots to track changes in plant species composition and density over time; (ii) using photo stations to evaluate vegetation community response; (iii) sampling surface and subsurface waters to determine pollutant loading and changes from the natural variability of background conditions (pH, nutrients, heavy metals); (iv) measuring base flow rates and stormwater runoff to model and evaluate water quantity predictions by a licensed engineer in the state of Washington, where required; (v) measuring sedimentation rates, if applicable; and (vi) sampling fish and wildlife populations to determine habitat utilization, species abundance and diversity. A protocol shall be included outlining how the monitoring data will be evaluated to track the progress of the compensation project. A monitoring report shall be submitted annually, and at a minimum, document milestones, successes, problems, maintenance and contingency actions of the compensation project. The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period of less than five years, and a longer period may be required if recommended by the mitigation plan or peer review.
- f. **Contingency Plan.** Identification of potential courses of action, and any corrective measures to be taken, when monitoring or evaluating indicates project performance standards are not being met.
- g. **Performance Conditions.** Any compensation project prepared pursuant to this section and approved by the department shall become part of the application for the permit.
- h. **Performance Bonds and Demonstration of Competence.** A demonstration of financial resources, administrative, supervisory, and technical competence and specific expertise of sufficient standing to successfully execute the compensation project shall be provided. A compensation project manager shall be named, and the qualifications of each team member involved in preparing the mitigation plan and implementing and supervising the project shall be provided, including educational background and areas of expertise, training and experience with comparable projects. In addition, bondroundwaters insuring fulfillment of the compensation project, monitoring program, and any contingency measure shall be posted in the amount of one hundred fifty percent of the expected cost of compensation and shall be effective for a period of no less than three years or the same time frame established for monitoring as recommended in the mitigation plan or through conditions of approval.

#### **16.20.740 Wetland buffer enhancement plan.**

When required, the applicant shall submit a buffer enhancement plan prepared by a qualified wetland specialist. The report shall assess the habitat, water quality, stormwater detention, groundwater recharge, shoreline protection, and erosion protection functions of the buffer; assess the effects of the proposed modification on



those functions; and propose replanting/vegetation enhancement. The buffer enhancement plan shall also provide the following:

- A. A map detailing the specific area of enhancement that shows the elevation contours of the site;
- B. A planting plan that uses native plant species indigenous to this region including groundcover, shrubs and trees;
- C. Provisions for monitoring and maintenance over the monitoring period as required under Section 16.20.745.

**16.20.745 Wetland monitoring report.**

Monitoring reports shall be prepared according to the approved monitoring schedule and submitted to the city of Poulsbo by December 31st of each monitoring year. A monitoring schedule shall be for a minimum of five years and a maximum of ten growing seasons, depending on the complexity of the compensation project. The director may approve modifications to this schedule as appropriate. Monitoring shall be conducted on the following schedule:

- A. At the end of construction (as-built);
- B. Early in the growing season of the first year;
- C. Late in the growing season of the first year;
- D. Annually.

**16.20.750 Habitat assessment report.**

For all regulated activity proposed on a site which contains or is within three hundred feet of a fish and wildlife habitat conservation area, a habitat assessment shall be prepared by a qualified wildlife biologist. The habitat assessment shall include, at a minimum, the following:

- A. Identify the type of stream and its prescribed RMZ buffer.
- B. An analysis and discussion of species or habitats known or suspected to be located within three hundred feet of the site.
- C. Assessment of project impact or effect on habitat and water quality.
- D. A site plan which clearly delineates the fish and wildlife habitat conservation area found on or within three hundred feet of the site.

**16.20.755 Habitat management plan.**

- A. When intrusions, reductions, alterations or impacts to a fish and wildlife habitat conservation area is proposed, or when otherwise required, a habitat management plan shall be prepared. The habitat management plan shall identify how the development impacts from the proposed project will be mitigated. The Washington Department of Fish and Wildlife Priority Habitat and Species Management Recommendations, dated May 1991, or bald eagle protection rules outlined in WAC 220-610-100, as now or hereafter amended, may serve as guidance for this report. The recommendations in Washington Department of Fish and Wildlife Priority Habitat and Species Management Recommendations found at [http://wdfw.wa.gov/conservation/phs/mgmt\\_recommendations/](http://wdfw.wa.gov/conservation/phs/mgmt_recommendations/) may serve as guidance for habitat management plans created to regulate the design, construction, and operation of projects that affect fish and wildlife conservation areas.
- B. The habitat management plan shall contain a map prepared at an easily readable scale, showing:
  - 1. The location of the proposed development site;
  - 2. The relationship of the site to surrounding topography, water features, and cultural features;
  - 3. Proposed building locations and arrangements; and

4. A legend which includes a complete legal description, acreage of the parcel, scale, north arrow, and date of map revision.
- C. The habitat management plan shall also contain a report which describes:
1. The nature and intensity of the proposed development;
  2. An analysis of the effect of the proposed development, activity or land use change upon the wildlife species and habitat identified for protection, including impacts on ~~RMZ~~ buffer and building setbacks.
  3. An analysis of any special management recommendations that will be implemented to ensure protection of the species and/or habitat.
  4. A plan which identifies how the applicant proposes to mitigate any adverse impacts to wildlife habitats created by the proposed development. Mitigation measures are required where ~~RMZ~~ buffer reduction or intrusions into building setbacks are proposed, and shall include ~~RMZ~~ buffer enhancement.
  5. Assessment and evaluation of the effectiveness of the mitigation measures proposed.
  6. Assessment and evaluation of ongoing management practices which will protect fish and wildlife habitat conservation areas after development of the project site, including monitoring and maintenance programs, and operation constraints.
  7. Assessment of project impact or effect on water quality upon SF Dogfish Creek or any regulated stream, and any proposed methods or practices to avoid degradation of water quality.
- D. This plan shall be prepared by a person who has been educated in this field and has professional experience as a fish or wildlife biologist.

**16.20.760 Geotechnical report and geological report.**

- A. A geotechnical report shall include a description of the site geology, conclusions and recommendations regarding the effect of geologic conditions of the proposed development, opinions and recommendations of the adequacy of the site to be developed, the effects of groundwater interception and infiltration, seepage, potential slip plans, and changes in soil-bearing strength, and the impacts of the proposed development and appropriate mitigating measures. A geotechnical report may contain information obtained with subsurface investigative measures such as test pit digging, soil boring, water well installation or Dutch Cone Penetrometer investigations. Reports containing engineering design recommendations, i.e., recommendations for foundations (loading, sizing, depth, or settlement estimates), pile or pier design, retaining structures, or recommendations for construction on slopes steeper than thirty percent, must be prepared by, or in conjunction with, a licensed geotechnical engineer as defined below.
1. Informational Requirements.
    - a. A description of the geologic setting of the region, based upon readily available data, including:
      - i. Site location and topography;
      - ii. Soils and geologic units underlying the site; and
      - iii. The location and characteristics of springs within one thousand feet of the site.
    - b. A discussion and evaluation of the potential impact of the proposal upon existing geological hazards.
    - c. Recommendations on appropriate protection mechanisms, if necessary, to minimize the risk of erosion or landslide.

A geological report shall include the above, with the exception of engineering design recommendations, and need not make use of subsurface investigative measures. As the report will not include engineering recommendations, a geological report may be prepared by a geologist or geotechnical engineer as defined in subsection B of this section.

- B. A geotechnical report shall be prepared by a geotechnical engineer (a civil engineer licensed by the state of Washington who is knowledgeable in regional geologic conditions and who has at least four years of professional experience in landslide and/or seismic hazard evaluation). Geological reports may be prepared by a geologist, engineering geologist or geotechnical engineer knowledgeable in regional geologic conditions and having at least four years of professional experience in site evaluation and development studies, and landslide and/or seismic hazard evaluation.
- C. Report recommendations for siting structures in high risk areas shall be based on existing site conditions rather than measures that have not been successfully approved, designed or constructed (e.g., slope recontouring, slope retaining walls, vegetation improvements, bulkheads, etc.).

#### **16.20.765 Hydrogeological report.**

A hydrogeological report shall be required for certain proposed operations based on a consultation with the appropriate local and state agencies. The report shall address the impact the proposed land use will have on both the quality and quantity of the water transmitted to the aquifer. The report shall also address the types of pesticides and herbicides and fertilizers that can safely be used for the care of landscaping proposed by the applicant.

- A. The report shall be submitted to the reviewing authority and address, at a minimum, the following criteria:
  - 1. Surficial soil type and geologic setting;
  - 2. Location and identification of wells within one thousand feet of the site;
  - 3. Location and identification of surface water bodies and springs within one thousand feet of the site with recharge potential;
  - 4. Description of underlying aquifers and aquitards, including water level, gradients and flow direction;
  - 5. Available surface water and groundwater quality data;
  - 6. Effects of the proposed development on water quality;
  - 7. Sampling schedules required to assure water quality;
  - 8. Discussion of the effects of the proposed development on the groundwater resource;
  - 9. Recommendations on appropriate BMPs (best management practices) or mitigation to assure no significant degradation of groundwater quality; and
  - 10. Other information as required by the Bremerton-Kitsap County health district.
- B. The hydrogeological report shall be prepared by a professional geologist/hydrologist or by a soil scientist with a strong background in geology as demonstrated by coursework from an accredited college or university and/or a minimum of five years of experience.
- C. Applications for development or operations with underground storage of petroleum products will be processed using the appropriate procedure as specified in existing city of Poulsbo ordinances.
- D. Analysis for a specific parcel(s), using the criteria outlined below, will be employed to determine if the soils present require a recharge area designation. Data collection will include, at a minimum: six soil logs to a depth of ten feet (or to a depth of four feet below the lowest proposed excavation point, whichever is greater) for each acre in the parcel(s) being evaluated. At least one well which is two hundred feet or greater in depth with an adequate drilling report must be available within one mile. The associated data

shall be analyzed and included in the hydrogeological report to determine the presence of highly permeable soils with the recharge area designation.

- E. For development proposals within aquifer recharge areas of concern, the hydrogeological report may be based on quarter-quarter section basis locations where the number of wells within a half-mile radius is thirty-six or more, and are designated aquifer recharge areas. To facilitate computer analysis, the evaluation may be done on a quarter-quarter basis using the quarter-quarter section in which a parcel of interest is located and all the surrounding quarter-quarter sections, in place of the half-mile circle.