ORDINANCE NOS452017

ADOPTING KITSAP COUNTY'S AMENDMENTS TO THE CRITICAL AREAS ORDINANCE, TITLE 19 KCC

BE IT ORDAINED:

<u>Section 1</u>. **General Findings.** The Kitsap County Board of Commissioners make the following general findings:

- A. Kitsap County's Critical Areas Ordinance (CAO) (Title 19 KCC) implements the requirements of Chapter 36.70A RCW, the Growth Management Act (the Act), including planning goals and minimum guidelines to designate and protect the functions and values of critical areas and to give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.
- B. Kitsap County first adopted its CAO in 1998, through Ordinance 217-1998, and made comprehensive amendments to the CAO in 2005 through Ordinance 351-2005. Following a remand from the Growth Management Hearings Board, limited amendments were made in 2007 to the CAO through Ordinance 376-2007.
- C. In RCW 36.70A.130, the Act directs the periodic update of local comprehensive plans and development regulations. Kitsap County satisfied its most recent deadline of June 30, 2016 through the adoption of Ordinance 534-2016, with the exception of critical area regulations.
- D. Both the Act, in RCW 36.70A.130(7), and the Washington Department of Commerce allow a one year grace period to complete updates to development regulations that protect critical areas. Accordingly, Kitsap County's deadline for its CAO update is June 30, 2017.
- <u>Section 2</u>. **General Procedural Findings**. The Kitsap County Board of Commissioners makes the following findings regarding the process and public participation aspects for amending Kitsap County's CAO:
- A. Kitsap County conducted a review of best available science as required by RCW 36.70A.172 and WAC 365-195. Kitsap County began with the two science review documents developed previously: "Summary of Best Available Science Review: Kitsap County Critical Areas" dated December 2004, and the "Kitsap County Critical Areas Ordinance Science Support Document" dated May 17, 2005. Kitsap County then developed an addendum called "Supplemental Best Available Science and Required Changes" dated December 15, 2015, and amended February 22, 2017 that covered BAS since 2005.

- B. In early 2016, the Planning Commission and the Board of County Commissioners were briefed on the BAS update and the Board approved the CAO Update Scope of Work, Schedule and Public Participation Plan on March 28, 2016.
- C. Kitsap County convened an informal Working Group from June through October of 2016 to review a preliminary draft CAO based on the "Summary of Best Available Science and Required Changes." This Working Group was comprised of state and local agency technical experts, tribal representatives, and members of local stakeholder organizations, such as Kitsap Alliance of Property Owners, Futurewise, and Kitsap Builders Association. All meetings of the Working Group were open to the public.
- D. Internal revisions to the draft CAO were made following the end of the Working Group and an online open house was launched on March 2, 2017.
- E. A Public Review Draft was published and advertised for public comment from March 1-31, 2017. Along with this Draft, Kitsap County provided three traditional open houses on March 23, 28, and 30, 2017, and the 24/7 online open house and comment form.
- F. The SEPA DNS (Determination of Non-significance) was noticed issued on April 27, 2017 in accordance with WAC 197-11-340 and was open for a 14 day public comment period through May 10, 2017. No comments or appeals were received.
- G. Following timely notice of hearing, Kitsap County held three Planning Commission hearings on April 25, April 27 and May 2, 2017. Findings of Fact and Recommendations of the Planning Commission were adopted on June 6, 2017.
- H. Following timely notice of hearing, the Kitsap County Board of Commissioners held three public hearings for the Critical Areas Ordinance at diverse locations throughout the County. On June 20, 2017, a hearing was held at the Poulsbo City Hall in Poulsbo, WA; on June 21, 2017, a hearing was held at Silverdale Water District / Central Kitsap Fire and Rescue in Silverdale, WA; and on June 26, 2017, a final hearing was held at the Kitsap County Administration Building in Port Orchard, WA.
- I. Following the conclusion of the public hearings, the Board of County Commissioners deliberated and discussed the proposed amendments on June 27, 28, and July 3, 2017 and adopted this ordinance on July 3, 2017.
- J. Additional information and detail regarding the adoption process for this CAO is set forth in the Kitsap County Staff Report to the Board of County Commissioners dated June 7, 2017, which the Board adopts and incorporates by this reference.

- <u>Section 3.</u> **General Substantive Findings.** The Kitsap County Board of Commissioners makes the following findings regarding the amendments to Kitsap County's CAO:
- A. This ordinance will amend Title 19 KCC to ensure the critical area regulations are consistent with the Act, incorporate BAS, and make housekeeping amendments to various code sections for clarity and consistency.
- B. The CAO is consistent with the fourteen statewide planning goals contained within the Act, including but not limited to Goals 6 (Property Rights), 7 (Permits), 8 (Natural resource industries), 9 (Open space and recreation), 10 (Environment) and 11 (Citizen participation and coordination).
- C. The CAO has been updated to conform to the Act, particularly including but not limited to RCW 36.70A.060(2), .170, and .172, and to follow the guidelines within Chapters 365-190, -195, and -196 of the Washington Administrative Code.
- D. Kitsap County's efforts to accommodate growth and to protect critical areas, resource lands and rural lands are guided by, and are consistent with, the Countywide Planning Policies and the Kitsap County Comprehensive Plan, in particular the Environmental Element of the 2016 Comprehensive Plan as it recognizes the CAO as one part of the overall goals, direction and path for the future of sustaining natural environments in Kitsap County.
- Section 4. Monitoring. The Kitsap County Board of County Commissioners directs the Department of Community Development to seek funding to develop and implement a Critical Area Monitoring and Adaptive Management Program. Implementation of this plan is intended to establish a baseline and provide performance measures to determine whether the County is achieving no net loss of functions through its policies and programs affecting wetlands and fish and wildlife habitat conservation areas. This monitoring program is also intended to fulfill Environmental Strategies 5 & 6 of the <u>Kitsap County Comprehensive Plan 2016-2036</u>, to develop a monitoring program to report on changes to natural environments and create and adaptive management plan, respectively. Furthermore, the monitoring program is to provide supporting information for the next Comprehensive Plan and Critical Areas Ordinance update and to fulfill the cumulative effectiveness monitoring requirement of the Washington State Shoreline Management Act (SMA) as part of the Shoreline Management Master Program.
- Section 5. Adoption. Kitsap County Code Title 19, last updated by Ordinance 351-2005 with limited amendments to KCC 19.200.210 and KCC 19.300.315(A) through Ordinance 376-2007, is hereby amended as set forth in the attached Appendix to this Ordinance.
- Section 6. **Typographical / Clerical Errors**. Should any amendment made to this Ordinance that was passed by the Board during its deliberations be inadvertently left out of the final printed version of the plan, maps, or code, the explicit action of the Board as discussed and passed shall prevail up on subsequent review and verification by the Board, and shall be corrected.
- Section 7. Severability. If any provision of this Ordinance or its application to any person, entity or circumstance is for any reason held invalid, the remainder of the Ordinance, or the application of the provisions to other persons, entities or circumstances is not affected.

Section 8. Effective Date. This Ordinance shall take effect on October 2, 2017.

Dated this 3rd day of July, 2017.

BOARD OF COUNTY COMMISSIONERS

ATTEST:



Dana Daniels, Clerk of the Board

KITSAP COUNTY, WASHINGTON

CHARLOTTE GARRIDO, Chair

ROBERT GELDER, Commissioner

VOTED NO

EDWARD WOLFE, Commissioner

Approved as to form by the Kitsap County Prosecutor's Office

- 1 Final Draft
- **2 Kitsap County Code Title 19**

Critical Areas Ordinance

Title 19 Critical Areas Ordinance

2	Chapter 19.100	Introduction and Approval Procedures
3	Chapter 19.150	Definitions
4	Chapter 19.200	Wetlands
5	Chapter 19.300	Fish and Wildlife Habitat Conservation Areas
6	Chapter 19.400	Geologically Hazardous Areas
7	Chapter 19.500	Frequently Flooded Areas
8	Chapter 19.600	Critical Aquifer Recharge Areas
9	Chapter 19.700	Special Reports
10	Chapter 19.800	Appendices
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1 2 3 **Chapter 19.100** INTRODUCTION AND APPROVAL PROCEDURES 4 5 Sections: 6 19.100.105 Statement of purpose. 7 19.100.110 Applicability. 8 19.100.115 Relationship to other county regulations. 9 19.100.120 Review authority. 10 19.100.125 Exemptions. 11 Standards for existing development. 19.100.130 12 19.100.135 Variances. 13 19.100.140 Reasonable use exception. 14 19.100.145 Special Use Review 19.100.150 Appeals. 15 16 19.100.155 General application requirements. 17 19.100.160 Inventory provisions. 18 19.100.165 Enforcement. 19 19.100.105 Statement of purpose. 20 The purpose of the ordinance codified in this title is to identify and protect critical areas as required by the 21 Growth Management Act of 1990 (Chapter 17, Laws of 1990). Critical Areas include wetlands, fish and 22 wildlife habitat conservation areas, geologically hazardous areas, frequently flooded areas, and critical 23 aquifer recharge areas, as defined in this Title. This title supplements the development requirements 24 contained in the various chapters of the Kitsap County Zoning Ordinance (Title 17 of the Kitsap County 25 Code) by providing for additional controls and measures to protect critical areas. This title is adopted 26 under the authority of Chapter 36.70A RCW, Chapter 36.70 RCW and the Kitsap County Code, as now or 27 hereafter amended. 28 Goal Statement. It is the goal of Kitsap County that the beneficial functions and values of critical 29 areas be preserved, and potential dangers or public costs associated with the inappropriate use of such 30 areas be minimized by reasonable regulation of uses within, adjacent to or directly affecting such areas, 31 for the benefit of present and future generations.

B. Policy Goals. To implement the purpose and goal stated above, it is the intent of this title to accomplish the following:

- 1. Conserve and protect the environmental factors that add to the quality of life within the federal, state and county regulations that protect critical areas for the benefit of current and future residents of Kitsap County and the State of Washington.
- 2. Protect the public against avoidable losses from maintenance and replacement of public facilities, property damage, costs of publicly subsidizing mitigation of avoidable impacts, and costs for public emergency rescue and relief operations.
- 3. Identify critical areas and their environmental functions and values.
 - 4. Protect critical areas and their functions and values by regulating use and management within these areas and adjacent lands while allowing for reasonable use and protection of property rights as provided for in state and federal law.
 - 5. Preserve the habitat, water quality, and water quantity functions and values of wetlands.
- 6. Protect water quality by controlling erosion and carefully siting uses and activities that can detrimentally affect stream flows or aquatic habitat quality.
 - 7. Guide development proposals to the most environmentally suitable and stable portion of a development site.
 - 8. Avoid potential damage due to geological hazards or flooding.
- Preserve natural flood control and stormwater storage.
 - Maintain groundwater recharge and prevent the contamination of groundwater.
- 21 11. Prevent cumulative adverse environmental impacts to water, wetlands, fish and wildlife 22 habitats, frequently flooded areas, geologically hazardous areas, and aquifer recharge areas.
- 23 12. Whenever mitigation is required, pursue as a preferred option, restoration and enhancement of previously impacted critical areas and their buffers.

25 **19.100.110** Applicability.

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A. Kitsap County shall not grant any permit, license or other development approval for any development proposal regulated by this title, except for those in compliance with the provisions of this title. This

- 1 includes permits, licenses or other development approval to alter the conditions of any land, water or
- 2 vegetation, or to construct or alter any structure or improvement. Failure to comply with the provisions of
- 3 this title shall be considered a violation and subject to enforcement procedures as provided for in this title.
- 4 B. This title applies to all uses and activities within areas or adjacent to areas designated as regulated
- 5 critical areas unless identified as exempt in KCC 19.100.125. The following permits and approvals shall
- 6 be subject to and coordinate with the requirements of this title: site development activity permit; site plan
- 7 approval; subdivision or short subdivision; building permit; performance based development, shoreline
- 8 substantial development; variance; conditional use permit; certain forest practice permits (Class IV
- 9 General, Class III Conversion Option Harvest Plans); other permits leading to the development or
- 10 alteration of land; and rezones if not combined with another development permit.
- 11 C. Non-project actions including, but not limited to, rezones, annexations, and the adoption of plans and
- programs, shall be subject to critical area review.
- 13 D. This title is an overlay to the Zoning Ordinance. Activities regulated by the Zoning Ordinance are also
- subject to critical areas requirements but to not require an additional county permit. Under limited
- circumstances, additional state or federal permits may be required.
- 16 E. The development standards and other requirements of this title shall be applied to uses and activities
- for any permit review or approval process otherwise required by county ordinances.
- 18 F. Uses and activities in critical areas or their buffers for which no permit or approval is required by any
- 19 other county ordinance remain subject to the development standards and other requirements of this title.
- While this title does not require a review or approval process for such uses and activities, they remain
- 21 subject to the title.
- 22 G. For the purpose of this title, the area of review is defined as the critical area and its largest potential
- buffer or setback. This defines the area of review only. Refer to Chapters 19.200 through 19.600 for
- 24 specific development standards.
- 25 19.100.115 Relationship to other county regulations.
- When any provision of any other chapter of the Kitsap County Code conflicts with this title, that which
- 27 provides the most protection to the critical area, as determined by the department, shall apply.
- Applications for permits and approvals are subject to the provisions of this title as well as to other
- 29 provisions of state and county law, which include, but are not limited to the following:
- 30 A. Title 2, Government;

- 1 B. Title 9, Health, Welfare and Sanitation;
- 2 C. Title 12, Storm Water Management;
- 3 D. Title 14, Buildings and Construction;
- 4 E. Title 15, Flood Hazard Areas;
- 5 F. Title 16, Land Division and Development;
- 6 G. Title 17, Zoning;
- 7 H. Title 18, Environment;
- 8 I. Title 21, Land Use and Development Procedures;
- 9 J. Title 22, Shoreline Management Master Program;
- 10 K. RCW 36.70A, Growth Management Act;
- 11 L. RCW 90.58, Shoreline Management Act;
- 12 M. RCW 43.21C, State Environmental Policy Act;
- 13 **19.100.120** Review authority.
- 14 A. In evaluating a request for a development proposal regulated by this title, it shall be the responsibility
- of the department to determine the following:
- 1. The nature and type of critical area and the adequacy of any special reports required in applicable sections of this title;
- 2. Whether the development proposal is consistent with this title, by granting, denying or conditioning projects;
- 3. Whether proposed alterations to critical areas are appropriate under the standards contained in this title, or whether it is necessary for the applicant to seek a variance or other exception; and
- 4. Whether the protection mechanisms and the mitigation and monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public health, safety and welfare consistent with the goals, purposes and objectives of this title, and if not, condition the permit or approval accordingly.

The department shall have the administrative authority to reduce buffers and building setbacks as 1 2 outlined in specific critical area sections of this title. 3 C. Where projects have been approved with conditions to protect critical areas under previous 4 protection policies in effect prior to the ordinance codified in this title, those conditions will apply. 5 Nevertheless, this title shall apply to new applications where the department determines, based on review 6 of current information that the prior conditions will result in a detrimental impact to a critical area. 7 D. Time Limitations. 8 1. Expiration of Approval. 9 a. Approvals granted under this title shall be valid for the same time period as the 10 underlying permit (e.g. preliminary plat, site development, building permit). If the 11 underlying permit does not contain a specified expiration date, then approvals granted 12 under this title shall be in writing and shall be valid for a period of three years from the 13 date of issue, unless a longer period is specified by the department. 14 b. The approval shall be considered null and void upon expiration, unless a time extension is requested and granted as set forth in subsection (2) below. 15 2. Time Extensions. 16 17 a. The applicant or owner(s) may request in writing a one-year extension of the original 18 approval. 19 Knowledge of the expiration date and initiation of a request for a time extension is 20 the responsibility of the applicant or owner(s). 21 c. A written request for a time extension shall be filed with the department at least 30 22 days prior to the expiration of the approval. 23 d. Upon filing of a written request for a time extension, a copy shall be sent to each 24 party of record together with governmental departments or agencies that were involved in 25 the original approval process. By letter, the department shall request written comments 26 be delivered to the department within 15 days of the date of the letter.

e. Prior to the granting of a time extension, the department may require a new

application(s), updated study(ies), and fee(s) if:

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1	(1) The original intent of the approval is altered or enlarged by the renewal;		
2	(2) The circumstances relevant to the review and issuance of the original		
3	approval have changed substantially; or		
4	(3) The applicant failed to abide by the terms of the original approval.		
5	f. The department has the authority to grant or deny any requests for time extensions		
6	based upon demonstration by the applicant of good cause for the delay. Time extensions		
7	shall be granted in writing and documented in the file.		
8 9	g. If approved, the one-year time extension shall be calculated from the date of granting said approval.		
10 11	E. The department or applicant may request, at the applicant's expense, third party review as described in KCC 21.04.140.		
12	19.100.125 Exemptions.		
13	The following activities are exempt from the requirements of this title:		
14	A. Emergencies that threaten the public health, safety and welfare. An "emergency" is an unanticipated		
15	and immediate threat to public health, safety, or the environment that requires action within a time too		
16	short to allow compliance with this title.		
17	B. Pre-existing and ongoing agricultural activities on lands containing critical areas, as defined in		
18	19.150.285.		
19	C. Normal and routine maintenance and operation of pre-existing retention/detention facilities, biofilters		
20	and other stormwater management facilities, irrigation and drainage ditches, farm ponds, fish ponds,		
21	manure lagoons, and livestock water ponds, provided that such activities shall not involve conversion of		
22	any wetland not currently being used for such activity.		
23	D. Structural alterations to buildings, otherwise allowed under the Kitsap County Code and that do not		
24	alter the structural footprint or introduce new adverse impacts to an adjacent critical area.		
25	E. Normal and routine maintenance or repair of existing utility structures within a right-of-way or within		
26	existing utility corridor or easements, including the cutting, removal and/or mowing of vegetation above		
27	the ground so long as in accordance with best management practices.		

1 F. Forest Practices conducted pursuant to RCW <u>76.09</u>, except Class IV (general conversions) and

2 Conversion Option Harvest Plans (COHP).

19.100.130 Standards for existing development.

- 5 A. Existing Nonconforming Structures.
- 1. "Existing nonconforming development" means a development that was lawfully constructed, approved or established prior to the effective date of the ordinance codified in this title, but does not conform to present regulations or standards of this title.
 - 2. Structures in existence on the effective date of the ordinance codified in this title that do not meet the setback or buffer requirements of this title may be remodeled or reconstructed provided that the new construction or related activity does not further intrude into the critical area or its associated buffers.
 - 3. New construction or related activity connected with an existing single family dwelling shall not be considered further intruding into an associated buffer so long as the footprint of the structure lying within the critical area or its buffer is not increased by more than twenty (20%) percent and no portion of the new structure is located closer to the critical area than the existing structure; and provided further that reconstruction or remodeling meets the requirements of Title 15 of the Kitsap County Code (Flood Hazard Areas) and shall only be allowed if it does not create or continue a circumstance where personal or property damage is likely due to the nature of the critical area.
 - 4. Nonconforming structures which are damaged or destroyed by fire, explosion, or other casualty, may be restored or replaced if the application is made for the necessary permits within one year of the date of the damage or destruction occurred, and the reconstruction is completed within two years of permit issuance or the conclusion of any appeal on the permit. The reconstruction or restoration shall not serve to expand, enlarge or increase the nonconformity except as allowed through the provisions of this section.
 - B. Danger Tree Removal in a Critical Area or Buffer. Where a threat to human life or permanent structure is demonstrated, the department may allow removal of danger or hazard trees subject to the following criteria: (1) tree removal is the minimum necessary to balance protection of the critical area and its buffer with protection of life and property; and (2) the critical area or its buffer shall be replanted as determined by the department and the property owner. The department shall coordinate review with the property owner and Washington State Department of Fish and Wildlife as determined necessary to assure habitat protection. The department may require the applicant to consult with a professional

1 forester or a certified arborist through a risk assessment report, or by the department through a danger

- 2 tree site evaluation permit, prior to tree removal. Danger tree abatement can sometimes be achieved by
- 3 felling the tree or topping the tree. Habitat needs may require leaving the fallen tree in the riparian corridor
- 4 or maintaining a high stump for wildlife habitat.

19.100.135 Variances.

- 6 A. A variance in the application of the regulations or standards of this title to a particular piece of
- 7 property may be granted by Kitsap County, when it can be shown that the application meets all of the
- 8 following criteria:

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- 1. Because of special circumstances applicable to the subject property, including size, shape, or topography, the strict application of this title is found to deprive subject property of rights and privileges enjoyed by other properties in the vicinity; provided, however, the fact that those surrounding properties have been developed under regulations in force prior to the adoption of this ordinance shall not be the sole basis for the granting of a variance.
 - 2. The special circumstances referred to in subsection 1 above are not the result of the actions of the current or previous owner.
 - 3. The granting of the variance will not result in substantial detrimental impacts to the critical area, public welfare or injurious to the property or improvements in the vicinity and area in which the property is situated or contrary to the goals, policies and purpose of this title.
 - 4. The granting of the variance is the minimum necessary to accommodate the permitted use.
 - No other practicable or reasonable alternative exists. (See Definitions, Chapter 19.150.)
- 21 6. A mitigation plan (where required) has been submitted and is approved for the proposed use of the critical area.
- 23 B. Kitsap County shall conduct a public hearing on all variance applications pursuant to the review
- 24 process and notice requirements established in Title 21 of the Kitsap County Code (Land Use and
- 25 Development Procedures), as now or hereafter amended.
- 26 C. Except when application of this title would deny all reasonable use of the property (Section
- 27 19.100.140), an applicant who seeks an exception from the standards and requirements of this title shall
- pursue relief by means of a variance as provided for in this title.

1 D. Requests for variances shall include the application requirements of Section 19.100.155 (Application

- 2 Requirements, General), or Section 19.200.215 (Wetland Review Procedures), whichever is applicable.
- 3 E. The department shall review administrative buffer reductions based on the criteria and standards
- 4 referenced in this chapter.
- 5 F. The department may grant variances for public utilities to the substantive or procedural requirements
- 6 of this title when:

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- Application of this title to the utility's activities would be inconsistent with the Comprehensive
 Plan and the Utility's public service obligations;
 - 2. The proposed utility activity does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal site; and
- Any alterations permitted to these critical areas shall be the minimum necessary to
 reasonably accommodate the proposed utility activity and mitigate when feasible.
- 13 19.100.140 Reasonable use exception.
- 14 If the application of this title would deny all reasonable use of the property, the applicant may apply for a
- reasonable use exception pursuant to this section:
- 16 A. The applicant shall apply to the department, and the department shall prepare a recommendation to
- the hearing examiner. The applicant may apply for a reasonable use exception without first having
- 18 applied for a variance if the requested exception includes relief from standards for which a variance
- 19 cannot be granted pursuant to the provisions of the section. The property owner and/or applicant for a
- reasonable use exception has the burden of proving that the property is deprived of all reasonable uses.
- 21 The examiner shall review the application and shall conduct a public hearing pursuant to the provisions of
- 22 Title 21 of the Kitsap County Code (Land Use and Development Procedures). The examiner shall make a
- 23 final decision based on the following criteria:
 - The application of this title would deny all reasonable use of the property;
- 25 2. There is no other reasonable use which would result in 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 and is consistent with the general purposes of
- this title and the public interest, and does not conflict with the Endangered Species Act or other
- 29 relevant state or federal laws; and

4. Any alterations permitted to the critical area shall be the minimum necessary to allow for reasonable use of the property.

- B. Any authorized alterations of a critical area under this section shall be subject to conditions
- 4 established by the examiner including, but not limited to, mitigation under an approved mitigation plan.
- 5 **19.100.145 Special Use Review.**

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- 6 Special use review is an administrative process unless the underlying permit requires a public hearing.
- 7 Special use review may be requested for revisions to existing permits, or when review by external
- 8 authorities would be necessary to assure the department applies reasonable conditions to minimize,
- 9 rectify, or compensate for impacts to the critical area or buffer. Those external authorities include, but are
- 10 not limited to federal agencies, state agencies, tribes, public utilities, and Kitsap Public Health.
- 11 The department is authorized to take action on permits as required by this title. Development identified
- as a special use review may be approved, approved with conditions, or denied according to the
- procedures and criteria outlined in this section.
- 14 A. The department may approve a permit after review of the application and any required special
- 15 reports submitted in accordance with this title. The department shall determine whether the use or activity
- 16 cannot be avoided because no reasonable or practicable alternative exists, the proposed use is
- 17 consistent with the spirit and intent of this title and it will not cause adverse impacts to the critical area or
- the buffer which cannot be mitigated. In taking action to approve a special use review, the department
- 19 may attach reasonable conditions.
- 20 B. The department shall deny a special use review request when it finds that the proposed use or
- activity is inconsistent with this title and/or will cause adverse impacts to the critical area or the buffer,
- which cannot be adequately mitigated and/or avoided.
- 23 C. Special use review determinations are appealable to the hearings examiner pursuant to Section
- 24 19.100.150 (Appeals).

26 **19.100.150 Appeals.**

- 27 A. Appealable Actions. The following decisions or actions required by this title may be appealed:
- 1. Any decision to approve, condition or deny a development proposal, or any disagreement on conclusions, methodology, rating systems, etc. between the department and such person or firm

which prepares special reports pursuant to Chapter 19.700 may be appealed by the applicant or affected party to the Kitsap County hearing examiner.

- Any decision to approve, condition or deny a variance application by the department may be
 appealed by the applicant or affected party to the Kitsap County hearing examiner.
- 5 3. Any decision to require, or not require a special report pursuant to this title may be appealed by the applicant or affected party to the Kitsap County hearing examiner.
- B. Appeal Process. The appeals process will be pursuant to procedures in KCC 21.04, or as amended
 hereafter.

9 19.100.155 General application requirements.

- 10 A. All applicants for new development are encouraged to meet with the department prior to submitting
- 11 an application subject to Title 17 of Kitsap County Code. Fees for a staff consultation may be applied
- 12 towards the application fee for the same project. The purpose of this meeting is to discuss Kitsap
- 13 County's zoning and applicable critical area requirements, to review any conceptual site plans prepared
- 14 by the applicant and to identify potential impacts and mitigation measures. Such conference shall be for
- the convenience of the applicant, and any recommendations shall not be binding on the applicant or the
- 16 county.
- 17 B. The applicant must comply with the standards and requirements of this title as well as standards
- relating to Title 12 of the Kitsap County Code (Stormwater Management) set forth by the department, as
- 19 now or hereafter amended. To expedite the permit review process, the department shall be the lead
- 20 agency on all work related to critical areas. Development may be prohibited in a proposed development
- 21 site based on criteria set forth in this title; the applicant should first determine whether this is the case
- before applying for permits from the department.
- 23 C. Application for development proposals, reasonable use exception or variances regulated by this title
- or for review of special reports shall be made with the department by the property owner, lessee, contract
- 25 purchaser, other person entitled to possession of the property, or by an authorized agent as listed in
- 26 Chapter 19.700 (Special Reports).
- 27 D. A filing fee in an amount established under KCC 21.10 shall be paid to the department at the time an
- application for a permit relating to a critical area or a special report review is filed.
- 29 E. Applications for any development proposal subject to this title shall be reviewed by the department
- for completeness and consistency or inconsistency with this title.

1 F. At every stage of the application process, the burden of demonstrating that any proposed

- 2 development is consistent with this title is upon the applicant.
- 3 G. All applications for development subject to this title shall include a site plan drawn to scale identifying
- 4 locations of critical areas, location of proposed structures and activities, including clearing and grading
- 5 and general topographic information as required by the department. If the department determines that
- 6 additional critical areas are found on the subject property, the applicant shall amend the site plan to
- 7 identify the location of the critical area. When it is determined that regulated activities subject to the
- 8 provisions of the State Environmental Policy Act (SEPA) as implemented by Title 18 of the Kitsap County
- 9 Code (Environment) are likely to cause a significant, adverse environmental impact to the critical areas
- identified in this title that cannot be adequately mitigated through compliance with this title, environmental
- 11 assessment and mitigation measures may be imposed consistent with the procedures established in Title
- 12 18 of the Kitsap County Code (Environment).
- 13 H. Prior to taking action on a zone reclassification or a Comprehensive Plan Amendment, the proponent
- 14 shall complete an environmental review to confirm the nature and extent of any critical areas on or
- 15 adjacent to the property; determine if the subsequent development proposal would be consistent with this
- 16 title; and determine whether mitigation or other measures would be necessary if the proposal were
- 17 approved. Such review shall occur prior to any SEPA threshold determination. Findings of such review
- may be used to condition or mitigate the impact through the SEPA threshold determination or to deny the
- 19 proposal if the impacts are significant and cannot be mitigated.
- 20 **19.100.160** Inventory provisions.
- 21 The approximate location and extent of mapped critical areas within Kitsap County are shown on the
- 22 maps adopted as part of this title, and incorporated herein by this reference. These maps shall be used
- 23 only as a general guide for the assistance of the department and the public; the type, extent and
- boundaries may be determined in the field by a qualified specialist or staff person according to the
- 25 requirements of this title. In the event of a conflict between a critical area location shown on the county's
- 26 maps and that of an on-site determination, the on-site determination will apply.
- 27 Kitsap County will review map inventory information of all critical areas as it becomes available. Mapping
- 28 will include critical areas that are identified through site specific analysis by local, state and federal
- 29 agencies, the Kitsap Conservation District, tribal governments, citizen groups and other sources.
- 30 **19.100.165** Enforcement.

Authorization. The director is authorized to enforce this title, and to designate county employees as 1 2 authorized representatives of the department to investigate suspected violations of this title, and to issue 3 orders to correct violations and notices of infraction. 4 Right of Entry. When it is necessary to make an inspection to enforce the provisions of this title, or 5 when the director or his/her designee has reasonable cause to believe that a condition exists on property 6 that is contrary to or in violation of this title, an authorized official may investigate and in doing so may 7 enter upon land when consent has been given or as otherwise allowed by law. 8 Stop Work Orders. Whenever any work or activity is being done contrary to the provisions of this title 9 the director or his/her designee may order the work stopped by notice in writing, served on any persons 10 engaged in the doing or causing such work to be done, or by posting the property, and any such persons 11 shall forthwith stop such work or activity until authorized by the director or his/her designee to proceed. 12 Penalties. The violation of any provision of this title shall constitute a Class I civil infraction. Each 13 violation shall constitute a separate infraction for each and every day or portion thereof during which the 14 violation is committed, continued, or permitted. Infractions shall be processed in accordance with the 15 provisions of Chapter 2.116 of Kitsap County Code, as now or hereafter amended. 16 Imminent and Substantial Dangers. Notwithstanding any provisions of these regulations, the director 17 or his/her designee may take immediate action to prevent an imminent and substantial danger to the 18 public health, welfare, safety or the environment by the violation of any provision of this title. 19 F. Other Legal or Equitable Relief. Notwithstanding the existence or use of any other remedy, the 20 director or his/her designee may seek legal or equitable relief to enjoin any acts or practices or abate any 21 conditions, which constitute or will constitute a violation of the provisions of this title. 22 23 24 25

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1 2 **Chapter 19.150** 3 **DEFINITIONS** 4 5 Sections: 6 19.150.050 Generally. 7 19.150.100 Adjacent. 8 19.150.105 Agricultural activities. 9 19.150.110 Alteration. 10 19.150.115 Anadromous fish. 11 19.150.120 Applicant. 12 19.150.125 Aquifer. 13 19.150.130 Aquifer recharge. 14 19.150.135 Aquifer recharge area. 15 19.150.140 Aquifer vulnerability. 16 19.150.145 Aquitard. 17 19.150.150 Bank stabilization. 18 19.150.155 Best available science. 19 19.150.160 Best management practices. 19.150.165 Bog. 20 21 19.150.170 Buffer. 22 19.150.175 Buffer, standard. 23 19.150.180 Candidate species. 24 19.150.185 Channel migration zone. 25 19.150.190 Clearing. 26 19.150.195 Compensation. 27 19.150.200 Creation. 28 19.150.205 Conversion option harvest plan. 29 19.150.210 Critical aquifer recharge areas. 30 19.150.215 Critical areas. 31 19.150.220 Critical area protection easement. 32 19.150.225 Critical facilities. 33 19.150.230 Danger trees.

- 1 19.150.235 Debris.
- 2 19.150.240 Department.
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- 4 19.150.250 Development proposal site.
- 5 **19.150.255 Director.**
- 6 19.150.260 Endangered species.
- 7 19.150.265 Enhancement.
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- 9 **19.150.275** Erosion hazard areas.
- 10 **19.150.280** Excavation.
- 11 19.150.285 Existing and ongoing agriculture.
- 12 **19.150.290** Exotic.
- 13 19.150.295 Extraordinary hardship.
- 14 19.150.300 Farm pond.
- 15 **19.150.305** Fen.
- 16 **19.150.310** Filling or fill.
- 17 19.150.315 Fish and wildlife habitat.
- 18 19.150.320 Fisheries biologist.
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- 20 **19.150.330 Floodway.**
- 21 19.150.335 Forest practices.
- 22 19.150.340 Frequently flooded areas.
- 23 19.150.345 Functions and Values
- 24 19.150.350 Geological assessment.
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- 26 19.150.360 Geologist.
- 27 19.150.365 Geotechnical engineer.
- 28 19.150.370 Geotechnical report and geological report.
- 29 **19.150.375** Grading.
- 30 **19.150.380** Grubbing.
- 31 **19.150.385 Groundwater.**
- 32 19.150.390 Habitat management plan.
- 33 19.150.395 Habitat of local importance.
- 34 **19.150.400** Hearing examiner.
- 35 **19.150.405** Hydric soils.
- 36 19.150.410 Hydrogeologist.

- 1 19.150.415 Infiltration rate.
- 2 19.150.420 Landslide hazard areas.
- 3 **19.150.425** Liquefaction.
- 4 19.150.430 Low impact activities.
- 5 **19.150.435 Mitigation.**
- 6 **19.150.440 Native vegetation.**
- 7 **19.150.445** Normal maintenance.
- 8 19.150.450 Ordinary high water mark.
- 9 19.150.455 Out-of-kind compensation.
- 10 **19.150.460** Permeability.
- 11 19.150.465 Practicable alternative.
- 12 **19.150.470** Priority habitat.
- 13 19.150.475 Priority species.
- 14 19.150.480 Public facilities.
- 15 19.150.485 Public project of significant importance.
- 16 19.150.490 Public right-of-way.
- 17 19.150.495 Public utility.
- 18 **19.150.500 Ravine**.
- 19 **19.150.505** Reasonable.
- 20 19.150.510 Reasonable alternative.
- 21 19.150.515 Reasonable use.
- 22 19.150.520 Reasonable use exception.
- 23 19.150.525 Re-establishment.
- 24 19.150.530 Refuse.
- 25 **19.150.535** Rehabilitation.
- 26 **19.150.540** Restoration.
- 27 19.150.545 Retention facilities.
- 28 **19.150.550** Riparian area.
- 29 **19.150.555 Salmonid.**
- 30 19.150.560 Seismic Hazard Area.
- 31 19.150.565 Sensitive species.
- 32 19.150.570 Shorelines.
- 33 **19.150.575 Significant tree.**
- 34 19.150.580 Single-family dwelling.
- 35 19.150.585 Special flood hazard areas.
- 36 **19.150.590 Species of concern.**

- 1 19.150.595 State Environmental Policy Act or SEPA.
- 2 19.150.600 Streams.
- 3 **19.150.605** Swale.
- 4 19.150.610 Threatened species.
- 5 **19.150.615** Toe of slope.
- 6 **19.150.620** Top of slope.
- 7 19.150.625 Use or activity.
- 8 19.150.630 Utilities.
- 9 **19.150.635** Utility corridor.
- 10 19.150.640 Wellhead protection area.
- 11 19.150.645 Wetland delineation.
- 12 19.150.650 Wetland determination.
- 13 19.150.655 Wetland edge.
- 14 19.150.660 Wetlands.
- 15 **19.150.665 Wetlands, mosaic.**
- 16 19.150.670 Wetlands of regional significance.
- 17 19.150.675 Wetlands of statewide significance.
- 18 19.150.680 Wetlands report.
- 19 **19.150.685** Wetlands specialist.
- 20 19.150.690 Wildlife biologist.
- 21 19.150.050 Generally.
- 22 As used in this title, the following terms have the meanings given in this chapter.
- 23 **19.150.100 Adjacent.**
- 24 "Adjacent" for the purposes of this title, means within an area containing the critical area in question for
- 25 the development proposal and its largest potential buffer or setback. This adjacent area is for review
- 26 purposes only.
- 27 19.150.105 Agricultural activities.
- 28 "Agricultural activities" means the normal actions associated with the production of crops such as plowing,
- 29 cultivating, minor drainage, and harvesting; and/or raising or keeping of livestock, including operation and
- maintenance, and repair of farm and stock ponds, drainage ditches, irrigation systems, and normal
- 31 operation, maintenance, and repair of existing serviceable agricultural structures, facilities, or improved
- 32 areas. The term "agricultural activities" as used within this Title does not include the practice of
- 33 aguaculture. Forest practices regulated under Chapter 76.09 RCW and Title 222 WAC are not included in
- 34 this definition.

1 19.150.110 Alteration.

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

9 **19.150.115 Anadromous fish.**

10 "Anadromous fish" means fish whose life cycle includes time spent in both fresh and salt water.

11 19.150.120 Applicant.

- 12 "Applicant" means the person, party, firm, corporation or legal entity, or agent thereof that proposes a
- 13 development of property in Kitsap County.

14 19.150.125 Aquifer.

- 15 "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.

17 19.150.130 Aquifer recharge.

- 18 "Aquifer recharge" means the process by which water is added to an aquifer. It may occur naturally by the
- 19 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"
- 21 means through the addition of surface water (e.g., land application of wastewater or storm water) or by
- the injection of water into the underground environment (e.g., drainfields and drywells).

23 **19.150.135** Aquifer recharge area.

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

26 19.150.140 Aguifer vulnerability.

- 27 "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.

29 **19.150.145 Aguitard.**

30 "Aquitard" means an underground geologic layer that has low permeability.

- **1 19.150.150** Bank stabilization.
- 2 "Bank stabilization" means lake and stream modification including vegetation enhancement, used for the
- 3 purpose of retarding erosion, protecting channels, and retaining uplands.
- 4 19.150.155 Best available science.
- 5 "Best available science" means scientifically valid information in accordance with WAC 365-195-900, as
- 6 now or hereafter amended, that is used to develop and implement critical areas policies or regulations.
- 7 19.150.160 Best management practices (BMPs).
- 8 "Best management practices" or "BMPs" means conservation practices (physical, structural and/or
- 9 managerial) or systems of practices and management measures typical of a particular industry or use
- 10 that:
- 11 A. Control soil loss and reduce water quality degradation caused by nutrients, pathogens, bacteria, toxic
- substances, pesticides, oil and grease, and sediment;
- 13 B. Minimize adverse impacts to surface water and groundwater flow, circulation patterns, and to the
- chemical, physical, and biological characteristics of critical areas;
- 15 **19.150.165 Bog.**
- 16 "Bogs" means a low nutrient, acidic wetland with organic soils characteristic bog plants, as described in
- 17 Washington State Wetland Rating System for Western Washington: 2014 Update (Washington State
- Department of Ecology Publication #14-06-29, Olympia WA, October 2014).
- 19 **19.150.170 Buffer.**
- 20 "Buffer" means an area that is intended to protect the functions and values of critical areas. Protecting
- 21 these functions and values includes the preservation of existing native and non-native vegetation where it
- 22 exists, unless otherwise required to be replaced with native vegetation through mitigation or voluntarily
- 23 enhanced or restored.
- 24 **19.150.175** Buffer, standard.
- 25 "Standard buffer" means the buffer width established by each chapter of this title before any buffer
- adjustments are applied.
- 27 19.150.180 Candidate species (state-listed).
- 28 "Candidate species (state-listed)" means species under review by the Department of Fish and Wildlife
- 29 (WDFW) for possible listing as endangered, threatened or sensitive. A species will be considered for
- 30 state-candidate designation if sufficient scientific evidence suggests that its status may meet criteria

- defined for endangered, threatened, or sensitive in WAC 220-610-110 as now or hereafter amended.
- 2 Currently listed state-threatened or state-sensitive species may also be designated as a state-candidate
- 3 species if their status is in question. State-candidate species will be managed by the Department of Fish
- 4 and Wildlife, as needed, to ensure the long-term survival of populations in Washington. They are listed in
- 5 WDFW, Policy 5301, or as amended.

6 19.150.185 Channel migration zone (CMZ).

- 7 "Channel migration zone" or "CMZ," as defined by WAC 173-26-020 (7), as now or hereafter amended,
- 8 means the area along a river or stream within which the channel(s) can be reasonably predicted to
- 9 migrate over time as a result of natural and normally occurring hydrological and related processes when
- 10 considered with the characteristics of the river or stream and its surroundings.

11 19.150.190 Clearing.

- 12 "Clearing" means the destruction, disturbance or removal of vegetation by physical, mechanical, chemical
- 13 or other means.

14 **19.150.195** Compensation.

- "Compensation" means replacement of project-induced critical area (e.g., wetland) losses of acreage or
- 16 functions.

17 19.150.200 Creation.

- 18 "Creation" means the manipulation of the physical, chemical, or biological characteristics present to
- 19 develop a wetland on an upland or deepwater site, where a wetland did not previously exist. Activities
- 20 typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod and
- 21 hydric soils, and support the growth of hydrophytic plant species.

22 19.150.205 Conversion option harvest plan (COHP).

- As it relates to forest practices, a "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
- 25 commercial timber operation shall mean a bona fide conversion to an active use which is incompatible
- with timber growing.

27 19.150.210 Critical aquifer recharge areas.

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

31 19.150.215 Critical areas.

- 1 "Critical areas" means those areas and ecosystems identified as: (a) wetlands; (b) areas with a critical
- 2 recharging effect on aquifers; (c) fish and wildlife habitat conservation areas; (d) geologically hazardous
- 3 areas; and (e) frequently flooded areas.

4 19.150.220 Critical area protection easement.

- 5 "Critical area protection easement" means an agreement conveyed through a notice to title, or shown on
- 6 the face of a plat or site plan, for the purpose of perpetual or long-term conservation.

7 19.150.225 Critical facilities.

- 8 "Critical facilities" means those facilities necessary to protect the public health, safety and welfare,
- 9 including but not limited to schools, hospitals, police stations, fire departments and other emergency
- 10 response facilities, and nursing homes. Critical facilities also include sites of hazardous material storage
- 11 or production.

12 **19.150.230** Danger trees.

- 13 "Danger trees" means any tree of any height, dead or alive, that presents a hazard to the public, public
- 14 utility, or permanent structure because of rot; root, stem or limb damage; lean; or any other observable
- 15 condition created by natural process or man-made activity determined by a certified arborist, or by the
- department through a danger tree site evaluation permit.

17 **19.150.235 Debris.**

18 See "Refuse."

19 **19.150.240 Department.**

20 "Department" means the Kitsap County Department of Community Development.

21 19.150.245 Detention facilities.

- 22 "Detention facilities" means stormwater facilities, including all the appurtenances associated with their
- designed functions, maintenance and security that are designed to store runoff while gradually releasing it
- 24 at a pre-determined controlled rate.

25 19.150.250 Development proposal site.

- 26 "Development proposal site" means the legal boundaries of the parcel or parcels of land on which an
- 27 applicant has applied for authority from Kitsap County to carry out a development proposal.

28 **19.150.255 Director.**

- 29 "Director" means the director of the Kitsap County department of community development or a duly
- 30 authorized designee in the department.

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3 19.150.260 Endangered species (state listed).

- 4 "Endangered species" means a species native to the state of Washington that is seriously threatened with
- 5 extinction throughout all or a significant portion of its range within the state. Endangered species are
- 6 legally designated in WAC 220-610-010, as now or hereafter amended.

7 **19.150.265** Enhancement.

- 8 "Enhancement" means the manipulation of the physical, chemical, or biological characteristics of a
- 9 wetland to heighten, intensify, or improve specific function(s) or to positively change the growth stage or
- 10 composition of the vegetation present. Enhancement is undertaken for specified purposes such as water
- 11 quality improvement, flood water retention, or wildlife habitat. Enhancement may result in a change in
- wetland function(s) or can lead to a decline in other wetland functions, but does not result in a gain in
- 13 wetland acres. Examples are planting vegetation, controlling non-native or invasive species, and
- 14 modifying site elevations to alter hydroperiods.

15 **19.150.270 Erosion.**

- 16 "Erosion" means the process whereby the land surface is worn away by the action of water, wind, ice or
- 17 other geologic agents, including processes such as gravitational creep or events such as landslides
- 18 caused by natural or manmade impacts.

19 **19.150.275**Erosion hazard areas.

- 20 "Erosion hazard areas" are those areas containing soils which, according to the U.S. Department of
- 21 Agriculture Natural Resources Conservation Service Soil Survey Program, may experience significant
- 22 erosion. Erosion hazard areas also include coastal erosion-prone areas and channel migration zones.
- 23 This designation pertains to water erosion and not wind erosion. These areas may not be highly erodible
- until or unless the soil is disturbed by activities such as clearing or grading.

25 **19.150.280 Excavation.**

26 "Excavation" means the mechanical removal of earth material.

27 19.150.285 Existing and ongoing agriculture.

- 28 "Existing and ongoing agriculture" means agricultural uses and activities on lands defined in RCW
- 29 84.34.020(2) or defined as agricultural activities in this title, as defined in this title when undertaken
- 30 pursuant to agricultural best management practices to minimize impacts to critical areas. Enrollment in a
- 31 federally recognized conservation program or the Kitsap County Open Space Taxation Program as Farm

and Agricultural Conservation Land (Chapter 18.12 KCC), within the past five years will not defeat an

- 2 activity's status as "existing and ongoing" agriculture.
- 3 **19.150.290 Exotic.**
- 4 "Exotic" means any species of plant or animal that is not indigenous (native) to an area.
- 5 **19.150.295 Extraordinary hardship.**
- 6 "Extraordinary hardship" means where the strict application of this title and/or other programs adopted to
- 7 implement this title by the regulatory authority would prevent all reasonable use of the parcel.
- 8 19.150.300 Farm pond.
- 9 "Farm pond" means an open-water habitat of less than five acres and not contiguous with a stream, river,
- 10 lake or marine water created from a non-wetland site in connection with agricultural activities.
- 11 19.150.305 Fen.
- 12 "Fen" means a wetland similar to a bog, dominated by organic soils, low nutrients, and low pH, but
- 13 receives some water from the surrounding landscape or groundwater, as described in Washington State
- 14 Wetland Rating System for Western Washington: 2014 Update (Washington State Department of Ecology
- 15 Publication #14-06029, Olympia, WA October 2014).
- 16 **19.150.310** Filling or fill.
- 17 "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.
- 19 19.150.315 Fish and wildlife habitat conservation areas.
- 20 "Fish and wildlife habitat conservation areas" are those areas that serve a critical role in sustaining
- 21 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
- 23 not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements
- 24 including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high
- 25 relative population density or species richness. See below "Priority habitats" and "Priority species" for
- 26 further detail. The County may also designate locally important habitats and species. "Fish and wildlife
- 27 habitat conservation areas" do not include such artificial features or constructs as irrigation delivery
- 28 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, or other entirely artificial
- 30 watercourses, except where they exist in a natural watercourse that has been altered by humans.
- 31 19.150.320 Fisheries biologist.

1 "Fisheries biologist" means a person with experience and training in fisheries within the past ten years

- 2 who is able to submit substantially correct reports on fish population surveys, stream surveys and other
- 3 related data analyses of fisheries resources. "Substantially correct" is interpreted to mean that technical
- 4 or scientific errors, if any, will be minor and do not delay or affect the site plan review process.
- 5 Qualifications of a fisheries biologist include:
- 6 A. Certification by the American Fisheries Society; or
- 7 B. A Bachelor of Science degree in fisheries or the biological sciences from an accredited institution
- 8 and two years of professional fisheries experience; or
- 9 C. Five or more years professional experience as a practicing fisheries biologist with a minimum three
- 10 years professional field experience.
- 11 19.150.325 Floodplain.
- 12 "Floodplain" means the floodway and associated 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. The regulatory flood hazard areas, floodplains and floodways are depicted on the Federal
- 15 Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for Kitsap County.
- 16 **19.150.330 Floodway**.
- 17 "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be
- 18 reserved in order to discharge the base flood without cumulatively increasing the water surface elevation
- more than one foot.
- 20 **19.150.335** Forest practices.
- 21 "Forest practices" means, as defined in WAC 222-16-010, as now or hereafter amended, any activity
- 22 conducted on or directly pertaining to forest land that is related to growing, harvesting, or processing
- timber, or removing forest biomass, including but not limited to:
- 24 A. Activities in and over typed water;
- 25 B. Road and trail construction;
- 26 C. Harvesting, final and intermediate;
- 27 D. Pre-commercial thinning;
- 28 E. Reforestation;

- 1 F. Fertilization;
- 2 G. Prevention and suppression of diseases and insects;
- 3 H. Salvage of trees; and
- 4 I. Brush control.
- 5 "Forest practices" shall not include: forest species seed orchard operations and intensive forest nursery
- 6 operations; or preparatory work such as tree marking, surveying and road flagging; or removal or harvest
- 7 of incidental vegetation from forest lands such as berries, ferns, greenery, mistletoe, herbs, mushrooms,
- 8 and other products which cannot normally be expected to result in damage to forest soils, timber or public
- 9 resources.
- 10 **19.150.340** Frequently flooded areas.
- 11 "Frequently flooded areas" are lands in the floodplain subject to at least a one percent or greater chance
- 12 of flooding in any given year, or within areas subject to flooding due to high ground water. These areas
- 13 include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and areas where high
- ground water forms ponds on the ground surface. Generally, floodplains are designated by FEMA on
- 15 Flood Insurance Rate and Boundary Maps.
- 16 **19.150.345** Functions and Values.
- 17 "Functions and values" are generally those natural processes and benefits performed or provided by
- 18 critical areas that are required to be protected by the GMA. These include, but are not limited to,
- improving and maintaining water quality, providing fish and wildlife habitat, supporting terrestrial and
- 20 aguatic food chains, reducing flooding and erosive flows, water attenuation, historical or archaeological
- importance, educational opportunities, and recreation.

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- 23 **19.150.350 Geologic Assessment.**
- 24 A "geologic assessment" is an umbrella term used for the evaluation completed by a geologist or
- 25 geotechnical engineer to meet the requirements of Chapter 19.400. The geologic assessment may be in
- the form of a Letter, as described in 19.400,440, a Geological report, or Geotechnical Report
- 27 (19.150.350).

- 29 **19.150.355 Geologically hazardous areas.** "Geologically hazardous areas" means areas that because
- of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to siting
- 31 commercial, residential or industrial development consistent with public health or safety concerns.

1 19.150.360 Geologist.

- 2 "Geologist" means a person who is licensed in the State of Washington and meets all experience and
- training requirements in accordance with Chapter 308-15 WAC, as now or hereafter amended.

4 19.150.365 Geotechnical engineer.

- 5 "Geotechnical engineer" means a practicing geotechnical/civil engineer licensed as a professional civil
- 6 engineer with the state of Washington, with professional training and experience in geotechnical
- 7 engineering, including at least four years' professional experience in evaluating geologically hazardous
- 8 areas.

9 19.150.370 Geotechnical report and geological report.

- 10 "Geotechnical report" and "geological report" means a study of potential site development impacts related
- to retention of natural vegetation, soil characteristics, geology, drainage, groundwater discharge, and
- 12 engineering recommendations related to slope and structural stability. The geotechnical report shall be
- prepared by or in conjunction with a licensed geotechnical engineer meeting the minimum qualifications
- as defined by this title. Geological reports may contain the above information with the exception of
- 15 engineering recommendations, and may be prepared by a geologist (See Chapter 19.700, Special
- 16 Reports, for minimum qualifications).

17 **19.150.375** Grading (construction).

- 18 "Grading" means any excavating, filling, grubbing, recontouring or mechanical removal of earth materials
- on the surface layer or any combination thereof.

20 **19.150.380 Grubbing.**

- 21 "Grubbing" means the removal of vegetative matter from underground, such as sod, stumps, roots, buried
- 22 logs, or other debris, and includes the incidental removal of topsoil to a depth not exceeding twelve
- 23 inches.

24 **19.150.385** Groundwater.

- 25 "Groundwater" means water that exists beneath the land surface or beneath the bed of any stream, lake
- or reservoir, or other body of surface water, regardless of the geological formation or structure in which
- such water stands or flows, percolates or otherwise moves.

28 19.150.390 Habitat management plan.

- 29 "Habitat management plan" means a report prepared by a professional wildlife biologist or fisheries
- 30 biologist that discusses and evaluates critical fish and wildlife habitat functions and evaluates the
- 31 measures necessary to maintain, enhance and improve habitat conservation on a proposed development
- 32 site.

1 19.150.395 Habitats of local importance.

- 2 "Habitats of local importance" are designated fish and wildlife habitat conservation areas that are found to
- 3 be locally important by the County.
- 4 19.150.400 Hearing examiner.
- 5 "Hearing examiner" means a person appointed to hear or review certain land use decisions pursuant to
- 6 RCW 36.70.970 and chapter 2.10 KCC.
- 7 19.150.405 Hydric soils.
- 8 "Hydric soils" means soils which are wet long enough to periodically produce anaerobic conditions,
- 9 thereby influencing the growth of hydrophitic plants.
- 10 19.150.410 Hydrogeologist.
- 11 "Hydrogeologist" means a person who is qualified to engage in the practice of hydrogeology, has met the
- qualifications in hydrogeology established under chapter 18.220 RCW, and has been issued a license in
- 13 hydrogeology by the Washington State Geologist Licensing Board.
- 14 **19.150.415** Infiltration rate.
- 15 "Infiltration rate" means a general description of how quickly or slowly water travels through a particular
- 16 soil type.
- 17 19.150.420 Landslide hazard areas.
- 18 "Landslide hazard areas" means areas at risk of mass movement due to a combination of geologic,
- 19 topographic, and hydrologic factors.
- 20 19.150.425 Liquefaction.
- 21 "Liquefaction" means a process in which a water-saturated soil, upon shaking, suddenly loses strength
- and behaves as a fluid.
- 23 **19.150.430** Low impact activities.
- 24 "Low impact activities" means activities that do not require a development permit and/or do not result in
- any alteration of hydrology or adversely impact the environment.
- 26 19.150.435 Mitigation.
- 27 "Mitigation" means avoiding, minimizing or compensating for adverse critical area impacts. Mitigation
- 28 includes the following specific categories:
- 29 A. Avoiding the impact altogether by not taking a certain action or parts of an action;

1 B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using

- 2 appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
- 3 C. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- 4 D. Reducing or eliminating the impact over time by preservation and maintenance operations during the
- 5 life of the action;
- 6 E. Compensating for the impact by replacing, enhancing, or providing substitute resources or
- 7 environments: and/or
- 8 F. Monitoring the impact and taking appropriate corrective measures.
- 9 **19.150.440 Native vegetation.**
- 10 "Native vegetation" means vegetation indigenous to the Puget Sound coastal lowlands.
- 11 **19.150.445** Normal maintenance.
- 12 "Normal maintenance" means 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
- 14 of vegetation in crossing and bridge areas. Normal maintenance does not include:
- 15 A. Use of fertilizer or pesticide application in wetlands, fish and wildlife habitat conservation areas, or
- 16 their buffers;
- 17 B. Re-digging ditches in wetlands or their buffers to expand the depth and width beyond the original
- 18 ditch dimensions;
- 19 C. Re-digging existing drainage ditches in order to drain wetlands on lands not classified as existing
- and ongoing agriculture under Section 19.100.130 (General Exemptions).
- 21 **19.150.450 Ordinary high water mark.**
- 22 "Ordinary high water mark" means that mark that will be found by examining the bed and banks and
- ascertaining where the presence and action of waters are so common and usual, and so long continued
- in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in
- 25 respect to vegetation as that condition existing on June 1, 1971, as it may naturally change thereafter, or
- as it may change thereafter in accordance with permits issued by a local government or the department:
- provided, that in any area where the ordinary high water mark cannot be found, the ordinary high water
- mark adjoining salt water shall be the line of mean higher high tide and the ordinary high water mark
- adjoining fresh water shall be the line of mean high water adjoining fresh water shall be the line of mean
- 30 high water.
- 31 19.150.455 Out-of-kind compensation.

1 "Out-of-kind compensation" means to replace a critical area (e.g., wetland) with a substitute critical area

- 2 (e.g., wetland) whose characteristics do not closely approximate those destroyed or degraded by an
- 3 activity. It does not refer to replacement out-of-category such as replacement of wetland loss with new
- 4 stream segments.

5 **19.150.460 Permeability.**

6 "Permeability" means the capacity of an aquifer or confining bed to transmit water.

7 19.150.465 Practicable alternative.

- 8 "Practicable alternative" means an alternative that is available and capable of being carried out after
- 9 taking into consideration cost, existing technology, and logistics in light of overall project purposes, and
- 10 having less impacts to critical areas. A practicable alternative may include an area not owned by the
- applicant for which an easement has been obtained in order to fulfill the basic purpose of the proposed
- 12 activity.

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13 **19.150.470** Priority habitat.

- 14 "Priority habitat" means a habitat type with unique or significant value to many species and may be
- described by a unique vegetation type or dominant plant species, by a successional stage, or specific
- 16 habitat features of key value to fish and wildlife. Priority habitats are established by the Washington State
- 17 Department of Fish and Wildlife within their Priority Habitats and Species Database. An area identified
- 18 and mapped as priority habitat has one or more of the following attributes:
- Comparatively high fish and wildlife density or species diversity;
 - Important fish and wildlife breeding habitat, seasonal ranges, or movement corridors;
- Limited availability;
- High vulnerability to habitat alteration; or
- Unique or dependent species.

24 **19.150.475** Priority species.

- 25 "Priority species" means species requiring protective measures and/or management actions to ensure
- their persistence at genetically viable population levels. Priority species include state-listed or state
- 27 proposed endangered, threatened or sensitive species and candidate and monitored species. Priority
- 28 species may also include vulnerable aggregations (heron rookeries, seabird concentrations, shellfish
- beds, etc.), or species of recreational, commercial and/or tribal importance, and are established by the
- 30 Washington State Department of Fish and Wildlife within their Priority Habitats and Species Database.

19.150.480 Public facilities.

1 "Public facilities" means facilities which are owned, operated or maintained by a public agency.

2 19.150.485 Public project of significant importance.

- 3 "Public project of significant importance" means a project funded by a public agency, department or
- 4 jurisdiction that is found to be in the best interests of the citizens of Kitsap County and is so declared by
- 5 the Kitsap County board of commissioners in a resolution.

6 **19.150.490 Public right-of-way.**

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

10 **19.150.495** Public utility.

- 11 "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
- 14 communications.

15 **19.150.500 Ravine.**

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

19 **19.150.505** Reasonable.

20 "Reasonable" means not excessive or extreme; fair.

21 19.150.510 Reasonable alternative.

- 22 "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.

24 19.150.515 Reasonable use.

- 25 "Reasonable use" is a legal concept articulated by federal and state courts in regulatory taking cases.
- 26 Generally, reasonable use applies when a property that is deprived of all reasonable use when the owner
- 27 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
- 30 implementation of the Critical Areas Ordinance-

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2 19.150.520 Reasonable use exception.

- 3 "Reasonable use exception" means an exception to the standards of this title that allows for the use of a
- 4 property that cannot otherwise conform to the requirements set forth in this title, including the variance
- 5 criteria. (See Section 19.100.140 for Reasonable Use Exception procedures.).

6 **19.150.525 Re-establishment.**

- 7 "Re-establishment" means the manipulation of the physical, chemical or biological characteristics of a site
- 8 with the goal of returning natural or historical functions to a former wetland. Activities could include
- 9 removing fill material, plugging ditches, or breaking drain tiles.

10 **19.150.530** Refuse.

- 11 "Refuse" means material placed in a critical area or its buffer without permission from any legal authority.
- 12 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
- 14 approved enhancement plan.

15 **19.150.535** Rehabilitation.

- 16 "Rehabilitation" means the manipulation of the physical, chemical or biological characteristics of a site
- 17 with the goal of repairing natural or historical functions and processes of a degraded wetland. Activities
- 18 could involve breaching a dike to reconnect wetlands to a floodplain, restoring tidal influence to a wetland,
- or breaking drain tiles and plugging drainage ditches. Rehabilitation results in a gain in wetland function
- but does not result in a gain in wetland acres.

21 **19.150.540** Restoration.

- 22 "Restoration" means 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 re-establishment and rehabilitation.

25 **19.150.545** Retention facilities.

- 26 "Retention facilities" means drainage facilities designed to store runoff for gradual release by evaporation,
- 27 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
- 29 surface water. Retention facilities shall include all appurtenances associated with their designed function,
- 30 maintenance and security.

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19.150.550 Riparian area.

1 "Riparian area" means a vegetated ecosystem along a water body through which energy, materials, and

- water pass. Riparian areas characteristically have a high water table and are subject to periodic flooding
- and influence from the adjacent water body. These systems encompass wetlands, uplands, or some
- 4 combination of these two landforms. They will not in all cases have all the characteristics necessary for
- 5 them to be also classified as wetlands.

6 **19.150.555 Salmonid.**

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

10 **19.150.560 Seismic hazard areas.**

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

13 19.150.565 Sensitive species (state listed).

- 14 "Sensitive species" means a wildlife_species, native to the state of Washington that is vulnerable or
- 15 declining and is likely to become endangered or threatened in a significant portion of its range within the
- 16 state without cooperative management or the removal of threats. Sensitive species are legally designated
- in WAC-220-200-100 as now or hereafter amended.

18 19.150.570 Shorelines.

- 19 "Shorelines", as defined by Chapter 90.58 RCW are regulated under Title 22 KCC, Shoreline Master
- 20 Program. Those portions of streams where the mean annual flow is twenty cubic feet per second or less,
- 21 lakes less than twenty acres in size, and wetlands associated with either, are regulated under this Title.

22 19.150.575 Significant Tree.

- 23 "Significant tree" means any healthy tree that is at least eight inches in diameter at breast height (48
- inches). A tree growing with multiple stems shall be considered significant if at least one of the stems, as
- 25 measured at a point six inches from where the stems digress from the main trunk, is at least four inches in
- diameter. Any tree that is planted to fulfill requirements of this title shall be considered significant,
- 27 regardless of size or species.

28 19.150.580 Single-family dwelling.

- 29 "Single family dwelling" (attached or detached) means a building or structure that is designed for
- occupancy by not more than one family and including accessory structures and improvements.

- 2 19.150.585 Special flood hazard areas.
- 3 "Special flood hazard area" means an areas subject to a base or one hundred-year flood; areas of special
- 4 flood hazard are shown on a flood hazard boundary map or flood insurance rate map as Zone A, AO, A1-
- 5 30, AE, A99, AH, VO, V1-30, VE, or V.
- 6 **19.150.590 Species of concern.**
- 7 "Species of concern" means those species that have been classified as endangered, threatened,
- 8 sensitive, candidate, or monitored by the Washington State Department of Fish and Wildlife.
- 9 19.150.595 State Environmental Policy Act or SEPA.
- 10 "State Environmental Policy Act" or "SEPA" means the state environmental law (Chapter 43.21C RCW)
- and rules (Chapter 197-11 WAC) as implemented by Kitsap County Code, Title 18 (Environment).
- 12 **19.150.600 Streams.**
- 13 "Streams" mean those areas in Kitsap County where the surface water flows are sufficient to produce a
- 14 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
- 17 meant to include irrigation ditches, canals, storm or surface water runoff devices or other artificial
- 18 watercourses unless they are used by fish or used to convey streams naturally occurring prior to
- 19 construction.
- 20 **19.150.605 Swale.**
- 21 "Swale" means a shallow drainage conveyance with relatively gentle side slopes, generally with flow
- 22 depths less than one foot.
- 23 19.150.610 Threatened species (state listed).
- 24 "Threatened species" means a species, native to the state of Washington that is likely to become
- 25 endangered in the foreseeable future throughout a significant portion of its range within the state without
- 26 cooperative management or the removal of threats. Threatened species are legally designated in WAC
- 27 220-200-100, as now or hereafter amended.
- 28 **19.150.615** Toe of slope.
- 29 "Toe of slope" means a distinct topographic break in a slope. Where no distinct break exists, this point
- 30 shall be the lowermost limits of the landslide hazard area as defined and classified in Chapter 19.400.

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2 19.150.620 Top of slope.

- 3 "Top of slope" means a distinct topographic break in a slope. Where no distinct break in a slope exists,
- 4 this point shall be the uppermost limit of the geologically hazardous area as defined and classified in
- 5 Chapter 19.400.

6 **19.150.625 Use or activity.**

- 7 "Use or activity" means any development proposal that includes or directly affects a critical area or its
- 8 buffer, or occurs within the area of review, as described in Section 19.100.110(G), and is not otherwise
- 9 exempt under 19.100.125.

10 **19.150.630 Utilities.**

- 11 "Utilities" means facilities or structures that produce or carry services consumed by the public, such as
- electrical power, gas, sewage, water, communications, oil, publicly maintained stormwater facilities.

13 **19.150.635** Utility corridor.

- "Utility corridor" means areas set aside for or containing above or below ground utilities. A utility corridor
- is usually contained within and is a portion of any right-of-way or easement.

16 19.150.640 Wellhead protection area.

- 17 "Wellhead protection area" means the surface and subsurface area surrounding a well or wellfield that
- supplies a public water system.

19 **19.150.645** Wetland delineation.

- 20 "Wetland delineation" means the identification of wetlands and their boundaries pursuant to this title,
- 21 which shall be done in accordance with the approved federal wetlands delineation manual and applicable
- 22 regional supplements.

23 **19.150.650** Wetland determination.

- 24 "Wetland determination" means an on-site determination as to whether a wetland exists on a specific
- parcel, completed by either a wetland specialist or the department.

26 **19.150.655 Wetland edge.**

27 "Wetland edge" means the line delineating the outer edge of a wetland established in Section 19.200.210.

28 19.150.660 Wetlands.

- 29 "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency
- 30 and duration sufficient to support, and that under normal circumstances do support, a prevalence of

1 vegetation typically adapted for life in saturated soil conditions. Wetlands generally include, but are not

- 2 limited to swamps, marshes, estuaries, bogs, and ponds less than twenty acres, including their
- 3 submerged aquatic beds and similar areas. Wetlands do not include those artificial wetlands intentionally
- 4 created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined
- 5 swales, canals, storm water facilities, wastewater treatment facilities, farm ponds, and landscape
- 6 amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of
- 7 the construction of a road, street, or highway. However, wetlands may include those legally established
- 8 artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

9 **19.150.665 Wetlands, mosaic.**

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

14 19.150.670 Wetlands of regional significance.

- "Wetlands of regional significance" means those wetlands determined by the department, or otherwise
- determined, to have characteristics of exceptional resource value, which should be afforded the highest
- 17 levels of protection.

18 19.150.675 Wetlands of statewide significance.

- 19 "Wetlands of statewide significance" means those wetlands recommended by the Washington State
- 20 Department of Ecology (DOE) and determined by the department to have characteristics of exceptional
- 21 resource value which should be afforded the highest levels of protection.

22 **19.150.680** Wetlands report.

- 23 "Wetlands report" means a wetland delineation report or wetland mitigation plan consistent with
- 24 applicable provisions of Chapter 19.200 (Wetlands) and Chapter 19.700 (Special Reports).

25 **19.150.685 Wetlands specialist.**

- 26 "Wetlands specialist" means a person with experience and training in wetland issues who is able to
- 27 submit substantially correct reports on wetland delineations, classifications, functional assessments and
- 28 mitigation plans. Substantially correct is interpreted to mean that errors, if any, will be minor and do not
- 29 delay or affect the site plan review process. Qualifications of a wetlands specialist include:
- 30 A. Certification as a Professional Wetland Scientist (PWS) or Wetland Professional in Training (WPIT)
- 31 through the Society of Wetland Scientists;

A Bachelor of Science degree in the biological sciences from an accredited institution and two years of professional field experience; or C. Five or more years professional experience as a practicing wetlands biologist with a minimum three years professional experience delineating wetlands. 19.150.690 Wildlife biologist. "Wildlife biologist" means a person with experience and training within the last ten years in the principles of wildlife management and with practical knowledge in the habits, distribution and environmental management of wildlife. Qualifications include: Certification as Professional Wildlife Biologist through The Wildlife Society; or 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 professional field experience; or C. Five or more years of experience as a practicing wildlife biologist with a minimum of three years of practical field experience.

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4 5		Chapter 19.200 WETLANDS
6	Sections:	
7	19.200.205	Purpose and Objectives.
8	19.200.210	Wetland identification and functional rating.
9	19.200.215	Wetland review procedure.
10	19.200.220	Wetland buffer requirements.
11	19.200.225	Additional development standards for certain uses.
12	19.200.230	Wetland mitigation requirements.
13	19.200.235	Incentives for wetlands protection.
14	19.200.205 F	Purpose and Objectives.
15	This chapter	applies to all uses within or adjacent to areas designated as wetlands, as defined in
16	Section19.15	50.660 except those identified as exempt in 19.100.125. The intent of this chapter is to:
17	A. Achieve	no net loss and increase the quality, function and values of wetland acreage within Kitsap
18	County by ar	nd maintaining and enhancing, when required, the biological and physical functions and
19	values of we	tlands with respect to water quality maintenance, stormwater and floodwater storage and
20	conveyance,	fish and wildlife habitat, primary productivity, recreation, and education;
21	B. Protect t	the public's health, safety and welfare, while preventing public expenditures that could arise
22	from imprope	er wetland uses and activities;
23	C. Plan we	tland uses and activities in a manner that allows property owners to benefit from wetland
24	property own	ership wherever allowable under the conditions of this title;
25	D. Prevent	turbidity and pollution of wetlands and fish or shellfish bearing waters; and
26	E. Maintain	the wildlife habitat.

19.200.210 Wetland identification and functional rating.

2 A. General.

- 1. All wetland delineations shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplement. All areas within the county meeting the wetland designation criteria are hereby designated critical areas and are subject to the provisions of this title.
- 2. Kitsap County uses the Washington Department of Ecology Washington State Wetland Rating System for Western Washington, revised 2014 or as hereafter amended, to categorize wetlands for the purposes of establishing wetland buffer widths, wetland uses and replacement ratios for wetlands. Wetlands shall be generally designated as follows (See Chapter 19.800, Appendix A, for more detailed description).

B. Wetlands.

- 1. Category I Wetlands. Category I wetlands include, but are not limited to, wetlands that represent include but are not limited to rare or unique wetland types, those that are more sensitive to disturbance than most wetlands, those_and that are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or those that provide a high level of function. Category I wetlands score 23 points or more out of 27 on the wetlands ratings system.
- 2. Category II Wetlands. Category II wetlands are those wetlands that are more difficult to replace and provide high levels of some functions. Category II wetlands_score between 20-22 points out of 27 on the wetlands ratings system.
- 3. Category III Wetlands. Category III wetlands are those wetlands with a moderate level of function and can often be adequately replaced with mitigation. Category III wetlands score between 16-19 points on the wetlands ratings system.
- 4. Category IV Wetlands. Category IV wetlands have the lowest level of function and are often heavily disturbed. Category IV wetlands score less than 16 points out of 27 on the wetlands ratings system.

1 C. Exemptions for small wetlands

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- 2 Category III wetlands that are less than 2,500 square feet and Category IV wetlands that are less than
- 3 7,500 square feet, that do not contain federally listed species or their critical habitat are exempt from the
- 4 buffer provisions in this Chapter when the following are met:
 - 1. They are not associated with riparian areas or their buffers;
 - 2. They are not associated with shorelines of the state or their associated buffers;
 - They do not contain a Class 1 Fish and Wildlife Habitat Conservation Area, identified by the Washington Department of Fish and Wildlife; and
 - 4. The wetland report identifies the specific wetland function affected or at risk, and the proposed mitigation to replace the wetland function, on a per function basis.

19.200.215 Wetland review procedures.

- 12 A. Application Requirements. Except as otherwise provided herein, all applications for development
- within a wetland or its largest potential buffer width shall include the following special reports at the time
- of application. This shall not prohibit the department from requesting reports or other information.
- 15 1. Wetland delineation report (Section 19.700.710)
 - 2. Wetland mitigation report (Section 19.700.715).
- 17 B. Delineation of Wetland Boundaries.
 - 1. The applicant shall be responsible for hiring a qualified wetlands specialist to determine the wetland boundaries by means of a wetland delineation. This specialist shall stake or flag the wetland boundary. When required by the department, the applicant shall hire a professional land surveyor licensed by the state of Washington to survey the wetland boundary line. The wetland boundary and wetland buffer established by this chapter shall be identified on all grading, landscaping, site, on-site septic system designs, utility or other development plans submitted in support of the project.
 - 2. The department may perform a delineation of a wetland boundary on parcels where no more than one single-family dwelling unit is allowed.
 - 3. Where the applicant has provided a delineation of a wetland boundary, the department may verify the wetland boundary at the cost of the applicant and may require that a wetland specialist make adjustments to the boundary.

1 C. Wetland Review Process for Single-family Dwellings.

1. Expedited Approval. Applicants proposing a single-family dwelling may receive expedited approval by the department if they choose to adopt the largest buffer width from the appropriate wetland category. Expedited approval removes the requirements of the wetland certification process for single-family dwellings (subsection (2), below) provided that the wetland delineation and/or wetland rating is not disputed. Administrative buffer reductions or variances will not apply. Expedited approval is not the same as expedited review, which is sometimes available for additional fees.

- 2. Wetland Certification Process for Single-family Dwellings (No Encroachment into a Wetland or its Standard Buffer).
 - a. Prior to issuance of a building permit, site development permit, or on-site sewage system permit, the applicant may submit a single-family wetland certification form completed by a wetland specialist that certifies either:
 - i. No wetlands are present within 250 feet of the project area; or
 - ii. Wetlands are present within 250 feet of the project area, but all regulated activities associated with the dwelling (e.g., landscaped areas, septic facilities, outbuildings, etc.) will occur outside of the standard buffer of the identified wetland.
 - b. If wetland buffers extend onto the site, the wetland specialist shall place permanent, clearly visible, wetland buffer signs at the edge of the buffer. A wetland buffer sign affidavit, signed by the wetland specialist, shall be submitted to the department as verification that the wetland buffer signs have been placed on the subject site.
 - c. A survey will not be required with a single-family wetland certification form.
 - d. The single-family certification form may be used only to authorize single-family dwellings and associated home site features such as driveways, gardens, fences, wells, lawns, and on-site septic systems. It may not be used for new agricultural activities, expansion of existing agricultural activities, forest practice activities, commercial projects, land divisions, buffer width modifications, or violations.

 The single-family certification process will be monitored by the department for accuracy, and enforcement actions will be initiated should encroachment into a wetland or buffer occur.

- f. The applicant/property owner assumes responsibility for any and all errors of the single-family certification form, as well as responsibility for all associated mitigation required by the department.
- g. Single-family certification forms shall be filed with the Kitsap County auditor's office.

19.200.220 Wetland buffer requirements.

A. Determining Buffer Widths. The following buffer widths are based on three factors: the wetland category, the intensity of the impacts, and the functions or special characteristics of the wetland that need to be protected as established through the rating system. These factors must be determined by a qualified wetland professional using the *Washington State Wetland Rating System for Western Washington: 2014 Update* (Ecology Publication #14-06-029, or as revised and approved by the Washington State Department of Ecology). If a wetland meets more than one of the characteristics listed in tables 19.200.220(B) through (E), the greater of the buffers recommended to protect the wetland is applied. Buffers shall be measured horizontally from a perpendicular line established at the wetland edge based on the buffer width identified using the tables below.

TABLE 19.200.220(A)

LAND USE IMPACT "INTENSITY" BASED ON DEVELOPMENT TYPES

Rating of Impact From Proposed Changes in Land Use	Examples of Land Uses that Cause the Impact Based on Common Zoning Categories
High	Commercial, Urban, Industrial, Institutional, Retail
	Sales, Residential subdivisions with more than 1
	unit/acre, New agriculture (high-intensity processing
	such as dairies, nurseries and greenhouses, raising
	and harvesting crops requiring annual tilling, raising
	and maintaining animals), New transportation
	corridors, High intensity recreation (golf courses, ball
	fields), hobby farms

Moderate	Single-family residential lots, Residential subdivisions with 1 unit/acre or less, Moderate-intensity open space (parks), New agriculture (moderate-intensity such as orchards and hay fields), Transportation enhancement projects
Low	Forestry, Open space (low-intensity such as passive recreation and natural resources preservation, minor transportation improvements)

TABLE 19.200.220(B)

Width of Buffers for Category IV Wetlands

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use	Other Measures Recommended for Protection
Score for all 3 basic functions is less than 16 points	Low- 25 feet Moderate- 40 feet	None
loss than to points	High- 50 feet	

TABLE 19.200.220(C) Width of Buffers for Category III Wetlands

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use	Other Measures Recommended for Protection
Moderate level of function for	Low- 75 feet	None
habitat (5-7 points)*	Moderate- 110 feet	
	High- 150 feet	
Score for habitat 3-4 points	Low- 40 feet	None
	Moderate- 60 feet	
	High- 80 feet	

*If wetland scores 8-9 habitat points, use Table 19.200.220(D) for Category II buffers

TABLE 19.200.220(D)

Width of Buffers for Category II Wetlands

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use (most protective applies if more than one criterion met)	Other Measures Recommended for Protection
High level of function for habitat score (8-9 points)	Low- 150 feet Moderate- 225 feet High- 300 feet	Maintain connections to other habitat areas
Moderate level of function for habitat (5-7 points)	Low- 75 feet Moderate- 110 feet High- 150 feet	None
High level of function for water quality improvement (8-9 points) and low for habitat (less than 5 points)	Low- 50 feet Moderate- 75 feet High- 100 feet	No additional surface discharges of untreated runoff
Estuarine	Low- 75 feet Moderate- 110 feet High- 150 feet	None
Interdunal	Low- 75 feet Moderate- 110 feet High- 150 feet	None
Not meeting above characteristics	Low- 50 feet Moderate- 75 feet High- 100 feet	None

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TABLE 19.200.220(E)
Width of Buffers for Category I Wetlands

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use (most	Other Measures Recommended for Protection
	protective applies if more than one criterion met)	

Wetlands of High Conservation Value	Low- 125 feet Moderate- 190 feet High- 250 feet	No additional surface discharges to wetland or its tributaries No septic systems within 300 feet of wetland Restore degraded parts of buffer
Bogs	Low- 125 feet Moderate- 190 feet High- 250 feet	No additional surface discharges to wetland or its tributaries Restore degraded parts of buffer
Forested	Buffer width to be based on score for habitat functions or water quality functions	If forested wetland scores high for habitat (8-9 points), need to maintain connections to other habitat areas Restore degraded parts of buffer
Estuarine	Low- 100 feet Moderate- 150 feet High- 200 feet	None
Wetlands in Coastal Lagoons	Low- 100 feet Moderate- 150 feet High- 200 feet	None
High level of function for habitat (8-9 points)	Low- 150 feet Moderate- 225 feet High- 300 feet	Maintain connections to other habitat areas Restore degraded parts of buffer
Interdunal wetland with high level of function for habitat (8-9 points)	Low- 150 feet Moderate- 225 feet High- 300 feet	Maintain connections to other habitat areas Restore degraded parts of buffer
Moderate level of function for habitat (5-7 points)	Low- 75 feet Moderate- 110 feet	None

	High- 150 feet	
High level of function for water	Low- 50 feet	None
quality improvement (8-9 points)	Moderate- 75 feet	
and low for habitat (less than 5	High- 100 feet	
points)		
Not meeting any of the above	Low- 50 feet	None
characteristics	Moderate- 75 feet	
	High 100 feet	

 B. Modification of Buffer Widths. The following modifications to buffer widths may be considered provided the applicant first demonstrates that reductions or alterations to the required wetland buffer cannot be avoided, minimized or mitigated (in that order).

1. Buffer Averaging. Standard buffer widths may be modified by the department for a development proposal first by averaging buffer widths, but only where the applicant can demonstrate that such averaging can clearly provide as great or greater functions and values as would be provided under the standard buffer. The following standards shall apply to buffer averaging:

 The decrease in buffer width is minimized by limiting the degree or magnitude of the regulated activity.

b. For wetlands and/or required buffers associated with documented habitat for endangered, threatened, or sensitive fish, or wildlife species, a habitat assessment report has been submitted that demonstrates that the buffer modification will not result in an adverse impact to the species of study.

c. Width averaging will not adversely impact the wetland.

d. The total buffer area after averaging is no less than the total buffer area prior to averaging.

e. For Category III and IV wetlands with habitat scores less than 5 points for habitat function based on the Washington State Wetland Rating System for Western Washington: 2014 Update, as amended, and the minimum buffer width at any point will not be less than 50 percent of the widths established after the categorization is done and any buffer adjustments applied in accordance with this chapter.

1	f.	For all other wetlands, the minimum buffer width at any point will not be less than 75
2		percent of the widths established after the categorization is done and any buffer
3		adjustments applied in accordance with this chapter.
4	g.	If significant trees are identified, such that their drip line extends beyond the reduced
5		buffer edge, the following tree protection requirements must be followed:
6		i. A tree protection area shall be designed to protect each tree or tree stand
7		during site development and construction. Tree protection areas may vary widely
8		in shape, but must extend a minimum of five feet beyond the existing tree canopy
9		area along the outer edge of the dripline of the tree(s), unless otherwise
10		approved by the department.
L1		ii. Tree protection areas shall be added and clearly labeled on all applicable
12		site development and construction drawings, submitted to the department.
13		iii. Temporary construction fencing at least 30 inches tall shall be erected
L4		around the perimeter of the tree protection areas prior to the initiation of any
L5		clearing or grading. The fencing shall be posted with signage clearly identifying
16		the tree protection area. The fencing shall remain in place through site
L7		development and construction.
18		iv. No clearing, grading, filling or other development activities shall occur within
19		the tree protection area, except where approved in advance by the department
20		and shown on the approved plans for the proposal.
21		v. No vehicles, construction materials, fuel, or other materials shall be placed in
22		tree protection areas. Movement of any vehicles within tree protection areas shall
23		be prohibited.
24		vi. No nails, rope, cable, signs, or fencing shall be attached to any tree
25		proposed for retention in the tree protection area.
26		vii. The department may approve the use of alternate tree protection
27		techniques if an equal or greater level of protection will be provided.
28	2. Admin	istrative Buffer Reductions. Standard buffer widths may be modified by the department
<u> 2</u> 9	for a devel	opment proposal by reducing buffers, but only where buffer averaging is not feasible

and the applicant can demonstrate that such is the minimum necessary to accommodate the

1	permitted use and that the reduction can clearly provide as great or greater functions and values
2	as would be provided under the standard buffer requirement. This may be accomplished through
3	enhancement of a degraded buffer. The following standards shall apply to buffer reductions:
4	a. The department may administratively reduce the buffer pursuant to the variance
5	criteria listed in Section 19.100.135.
6	b. For proposed single-family dwellings, the department may administratively reduce a
7	buffer by up to 25 percent of the area required under the standard buffer
8	requirement, but not less than thirty feet.
9	c. For all other proposed uses, the department may administratively reduce the buffer
10	by up to 25 percent of the area required under the standard buffer requirement, but
11	not less than forty feet.
12	d. To minimize impacts and provide equivalent functions and values as required by this
13	section, applicants may propose:
14	i. Enhancement of existing degraded buffer area and replanting of the disturbed
15	buffer area;
16	ii. The use of alternative on-site wastewater systems in order to minimize site
17	clearing;
18	iii. Infiltration of stormwater where soils permit; and
19	iv. Retention of existing native vegetation on other portions of the site in order
20	to offset habitat loss from buffer reduction.
21	e. The buffer widths recommended for proposed land uses with high-intensity impacts
22	to wetlands can be reduced to those recommended for moderate-intensity impacts
23	under the following conditions:
24	i. For wetlands that score moderate or high for habitat (5 points or more the
25	habitat functions), the width of the buffer can be reduced if both of the following
26	criteria are met:
27	(A) A relatively undisturbed, vegetated corridor at least 100-feet wide is
28	protected between the wetland and any other Priority Habitats as

defined by the Washington Department of Fish and Wildlife. The 1 2 corridor must be protected for the entire distance between the 3 wetland and the Priority Habitat by some type of legal protection 4 such as a conservation easement. 5 (B) Measures to minimize the impacts of different land uses on wetlands, 6 such as the examples summarized in Table 19.200.220(F). 7 ii. For wetlands that score less than 5 points for habitat, the buffer width can be 8 reduced to that required for moderate land-use impacts by applying measures to 9 minimize the impacts of the proposed land uses, such as the examples 10 summarized in Table 19.200.220(F). 11 12 **TABLE 19.200.220(F)**

Examples of Measures to Minimize Impacts to Wetlands

Examples of Disturbance	Activities and Uses that Cause Disturbances	Examples of Measures to Minimize Impacts
Lights	Parking lotsWarehousesManufacturingResidential	Direct lights away from wetland
Noise	Manufacturing Residential	 Locate activity that generates noise away from wetland

Stormwater runoff	 Parking lots 	Route all new, untreated
	 Roads 	runoff away from wetland
	 Manufacturing 	while ensuring wetland is
	Residential areas	not dewatered
	Application of agricultural	Establish covenants
	pesticides	limiting use of pesticides
	 Landscaping 	within 150 ft of wetland
	 Commercial 	Apply integrated pest
	 Landscaping 	management
		Retrofit stormwater
		detention and treatment
		for roads and existing
		adjacent development
		Prevent channelized flow
		from lawns that directly
		enters the buffer
Change in water regime	Impermeable surfaces	 Infiltrate or treat, detain,
	 Lawns 	and disperse into buffer
	• Tilling	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	Tilled fields	Use best management
		practices to control dust

 Variance. In cases where proposed development cannot meet the administrative buffer reduction criteria described in this section, a variance shall be required as described in Section 19.100.135.

C. Fencing and Signs.

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- 1. Wetland buffers shall be temporarily fenced or otherwise suitably marked, as required by the department, 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 county approval.
- 2. The department may require that permanent signs and/or fencing be placed on the common boundary between a wetland buffer and the adjacent land of the project site. Such signs will identify the wetland buffer. The department may approve an alternate method of wetland and buffer identification, if it provides adequate protection to the wetland and buffer.
- D. Protection of Buffers. The buffer shall be identified on a site plan and on site as required by the department and this Chapter. Refuse shall not be placed in buffers.
- E. Building or Impervious Surface Setback Lines. A building or impervious surface setback line of 15 feet is required from the edge of any wetland buffer. Minor structural or impervious surface intrusions into the areas of the setback may be permitted if the department determines that such intrusions will not adversely impact the wetland. The setback shall be identified on a site plan.
- 21 19.200.225 Additional development standards for certain uses.
- 22 In addition to meeting the development standards of this chapter, those uses identified below shall also
- comply with the standards of this section and other applicable state, federal and local laws.
- A. Forest Practice, Class IV General, and Conversion Option Harvest Plans (COHPs). All timber
- 25 harvesting and associated development activity, such as construction of roads, shall comply with the
- provisions of this title, including the maintenance of buffers around wetlands.
- 27 B. Agricultural Restrictions. In all development proposals that would introduce or expand agricultural
- activities, a net loss of functions and values to wetlands shall be avoided. Wetlands shall be avoided by at
- 29 least one of the following methods:
 - 1. Locate fencing no closer than the outer buffer edge; or

Implement a farm resource conservation and management plan agreed upon by the
 conservation district and the applicant to protect and enhance the functions and values of the
 wetland.

- C. Road/Street Repair and Construction. Any private or public road or street repair, maintenance,
 expansion or construction may be allowed within a critical area or its buffer only when all of the following
- 6 are met:

- No other reasonable or practicable alternative exists and the road or street serves multiple
 properties whenever possible;
- 9 2. For publicly owned or maintained roads or streets, other purposes, such as utility crossings, pedestrian or bicycle easements, viewing points, etc. shall be allowed whenever possible;
 - 3. The road or street repair and construction are the minimum necessary to provide safe roads and streets; and
 - 4. Mitigation shall be performed in accordance with specific project mitigation plan requirements.
 - D. Land Divisions and Land Use Permits. All proposed divisions of land and land uses (including but not limited to the following: short plats, large lot subdivisions, performance based developments, conditional use permits, site plan reviews, binding site plans) which include regulated wetlands, shall comply with the following procedures and development standards:
 - 1. The area of a wetland and its buffers may be included in the calculation of minimum lot area for proposed lots, except for the area with permanent open water.
 - 2. Land division approvals shall be conditioned to require that wetlands and wetland buffers be dedicated as open space tracts, or an easement or covenant encumbering the wetland and wetland buffer. Such dedication, easement or covenant shall be recorded together with the land division and represented on the final plat, short plat or binding site plan, and title.
 - 3. In order to implement the goals and policies of this title, to accommodate innovation, creativity, and design flexibility, and to achieve a level of environmental protection that would not be possible by typical lot-by-lot development, the use of the clustered development or similar innovative site planning is strongly encouraged for projects with regulated wetlands on the site.

4. After preliminary approval and prior to final land division approval, the department may require the common boundary between a regulated wetland or associated buffer and the adjacent land be identified using permanent signs and/or fencing. In lieu of signs and/or fencing, alternative methods of wetland and buffer identification may be approved when such methods are determined by the department to provide adequate protection to the wetland and buffer.

- E. Surface Water Management. Surface water discharges from stormwater facilities or structures may be allowed in wetlands and their buffers when they are in accordance with Title 12 of the Kitsap County Code (Stormwater Management) subject to the provisions of Section 19.100.145, Special Use Review, and this subsection. The discharge shall neither significantly increase or decrease the rate of flow or hydro-period, nor decrease the water quality of the wetland. Pre-treatment of surface water discharge through biofiltration or other best management practices (BMPs) shall be required.
- F. Trails and Trail-Related Facilities. Construction of public and private trails and trail-related facilities, such as benches and viewing platforms, may be allowed in wetlands or wetland 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 any other previously disturbed areas.
 - 2. Trails and related facilities shall be planned to minimize removal of trees, soil disturbance and existing hydrological characteristics, shrubs, snags and important wildlife habitat.
 - 3. Viewing platforms, interpretive centers, benches, picnic areas, and access to them, shall be designed and located to minimize disturbance of wildlife habitat and/or critical characteristics of the affected wetland. Platforms shall be limited to one hundred square feet in size, unless demonstrated through a wetland mitigation plan that a larger structure will not result in a net loss of wetland functions.
 - 4. Trails and related facilities shall generally be located outside required buffers. Where trails are permitted within buffers they shall be located in the outer 25% of the buffer, except where wetland crossings or for direct access to viewing areas have been approved by the Department.
 - 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 department. Trails shall be constructed with pervious materials except where determined infeasible.

6. Regional or public trails and trail-related facilities as identified in the 2013 Kitsap County Non-Motorized Facility Plan (and associated recognized community trails), and as amended, and provided design considerations are made to minimize impacts to critical areas and buffers, shall not be subject to the platform, trail width, or trail material limitations above. Such trails and facilities shall be approved through Special Use Review (19.100.145), unless any underlying permit requires a public hearing.

F. Utilities. Placement of utilities within wetlands or their buffers may be allowed pursuant to the following standards and any other required state and federal approvals:

- 1. The utility maintenance or repair, as identified in Section 19.100.125(E), shall be allowed in wetlands and wetland buffers so long as best management practices are used.
- 2. Construction of new utilities outside the road right-of-way or existing utility corridors may be permitted in wetlands or wetland buffers only when: (a) no reasonable alternative location is available, (b)_the new utility corridor meets the requirements for installation, replacement of vegetation and maintenance outlined below, and (c) all requirements in any as required in the filing and approval of applicable permit or special report (Chapter 19.700) required by this title are satisfied.
- 3. Construction of sewer lines or on-site sewage systems may be permitted in wetland buffers only when: (a) the applicant demonstrates that the location is necessary to meet state or local health code minimum design standards (not requiring a variance for either horizontal setback or vertical separation), and (b) there are no other practicable or reasonable alternatives available and (c) construction meets the requirements of this section. Joint use of the sewer utility corridor by other utilities may be allowed.
- 4. New utility corridors shall not be allowed when the 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 will not significantly impact the wetland or wetland buffer.
- 5. New utility corridor construction and maintenance shall protect the wetland and buffer environment by utilizing the following methods:

a. New utility corridors shall be aligned to avoid cutting trees greater than 12 inches in 1 2 diameter at breast height (four and one-half feet), measured on the uphill side, unless no 3 reasonable alternative location is available. 4 b. New utility corridors shall be revegetated with appropriate native vegetation at not 5 less than preconstruction densities or greater immediately upon completion of 6 construction, or as soon thereafter as possible if due to seasonal growing constraints. 7 The utility shall ensure that such vegetation survives; 8 c. Any additional utility corridor access for maintenance shall be provided at specific 9 points rather than by parallel roads, unless no reasonable alternative is available. If 10 parallel roads are necessary, they shall be the minimum width necessary for access, but 11 no greater than 15 feet, and shall be contiguous to the location of the utility corridor on 12 the side away from the wetland. Mitigation will be required for any additional access 13 through restoration of vegetation in disturbed areas. 14 d. The department may require other additional mitigation measures. 15 6. Utility corridor maintenance shall include the following measures to protect the wetland and 16 buffer environment: 17 Painting of utility equipment, such as power towers, shall not be sprayed or 18 sandblasted, unless appropriate containment measures are used. Lead-based paints 19 shall not be used. 20 b. No pesticides, herbicides or fertilizers may be used in wetland areas or their buffers 21 except those approved by the U.S. Environmental Protection Agency (EPA) and 22 Washington Department of Ecology. Where approved, they must be applied by a licensed 23 applicator in accordance with the safe application practices on the label. 24 G. Parks. Development of public park and recreation facilities may be permitted in wetlands or their 25 buffer subject to the provisions of Section 19.100.145, Special Use Review, and other applicable chapters 26 of the Kitsap County Code, and any state or federal approvals. For example, enhancement of wetlands 27 and development of trails may be allowed in wetlands and wetland buffers subject to special use 28 requirements and approval of a wetland mitigation plan.

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1 19.200.230 Wetland mitigation requirements.

2 A. Mitigation Sequencing. All impacts to wetlands or buffers shall be mitigated according to this title in

3 the following order:

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- 1. Avoiding the impact altogether by not taking a certain action or parts of actions.
- 5 2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation 6 by using appropriate technology or by taking affirmative steps to reduce impacts.
 - 3. Using one of the following mitigation types, listed in order of preference:
 - a. Rectifying the impact by reestablishing, rehabilitating, or restoring the affected environment;
 - b. Compensating for the impact by replacing or providing substitute resources or environments; or
 - c. Compensating for the impact by improving the environmental processes that support wetland systems and functions.
 - 4. Monitoring the impact and compensation and taking appropriate corrective measures.
- B. Mitigation Report. Where mitigation is required under the sequencing in subsection (A), a mitigation report shall be provided in accordance with Section 19.700.715. Acceptance of the mitigation report shall be signified by a notarized memorandum of agreement signed by the applicant and department director or designee. The agreement shall refer to all requirements for the mitigation project.
- 19 C. Wetland Replacement Ratios.
 - 1. The following ratios appearing below in the Table 19.200.230 (Wetland Mitigation Replacement Ratios), as well as consideration of the factors listed in this section, shall be used to determine the appropriate amounts of restored, rehabilitated, created or enhanced wetland that will be required to replace impacted wetlands. The first number specifies the amount of wetland area to be restored, rehabilitated, created or enhanced, and the second number specifies the amount of wetland area lost.

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TABLE 19.200.230
WETLAND MITIGATION REPLACEMENT RATIOS TABLE

Wetland Category	Re- establishment or Creation Only	Rehabilitation Only	1:1 Reestablishment or Creation (R/C) and Enhancement (E)	Enhancement Only
All Category IV	1.5:1	3:1	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	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
All other Category II	3:1	8:1	1:1 R/C and 8:1 E	12:1
Category I Forested	6:1	12:1	1:1 R/C and 20:1	24:1
Category I other (based on functions)	4:1	8:1	1:1 R/C and 12:1 E	16:1
Category I Wetlands of High Conservation Value	Not considered possible	Case-by-case	Case-by-case	Case-by-case
Category I Coastal Lagoon	Case-by-case	6:1 rehabilitation of a coastal lagoon	Case-by-case	Case-by-case
Category I Bog	Case-by-case	6:1 rehabilitation of a bog	Case-by-case	Case-by-case
Category I Estuarine	Case-by-case	6:1 rehabilitation of an estuarine wetland	Case-by-case	Case-by-case

2. The above ratios are based on the assumption that the rehabilitation or enhancement actions implemented represent the average degree of improvement possible for the site. Accordingly, in the appropriate circumstances identified below, the department may increase or decrease the ratios based on one or more of the following:

1		a. Replacement ratios may be increased under the following circumstances.
2		i. Uncertainty exists as to the probable success of the proposed restoration or
3		creation;
4		ii. A significant period of time will elapse between impact and establishment of
5		wetland functions at the mitigation site;
6		iii. Proposed compensation will result in a lower category wetland or reduced
7		functions relative to the wetland being impacted; or
8		iv. The impact was an unauthorized impact.
9		b. Replacement ratios may be decreased under the following circumstances:
J		b. Replacement ratios may be decreased under the following circumstances.
10		i. Documentation by a qualified wetland specialist demonstrates certainty that
11		the proposed compensation actions will be successful. For example,
12		demonstrated prior success with similar compensation actions as those
13		proposed, and/or extensive hydrologic data to support the proposed water
14		regime;
15		ii. Documentation by a qualified wetland specialist demonstrates that the
16		proposed compensation actions will provide functions and values that are
17		significantly greater than the wetland being impacted; or
18		iii. The proposed mitigation actions are conducted in advance of the impact and
19		are shown to be successful.
20	D. A	Iternative Mitigation Plans
21	1.	The department may approve alternative wetland mitigation plans identified in this section that
22		are based on best available science, such as priority restoration plans that achieve restoration
23		goals identified in Title 22 KCC, Restoration Plan. Alternative mitigation proposals must provide
24		an equivalent or better level of protection of wetland functions and values than would be provided
25		by the strict application of this chapter.
26		The department shall consider the following for approval of an alternative mitigation proposal:

1		a. The proposal uses a watershed approach consistent with Selecting Wetland Mitigation Sites
2		Using a Watershed Approach (Western Washington) (Ecology Publication #09-06-32,
3		Olympia, WA, December 2009).
4		b. Creation or enhancement of a larger system of natural areas and open space is preferable to
5		the preservation of many individual habitat areas.
6		c. Other on-site mitigation, as described above, are not feasible due to site constraints, such as
7		parcel size, stream type, wetland category, or geologic hazards.
8		d. There is clear potential for success of the proposed mitigation at the proposed mitigation site.
9		e. The plan contains clear and measurable standards for achieving compliance with the specific
10		provisions of the plan. A monitoring plan shall, at a minimum, meet the provisions of the
11		Wetland Mitigation Plan (19.700, Special Reports).
12		
13	2.	Off-Site Compensatory Mitigation.
13	۷.	On Old Compensatory Willigation.
14		a. Considerations for determining whether off-site mitigation is preferable include, but are not
15		limited to:
16		i. On-site conditions do not favor successful establishment of the required vegetation
17		type, or lack the proper soil conditions, or hydrology, or may be severely impaired by the
18		effects of the adjacent;
19		ii. On-site compensation would result in isolation from other natural habitats;
20		iii. Off-site location is crucial to one or more species that is threatened, endangered, or
21		otherwise of concern, and the on-site location is not;
22		iv. Off-site location is crucial to larger ecosystem functions, such as providing corridors
23		between habitats, and the on-site location is not; and
24		v. Off-site compensation has a greater likelihood of success or will provide greater
25		functional benefits.
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26		b. When determining whether off-site mitigation is preferable, the value of the site-specific
27		wetland functions at the project site, such as flood control, nutrient retention, sediment filtering,
28		and rare or unique habitats or species, shall be fully considered.

1	c. When conditions do not favor on-site compensation, off-site compensatory mitigation should
2	be located as close to the impact site as possible, but at least within the same watershed, while
3	still replacing lost functions.
4	d. Off-site compensatory mitigation may include the use of a wetland mitigation bank or an in-
5	lieu fee program.
6	i. Mitigation Banking. Kitsap County encourages the creation of a public or private
7	mitigation banking system when feasible.
8	(A). The approval authority determines that it would provide appropriate
9	compensation for the proposed impacts;
10	(B). The impact site is located in the service area of the bank;
11	(C). The proposed use of credits is consistent with the terms and conditions of
12	the certified mitigation bank instrument; and
13	(D). Replacement ratios for projects using bank credits is consistent with
14	replacement ratios specified in the certified mitigation bank instrument.
15	ii. In-Lieu Fee Mitigation. Credits from an approved in-lieu-fee program may be used
16	when all of the following apply:
17	(A). The approval authority determines that it would provide environmentally
18	appropriated compensation for the proposed impacts.
19	(B). The proposed use of credits is consistent with the terms and conditions of
20	the approved in-lieu-fee program instrument.
21	(C). Projects using in-lieu-fee credits shall have debits associated with the
22	proposed impacts calculated by the applicant's qualified wetland professional
23	using the credit assessment method specified in the approved instrument of the
24	in-lieu-fee program.
25	(D). The impacts are located within the service area specified in the approved in
26	lieu-fee instrument.
27	3. Advance Mitigation. Mitigation for projects with pre-identified impacts to wetlands may be

constructed in advance of the impacts if the mitigation is implemented according to federal, state and

1	local laws and guidance on advance mitigation, and state water quality regulations consistent with
2	Interagency Regulatory Guide: Advance Permittee-Responsible Mitigation (Ecology Publication #12-
3	06-15).
4	E. Monitoring Requirements. Kitsap County shall require monitoring reports on an annual basis for a
5	minimum of five years and up to ten years, or until the department determines that the mitigation project
6	has achieved success. The wetland mitigation plan shall provide specific criteria for monitoring the
7	mitigation project. Criteria shall be project-specific and use best available science to aid the department in
8	evaluating whether or not the project has achieved success (See Chapters 19.700, 19.710 and Section
9	19.700.715, Special Reports).
10	19.200.235 Incentives for wetland mitigation.
11	Kitsap County recognizes that property owners wish to gain economic benefits from their land. The
12	county encourages such mechanisms as the Open Space Tax Program (KCC 18.12), conservation
13	easements and donations to land trusts, in order to provide taxation relief upon compliance with the
14	regulations in this title. Buffers dedicated as permanent open space tracts may qualify for the open space
15	taxation program and will be offered the opportunity to be entered into this program. Kitsap County may
16	offer to purchase these lands through the Conservation Futures Fund, as funding is available.
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Chapter 19.300
FISH AND WILDLIFE HABITAT CONSERVATION AREAS

- 3 Sections:
- 4 19.300.305 Purpose.
- 5 19.300.310 Fish and wildlife habitat conservation area categories.
- 6 19.300.315 Development standards.
- 7 19.300.305 Purpose.
- 8 This chapter applies to all uses within or adjacent to fish and wildlife habitat conservation areas, defined
- 9 in 19.150.315 except those identified as exempt in 19.100.125. The intent of this chapter is to identify fish
- 10 and wildlife habitat conservation areas and establish habitat protection procedures and mitigation
- 11 measures designed to achieve no net loss of critical area functions and values and to maintain viable fish
- and wildlife populations and habitat over the long term. Further, it is also the intent of this chapter to:
- 13 A. Preserve natural flood control, storm water storage, and drainage or stream flow patterns;
- 14 B. Prevent turbidity and pollution, control siltation, protect nutrient reserves, and maintain water flows
- and quality for anadromous and resident fish, marine shellfish and forage fish;
- C. Encourage non-regulatory methods of habitat retention whenever practical, through mechanisms
- 17 such as education and the open space tax program; and
- 18 D. Avoid or minimize human and wildlife conflicts through planning and implementation of wildlife
- 19 corridors where feasible.
- 20 19.300.310 Fish and wildlife habitat conservation area categories.
- 21 A. General. Fish and wildlife habitat conservation areas are typically identified by known locations of
- 22 specific species (such as a nest or den) or by habitat areas or both and may occur on both public and
- 23 private lands.
- 24 B. Classification and Designation. The following categories shall be used in classifying and designating
- 25 fish and wildlife habitat conservation areas:
- Streams. All streams which meet the criteria for Type, F, Np or Ns waters as set forth in WAC
- 27 222-16-030 of the Washington Department of Natural Resources (DNR) Water Typing System, as
- 28 now or hereafter amended, and Table 19.300.310 (See also Chapter 19.800, Appendix "B"). Type
- 29 S waters are regulated through the Shoreline Master Program (Kitsap County Code, Title 22).
- 30 The DNR stream maps should not be the only source for identifying regulated areas or

establishing buffers. Other modeled or field-verified stream type maps should also be used, and stream conditions, identification of flow alterations, and location of fish passage barriers shall be identified through a site-specific field visit. Field verification of all intermittent or non-fish bearing streams should occur during the wet season months of October to March if feasible, or as determined by the Department.

Table 19.300.310

DNR Water Typing System

Wate	r Туре
Current DNR Water Typing	Previous DNR Water Typing
Type S	Type 1
Type F	Type 2 and 3
Type Np	Type 4
Type Ns	Type 5

2. Lakes Less Than 20 Acres in Surface Area. Those lakes which meet the criteria for Type F, Np, and Ns waters as set forth in WAC 222-16-030, as now or hereafter amended. This includes lakes and 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.

- 3. Wildlife Habitat Conservation Areas.
 - a. Class I Wildlife Habitat Conservation Areas.
 - i. Habitats recognized by federal or state agencies for federal and/or state listed endangered, threatened and sensitive species documented in maps or databases available to Kitsap County, including but not limited to the database on Priority Habitats and Species provided by the Washington Department of Fish and Wildlife.

ii. Areas targeted for preservation by the federal, state and/or local government 1 2 which provide fish and wildlife habitat benefits, including but not limited to, 3 important waterfowl areas identified by the U.S. Fish and Wildlife Service and 4 WDFW Wildlife Areas; or 5 Areas that contain habitats and species of local importance have not been 6 identified at this time, and may be identified at a later date through a public 7 process when information necessitating such identification is made known. 8 b. Class II Wildlife Habitat Conservation Areas. Habitats for state listed candidate and 9 monitored species documented in maps or databases available to Kitsap County and 10 which, if altered, may reduce the likelihood that the species will maintain a viable 11 population and reproduce over the long term. 12 19.300.315 Development standards. 13 Activities within a designated fish and wildlife habitat conservation area with its buffer are subject to the 14 regulatory provisions of this chapter and shall comply with the performance standards outlined in this

16 A. Buffers and Building Setbacks.

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chapter.

1. Buffers. Buffers shall remain undisturbed natural vegetation areas except where the buffer can be enhanced to improve its functional attributes. Buffers shall be maintained along the perimeter of fish and wildlife habitat conservation areas, as listed in Table 19.300.315. Refuse shall not be placed in buffers.

TABLE 19.300.315 FISH AND WILDLIFE HABITAT CONSERVATION AREA DEVELOPMENT STANDARDS

			Streams
Water Type	Buffer Width	Minimum Building Setback	Other Development Standards
S	See Title	See Title 22	Where applicable, refer to the development standards in
(As defined and regulated in Title 22	22 (SMP)	(SMP)	Chapters 19.200 (Wetlands) and 19.400 (Geologically

of this code, the Shoreline Master Program (SMP))			Hazardous Areas). Where such features occur on site, the more restrictive buffer or building setback shall apply.
F	150 feet	15 feet beyond buffer	
Np	50 feet	15 feet beyond buffer	
Ns	50 feet	15 feet beyond buffer	
Lakes less than 20 acres	100 feet	15 feet beyond buffer	
Wildlife Habitat Conservation Areas			
Class I	Buffer widths and setbacks will be determined through a mandatory Habitat Management Plan (HMP). In the case of Bald Eagles, a HMP will not be required, but additional state and federal permits and/or timing considerations for construction may be required to ensure compliance with all federal laws, including the federal Bald and Golden Eagle Protection Act (16 USC 668) to avoid impacting eagles and their habitat.		
Class II	Site-specif	ic conditions w	ill determine the need for the preparation of a HMP

2. Buffer Measurement. Distances shall be measured from the ordinary high water mark (OHM) or from the top of the bank where the OHM cannot be identified. Buffers shall be retained in their natural condition. It is acceptable, however, to enhance the buffer by planting indigenous vegetation, as approved by the department. Alteration of buffer areas and building setbacks may be allowed for development authorized by Section 19.100.140 (Reasonable Use Exception), Section 19.100.125 (Exemptions), Section 19.100.130 (Standards for Existing Development) or Section 19.100.135 (Variances). The buffer width shall be increased to include streamside wetlands, which provide overflow storage for storm waters, feed water back to the stream during

1 low flows or provide shelter and food for fish. In braided channels, the ordinary high water mark or 2 top of bank shall include the entire stream feature. 3 3. Provision for Decreasing Buffer. 4 a. The department may grant an administrative reduction to buffer widths when the 5 following are met: 6 i. the applicant demonstrates that buffer widths cannot be met, according to the 7 variance criteria in 19.100.135; 8 ii. the applicant submits a habitat management plan (HMP) that meets the 9 requirements as described in Chapter 19.700 (Special Reports); 10 iii. the HMP is reviewed and consultation with the Washington State Department 11 of Fish and Wildlife determines that a reduction is the minimum necessary for the 12 permitted use; and 13 iv. the conditions are sufficient to assure no net loss of ecological functions of the 14 affected fish and wildlife habitat conservation area. b. The department may reduce the buffer width by up to twenty-five percent in a Type I 15 16 decision under chapter 21.04. Reductions of greater than twenty-five percent but less 17 than fifty percent for single-family dwellings will be a Type II decision and require 18 notification (see Chapter 19.800, Appendix F). Buffer reductions for single-family 19 residences greater than fifty percent, and reductions greater than twenty-five percent for 20 all other uses shall be pursuant to a variance under 19.100.135. When applicable, the 21 order of sequence for buffer reductions shall be as follows: 22 i. Use of buffer averaging, maintaining one hundred percent of the buffer area 23 under the standard buffer requirement; 24 Reduction of the overall buffer area by no more than twenty-five percent of 25 the area required under the standard buffer requirement; 26 Enhancement of existing degraded buffer area and replanting of the 27 disturbed buffer area:

1	iv. Use of alternative on-site wastewater systems in order to minimize site
2	clearing;
3	v. Infiltration of stormwater where soils permit; and
4	vi. Retention of native vegetation on other portions of the site in order to offset
5	habitat loss from buffer reduction.
6	4. Provision for Increasing Buffer. The department may increase the buffer width whenever a
7	development proposal has known locations of endangered or threatened species for which a
8	habitat management plan indicates a larger buffer is necessary to protect habitat values for such
9	species, or when the buffer is located within a landslide or erosion hazard area.
10	5. Buffers for Streams in Ravines. For streams in ravines with ravine sides ten feet or greater in
11	height, the buffer width shall be the minimum buffer required for the stream type, or a buffer width
12	that extends twenty-five feet beyond the top of the slope, whichever is greater. Building setbacks
13	for geologically hazardous areas may still apply (19.400), if determined necessary.
14	6. Channel Migration Zones. In areas where channel migration zones can be identified the
15	buffer distance shall be measured from the edge of the channel migration zone.). Building
16	setbacks for geologically hazardous areas may also apply (19.400), if determined necessary.
17	7. Protection of Buffers. Buffer areas shall be protected as required by the department. The
18	buffer shall be identified on a site plan and on site as required by the department and this
19	Chapter.
20	8. Building or Impervious Surface Setback Lines. A building or impervious surface setback line
21	of 15 feet, or as determined by an HMP, is required from the edge of any fish and wildlife habitat
22	conservation area buffer. Minor structural or impervious surface intrusions into the areas of the
23	setback may be permitted if the department determines that such intrusions will not adversely
24	impact the fish and wildlife habitat conservation area. The setback shall be identified on a site
25	plan.
26	B. Class I Wildlife Habitat Conservation Areas Development Standards. All development permits within
27	known Class I wildlife habitat conservation areas will require the submittal and approval of a habitat
28	management plan (HMP) as specified in Chapter 19.700 (Special Reports). In the case of bald eagles, a
29	HMP will not be required, but additional state and federal permits and/or timing considerations for
30	construction may be required to ensure compliance with all federal laws, including the federal Bald and

1 Golden Eagle Protection Act (16 USC 668) to avoid impacting eagles and their habitat. In the case of

- 2 listed fish species, a HMP shall be required only if a buffer reduction is proposed under the provisions of
- 3 Section 19.300.315(A). The HMP shall consider measures to retain and protect the wildlife habitat and
- 4 shall consider effects of land use intensity, buffers, setbacks, impervious surfaces, erosion control and
- 5 retention of natural vegetation.
- 6 C. Class II Wildlife Habitat Conservation Area Development Standards. All development permits within
- 7 known Class II wildlife conservation areas may require the submittal of a habitat management plan
- 8 (HMP), as determined during the SEPA/critical areas review on the project. The HMP shall consider
- 9 measures to retain and protect the wildlife habitat and shall consider effects of land use intensity, buffers,
- 10 setbacks, impervious surfaces, erosion control and retention of natural vegetation.
- 11 D. Stream Crossings. Any private or public road expansion or construction proposed to cross streams
- 12 classified within this title, shall comply with the following minimum development standards. All other state
- and local regulations regarding water crossing structures will apply, and the use of the Water Crossing
- 14 Design Guidelines (WDFW, 2013) or as amended, is encouraged.
- 15 1. Crossings shall not occur in salmonid streams unless no other feasible crossing site exists.
- For new development proposals, if existing crossings are determined to adversely impact salmon
- 17 spawning or passage areas, new or upgraded crossings shall be relocated as determined by the
- 18 Washington State Department of Fish and Wildlife (WDFW).
- 19 2. Bridges or bottomless culverts shall be required for all Type F streams that have salmonid
- habitat. Other alternatives may be allowed upon submittal of a habitat management plan that
- 21 demonstrates that other alternatives would not result in significant impacts to the fish and wildlife
- 22 conservation area, as determined appropriate through the Washington State Department of Fish
- and Wildlife (WDFW), Hydraulic Project Approval (HPA) process. The plan must demonstrate that
- salmon habitat will be replaced on a 1:1 ratio.

- 25 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 or to provide mid-span
- 27 footings for the purpose of increased floodplain connectivity.
- Crossings shall not diminish flood carrying capacity.
 - 5. Crossings shall serve multiple properties whenever possible.

6. Where there is no reasonable alternative to providing a culvert, the culvert shall be the minimum length necessary to accommodate the permitted activity.

E. Stream Relocations. Stream relocations shall not be permitted unless for the purpose of flood protection and/or fisheries restoration and only when consistent with the WDFW Hydraulic Project Approval (HPA) process and the following minimum performance standards:

- 1. The channel, bank and buffer areas shall be replanted and maintained with native vegetation that replicates a natural, undisturbed riparian condition, when required by a habitat management plan; and
 - 2. For those shorelands and waters designated as frequently flooded areas pursuant to Chapter 19.500, 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.
- F. Pesticides, Fertilizers and Herbicides. No pesticides, herbicides or fertilizers may be used in fish and wildlife habitat conservation areas or their buffers, except those approved by the U.S. E.P.A. or
 Washington Department of Ecology for use in fish and wildlife habitat conservation area environments
 and applied by a licensed applicator in accordance with the safe application practices on the label.
 - G. Land Divisions and Land Use Permits. All proposed divisions of land and land uses (subdivisions, short subdivisions, short plats, long and large lot plats, performance based developments, conditional use permits, site plan reviews, binding site plans) that include fish and wildlife habitat conservation areas shall comply with the following procedures and development standards:
 - 1. The open water area of lakes, streams, and tidal lands shall not be used in calculating minimum lot area.
 - 2. Land division approvals shall be conditioned so that all required buffers are dedicated as open space tracts, or as an easement or covenant encumbering the buffer. Such dedication, easement or covenant shall be recorded together with the land division and represented on the final plat, short plat or binding site plan, and title.
 - 3. In order to avoid the creation of non-conforming lots, each new lot shall contain at least one building site that meets the requirements of this title, including buffer requirements for habitat conservation areas. This site shall also have access and a sewage disposal system location that

are suitable for development and does not adversely impact the fish and wildlife conservation area.

- 4. After preliminary approval and prior to final land division approval, the department may require that the common boundary between a required buffer and the adjacent lands be identified using permanent signs. In lieu of signs, alternative methods of buffer identification may be approved when such methods are determined by the department to provide adequate protection to the buffer.
- 5. In order to implement the goals and policies of this title; to accommodate innovation, creativity, and design flexibility; and to achieve a level of environmental protection that would not be possible by typical lot-by-lot development, the use of the performance based development process is strongly encouraged for projects within designated fish and wildlife habitat conservation areas.
- H. Agricultural Restrictions. In all development proposals that would introduce or expand agricultural activities, a net loss of functions and values to the critical area shall be avoided by at least one of the following methods:
 - 1. Locate fencing no closer than the outer buffer edge; or

- 2. Implement a farm resource conservation and management plan agreed upon by the conservation district and the applicant to protect and enhance the fish and wildlife habitat conservation area.
- I. Trails and Trail-Related Facilities. Construction of public and private trails and trail-related facilities, such as benches, interpretive centers, and viewing platforms, may be allowed in fish and wildlife habitat conservation areas or their 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.
 - 2. Trails and related facilities shall be planned to minimize removal of trees, shrubs, snags and important wildlife habitat.
 - 3. Viewing platforms, interpretive centers, benches, and picnic areas, and access to them, shall be designed and located to minimize disturbance of wildlife habitat and/or critical characteristics of the affected conservation area. Platforms shall be limited to one hundred square feet in size,

unless demonstrated through a Habitat Management Plan that a larger structure will not result in a net loss of habitat and critical functions.

- 4. Trails and related facilities shall generally be located outside required buffers. Where trails are permitted within buffers they shall be located in the outer 25% of the buffer, except where stream crossings or for direct access to viewing areas have been approved by the Department.
- 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 demonstrated need, subject to review and approval by the department. Trails shall be constructed with pervious materials except where determined infeasible.
- 6. Regional or public trails and trail-related facilities as identified in the 2013 Kitsap County Non-Motorized Facility Plan (and associated recognized community trails) and as amended, and provided design considerations are made to minimize impacts to critical areas and buffers shall not be subject to the platform, trail width, or trail material limitations above. Such trails and facilities shall be approved through Special Use Review (19.100.145), unless any underlying permit requires a public hearing.
- J. Utilities. Placement of utilities within designated fish and wildlife habitat conservation areas and buffers may be allowed pursuant to the following standards:
 - 1. The normal and routine utility maintenance or repair authorized in Section <u>19.100.125</u> shall be allowed within designated fish and wildlife habitat conservation areas, subject to best management practices.
 - 2. Construction of utilities may be permitted in fish and wildlife habitat conservation areas or their buffers, only when no practicable or reasonable alternative location is available. Utility construction shall adhere to the development standards set forth in (5) and (6), below. As required, special reports (Chapter 19.700) shall be reviewed and approved by the department.
 - 3. Construction of sewer lines or on-site sewage systems may be permitted in fish and wildlife habitat conservation areas or their buffers only when: (a) the applicant demonstrates that the location it is necessary to meet state or local health code requirements; (b)there are no other practicable alternatives available, and (c) construction meets the requirement of this chapter. Joint use of the sewer utility corridor by other utilities may be allowed.

1	4. New utility corridors shall not be allowed in Class I or II fish and wildlife habitat conservation
2	areas (Section 19.300.310(B) and (C)) except in those circumstances where an approved HMP
3	indicates that the utility corridor will not significantly impact the conservation area.
3	indicates that the utility corndor will not significantly impact the conservation area.
4	5. Utility corridor construction and maintenance shall protect the environment of fish and wildlife
5	habitat conservation areas and their buffers by utilizing the following methods:
6	a. New utility corridors shall be aligned to avoid cutting trees greater than twelve inches
7	in diameter at breast height (four and one-half feet) measured on the uphill side, unless
8	no reasonable alternative location is available.
9	b. In order of preference, new utility corridors shall be located.
10	i. On an existing road;
11	ii. On an existing bridge;
12	iii. Placed deep enough under the culvert to allow for future culvert replacement
13	and to avoid grade barriers.
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15	c. New utility corridors shall be revegetated with appropriate native vegetation at not
16	less than pre-construction vegetation densities or greater, immediately upon completion
17	of construction, or as soon thereafter as possible due to seasonal growing constraints.
18	The utility entity shall ensure that such vegetation survives.
19	d. Any additional corridor access for maintenance shall be provided at specific points
20	rather than by parallel roads, unless no reasonable alternative is available. If parallel
21	roads are necessary, they shall be the minimum width necessary for access, but no
22	greater than fifteen feet; and shall be contiguous to the location of the utility corridor on
23	the side away from the conservation area. Mitigation will be required for any additional
24	access through restoration of vegetation in disturbed areas.
25	6. Utility corridor maintenance shall include the following measures to protect the environment
26	of fish and wildlife habitat conservation areas.
27	a. Utility towers shall be painted with brush, pad or roller and shall not be sandblasted
28	or spray painted, unless appropriate containment measures are used. Lead-based paints
29	shall not be used.
30	b. No pesticides, herbicides or fertilizers may be used in fish and wildlife habitat

conservation areas or their buffers except those approved by the U.S. Environmental

Protection Agency (EPA) and Washington Department of Ecology. Where approved, they must be applied by a licensed applicator in accordance with the safe application practices on the label.

- K. Bank Stabilization. A stream channel and bank, or shoreline may be stabilized when documented naturally occurring earth movement presents an imminent threat to existing primary structures (defined as requiring a building permit pursuant to Chapter 14.04 of this code, the Kitsap County Building and Fire Code), to public improvements, to unique natural resources, to public health, safety or welfare, to the only feasible access to property, or, in the case of streams, when such stabilization results in the maintenance of fish and wildlife habitat, flood control for the protection of primary structures and appurtenances, or improved water quality.
 - 1. Channel, bank and shoreline stabilization may also be subject to the standards of Title 22 of the Kitsap County Code (Shoreline Management Master Program), and of Title 15 of the Kitsap County Code (Flood Hazard Areas). Documentation of earth movement and/or stability shall be provided through Section 19.700.725 (Special Reports), geological and geotechnical report requirements.
 - 2. Where bank stabilization is determined to be necessary, soft-shore protective techniques shall be evaluated and may be required over other types of bank protection. Techniques include, but are not limited to, gravel berms, vegetation plantings, and placement of large, woody debris (logs and stumps). Special consideration shall be given to protecting the functions of channel migration zones.
 - 3. Bulkheads and retaining walls may only be utilized as an engineering solution where it can be demonstrated through a geotechnical report (See Section 19.700.725) that an existing residential structure cannot be safely maintained without such measures, and that the resulting retaining wall is the minimum length necessary to provide a stable building area for the subject structure. A variance pursuant to Section 19.100.135 must be obtained in all other cases.
 - 4. The department may require that bank stabilization be designed by a professional engineer licensed in the state of Washington with demonstrated expertise in hydraulic actions of rivers and streams. Bank stabilization projects may also require a Kitsap County site development activity permit under Title 12 of this code (Stormwater Management) or a Hydraulic Project Approval (HPA) from WDFW.
- L. Fencing and Signs. Prior to approval or issuance of permits for land divisions and new development, the department may require that the common boundary between a required buffer and the adjacent lands

1 be identified using fencing or permanent signs. In lieu of fencing or signs, alternative methods of buffer 2 identification may be approved when such methods are determined by the department to provide 3 adequate protection to the buffer. 4 Forest Practice, Class IV General and Conversion Option Harvest Plans (COHPs). All timber 5 harvesting and associated development activity, such as construction of roads, shall comply with the 6 provisions of this title, and with Title 12 (Stormwater Management) and Title 22 (Shoreline Management) 7 of the Kitsap County Code, including the maintenance of buffers, where required. 8 Road/Street Repair and Construction. When no other reasonable or practicable alternative exists road or street expansion or construction is allowed in fish and wildlife habitat conservation areas or their 9 10 buffers, subject to the following minimum development standards: 11 1. The road or street shall serve multiple properties whenever possible; 12 2. Public and private roads should provide for other purposes, such as utility corridor crossings, 13 pedestrian or bicycle easements, viewing points, etc.; and 14 3. The road or street construction is the minimum necessary, as required by the department, 15 and shall comply with the department's guidelines to provide public safety and mitigated 16 stormwater impacts; and 17 4. Construction time limits shall be determined in consultation with WDFW in order to ensure 18 habitat protection. 19 5. Mitigation shall be performed in accordance with specific project mitigation requirements. 20 21 22 23 24 25 26 27 28

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8 9	Chapter 19.400 GEOLOGICALLY HAZARDOUS AREAS
10	Sections:
11	19.400.405 Purpose and applicability.
12	19.400.410 General requirements.
13	19.400.415 Designation of geologically hazardous areas.
14	19.400.420 Erosion hazard areas.
15	19.400.425 Landslide hazard areas.
16	19.400.430 Seismic hazard areas.
17	19.400.435 Development standards.
18	19.400.440 Review procedures.
19	19.400.445 Recording and disclosure.
20	19.400.405 Purpose and applicability.
21	A. This chapter regulates uses and activities in those areas susceptible to erosion, sliding, earthquake, or
22	other geologic events. Some geological hazards can be reduced or mitigated by engineering, design, or
23	modified construction or mining practices so that risks to public health and safety are minimized.
24	The intent of this section is to:
25	1. Provide standards to protect human life and property from potential risks;
26	2. Regulate uses of land in order to avoid damage to structures and property being developed and
27	damage to neighboring land and structures;
28	3. Control erosion, siltation, and water quality to protect anadromous and resident fish and shellfish.
29	4. Provide controls to minimize erosion caused by human activity; and

Use innovative site planning by placing geologically hazardous areas and buffers in open space
 and transferring development density to suitable areas on the site.

- 3 B. This chapter applies to development activities, actions requiring project permits, and clearing, except
- 4 those identified as exempt in 19.100.125 and except those activities related to soils testing or topographic
- 5 surveying of slopes for purposes of scientific investigation, site feasibility analysis, and data acquisition for
- 6 geotechnical report preparation, provided it can be accomplished without road construction.

19.400.410 General requirements.

- 8 A. Any development activity or action requiring a project permit or any clearing within an erosion or
- 9 landslide area shall:

- 10 1. Comply with the requirements in an approved geotechnical report when one is required, 11 including application of the largest buffer and/or building setback;
- 2. Utilize best management practices (BMPs) and all known and available technology appropriate
 for compliance with this chapter and typical of industry standards;
- 3. Prevent collection, concentration or discharge of stormwater or groundwater within an erosion
 or landslide hazard area and be in compliance with Title 12 of this code (Stormwater
 Management);
- 4. Minimize impervious surfaces and retain vegetation to minimize risk of erosion or landslide hazards;
- B. Any development activity or action requiring a project permit or any clearing within an erosion or landslide area shall not:
- 21 1. result in increased risk of property damage, death or injury;
- cause or increase erosion or landslide hazard risk;
- increase surface water discharge, sedimentation, slope instability, erosion or landslide potential to
 adjacent downstream and down-drift properties beyond pre-development conditions;
- 4. adversely impact wetlands, fish and wildlife habitat conservation areas or their buffers; or
- 5. be identified as a critical facility necessary to protect public health, safety and welfare. This
 includes, but is not limited to, schools, hospitals, police stations, fire departments and other
 emergency response facilities, nursing homes, and hazardous material storage or production.

1 C. Field marking requirements. The proposed clearing for the project and all critical area buffers shall be

- 2 marked in the field for inspection and approval by the department prior to beginning work. Field marking
- 3 requirements for construction of a single-family dwelling will be determined on a case-by-case basis by
- 4 the department. The field marking of all buffers shall remain in place until construction is completed, and
- 5 final approval is granted by the department. Permanent marking may be required as determined
- 6 necessary to protect critical areas or its buffer.
- 7 D. Clearing, grading and vegetation removal.

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- Minor pruning of vegetation for view enhancement may be allowed through consultation with the
 department. The thinning of limbs on individual trees is preferred to topping of trees for view
 corridors. Total buffer thinning shall not exceed twenty-five percent and no more than thirty
 percent of the live tree crowns shall be removed.
 - Vegetation shall not be removed from a landslide hazard area, except for hazardous trees based on review by a qualified arborist or as otherwise provided for in a vegetation management and restoration plan.
- Seasonal restrictions. Clearing and grading shall be limited to the period between May 1 and
 October 1, unless the applicant provides an erosion and sedimentation control plan prepared by a
 professional engineer licensed in the state of Washington that specifically and realistically
 identifies methods of erosion control for wet weather conditions.
- 4. Only the clearing necessary to install temporary erosion control measures will be allowed prior to clearing for roads and utilities construction.
- 5. The faces of cut and fill slopes shall be protected to prevent erosion as required by the engineered erosion and sedimentation control plan.
 - Clearing for roads and utilities shall be the minimum necessary and shall remain within marked construction limits.
- Clearing for overhead power lines shall be the minimum necessary for construction and will
 provide the required minimum clearances for the serving utility corridor.
- E. Existing logging roads. Where existing logging roads occur in geologically hazardous areas, a geological assessment may be required prior to use as a temporary haul road or permanent access road under a conversion or COHP forest practices application.

- 1 F. The department may also require:
- 2 1. clustering to increase protection to geologically hazardous areas; or
- 2. enhancement of buffer vegetation to increase protection to geologically hazardous areas.

4 19.400.415 Designation of geologically hazardous areas.

- 5 The county has designated geologically hazardous areas pursuant to RCW 36.70A.170 by defining them
- and providing criteria for their identification. Project proponents are responsible for determining whether a
- 7 geologically hazardous area exists and is regulated pursuant to this chapter. The department will verify on
- 8 a case-by-case basis the presence of geologically hazardous areas identified by project proponents.
- 9 Specific criteria for the designation of geologically hazardous areas are contained in this chapter. While
- the county maintains some maps of potentially geologically hazardous areas, they are for informational
- 11 purposes only and may not accurately represent all such areas.

12 **19.400.420** Erosion hazard areas.

- 13 A. General. Erosion hazard areas include areas likely to become unstable, such as bluffs, steep slopes,
- and areas with unconsolidated soils. These include coastal erosion-prone areas and channel migration
- zones, and may be inclusive of landslide areas.
- 16 B. Potential erosion hazard areas. Potential erosion hazard areas are depicted on the Kitsap County
- 17 Erosion Hazards map. These potential erosion hazard areas are identified using the following criteria:
 - Areas of high erosion hazard

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- a. Channel Migration Zones, as mapped by the Washington Department of Ecology;
- b. Coastal erosion with a sediment source rating value of 0.6 to 1.0, per the Prioritization
 Analysis of Sediment Sources in Kitsap County;
 - 2. Areas of moderate erosion hazard
 - a. Slopes 15 percent or greater, not classified as I, U, UOS, or URS with soils classified by the
 U.S. Department of Agriculture NRCS as "highly erodible" or "potentially highly erodible";
 - b. Coastal erosion with a sediment source rating value of 0.3 to 0.6 per the Prioritization
 Analysis of Sediment Sources in Kitsap County.
- C. Erosion Hazard Indicators. The project proponents are responsible for determining actual presence
 and location of an erosion hazard area. These areas may be indicated by, but not limited to, the following:

1. Any of the above criteria currently identified in subsection (B) or amended hereafter.

- 2 2. Coastal Erosion Hazards.
 - Areas with active bluff retreat that exhibit continuing sloughing or calving of bluff sediments,
 resulting in a vertical or steep bluff face with little or no vegetation;
 - b. Lands located directly adjacent to freshwater or marine waters that are identified as regressing, retreating, or potentially unstable as a result of undercutting by wave action or bluff erosion. The limits of the active shoreline erosion hazard area shall extend landward to include that land area that is calculated, based on the rate of regression, to be subject to erosion processes within the next ten year time period.
 - 3. Channel Migration Zones. The lateral extent that a river or stream is expected to migrate over time due hydrologically and geomorphologically related processes, as indicated by historic record, geologic character, and evidence of past migration over the past one hundred years.

13 19.400.425 Landslide hazard areas.

- 14 A. General. Landslide hazard areas include those areas at risk of mass movement due to a combination
- 15 of geologic, topographic, and hydrologic factors, such as bedrock, soil, slope (gradient), slope aspect,
- 16 structure, hydrology, and other factors. Landslide hazards are further classified as either shallow or deep-
- 17 seated.

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- 18 B. Potential Landslide Hazard Areas. Potential landslide hazard areas are depicted on the Kitsap County
- 19 Landslide Hazards map. These potential landslide hazard areas are identified using the following criteria:
- 1. Areas of high landslide hazard.
- a. Shallow landslide areas with Factor or Safety (FS) of 0.5 to 1.5. FS is a method (Harp, 2006)
 for slope stability based on the angle of the slope from LiDAR elevation data and strength
 parameters.
 - b. Areas with slopes greater to or equal to 30 percent in grade and deemed by a qualified geologist or geotechnical engineer to meet the criteria of U, UOS, or URS.
 - c. All deep-seated landslides areas.
- 2. Areas of moderate landslide hazard.
 - a. Shallow landslide areas with FS of 1.5 to 2.5

1		Slopes of 15 percent or greater and not classified as I, U, UOS, or URS, with soils classified
2		by the U.S. Department of Agriculture NRCS as "highly erodible" or "potentially highly
3		erodible"; or slopes of 15 percent or greater with springs or groundwater seepage
4		Slopes in all areas equal to or greater than 40 percent.
5	C. Lan	de Hazard Indicators. Project proponents are responsible for determining the actual presence
6	and loc	on of a landslide hazard area. These areas may be indicated by, but not limited to the following:
7	1.	y of the above criteria currently identified in subsection (B) or amended hereafter;
8	2.	eas of historic failures, including areas of unstable, old and recent landslides or landslide debris
9		thin a head scarp;
10	3.	eas within active bluff retreat that exhibit continuing sloughing or calving of bluff sediments,
11		sulting in a vertical or steep bluff face with little or no vegetation;
12	4.	llsides that intersect geologic contacts with a relatively permeable sediment overlying a
13		atively impermeable sediment or bedrock;
14	5.	opes that are parallel or sub-parallel to planes of weakness, such as bedding planes, joint
15		stems, and fault planes in subsurface materials;
16	6.	eas exhibiting geomorphological features indicative of past slope failure, such as hummocky
17		ound, back-rotated benches on slopes, etc.;
18	7.	eas with tension cracks or ground fractures along and/or near the edge of the top of a bluff or
19		vine;
20	8.	eas with structures that exhibit structural damage such as settling and cracking of building
21		undations or separation of steps or porch from a main structure that is located near the edge of
22		pluff or ravine;
23	9.	e occurrence of toppling, leaning, bowed, or jackstrawed trees that are caused by disruptions
24		ground surface by active movement;

11. Areas where gullying and surface erosion have caused dissection of the bluff edge or slope face

as a result of drainage or discharge from pipes, culverts, ditches, and natural drainage courses;

10. Areas with slopes containing soft or liquefiable soils;

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1 12. Areas where seeps, springs or vegetative indicators of a shallow groundwater table are observed 2 on or adjacent to the face of the slope;

- 3 13. Areas that include alluvial or colluvial fans located at the base of steep slopes and drainages.
- 4 14. Areas within 200 feet of areas classified as U, UOS, or URS.

19.400.430 Seismic hazard areas.

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- 6 A. General. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake-
- 7 induced land sliding, seismic ground shaking, dynamic settlement, fault rupture, soil liquefaction, or
- 8 flooding caused by tsunamis and seiches.
- 9 B. Potential Seismic hazard areas. Potential seismic hazard areas are depicted on the Kitsap County
- 10 Seismic Hazards map. These potential seismic hazard areas are identified using the following criteria:
- 1. Areas of high seismic hazard are those areas with faults that have evidence of rupture at the ground surface.
- Areas of moderate seismic hazard
 - a. Areas susceptible to seismically induced soil liquefaction, such as hydric soils as identified by the NRCS, and areas that have been filled to make a site more suitable for development. This may include former wetlands that have been covered with fill.
 - b. Areas identified as Seismic Site Class D, E, and F.
- c. Faults without recognized evidence of rupture at the ground surface.
- C. Seismic Hazard Indicators. Project proponents are responsible for determining actual presence and location of a seismic hazard area. These areas may be indicated by, but not limited to, the following:
- 20 location of a seismic nazard area. These areas may be indicated by, but not limited to, the following
- 1. Any of the above criteria currently identified in subsection (B) or amended hereafter;
- 22 2. Areas identified as potential landslide areas. Includes slopes that can become unstable as a 23 result of strong ground shaking, even though these areas may be stable under non-seismic 24 conditions;
 - Areas identified as high and moderate liquefaction and dynamic settlement hazard areas by the Washington Department of Natural Resources, including areas underlain by unconsolidated sandy or silt soils and a shallow groundwater table (static groundwater depth <30 feet) capable of

liquefying in response to earthquake shaking. Dynamic settlement hazard areas are those underlain by more than 10 feet of loose or soft soil not susceptible to liquefaction, but that could result in vertical settlement of the ground surface in response to earthquake shaking.

- 4. Tsunami and Seiche hazard areas. Generally, these are areas that are adjacent to Puget Sound marine waters and lakes that are designated as "A" or "V" zones as identified by FEMA and depicted on the FEMA maps or other maps adopted by Kitsap County.
 - 5. Fault rupture hazard areas, including areas where displacement (movement up, down, or laterally) of the ground surface has occurred during past earthquake(s) in the Holocene Epoch, and areas adjacent that may be potentially subject to ground surface displacement in a future earthquake.

19.400.435 Development standards.

- 12 A. Erosion and Landslide Hazard Development Standards.
 - Development activities or actions requiring project permits or clearing shall not be allowed in landslide hazard areas unless a geotechnical report demonstrates that building within a landslide hazard area will provide protection commensurate to being located outside the landslide hazard area and meets the requirements of this section. This may include proposed mitigation measures.
 - 2. Top of slope building setback. All development activities or actions that require project permits or clearing in erosion and landslide hazard areas shall provide native vegetation from the toe of the slope to twenty-five feet beyond the top of slope, with an additional minimum fifteen-foot building and impervious surface setback, unless otherwise allowed through a geologic assessment. The minimum building and setback shall be increased from the top of the slope as follows:
 - a. For high landslide hazard areas, the setback shall be equal to the height of the slope
 (1:1 horizontal to vertical) plus the greater of one-third of the vertical slope height or twenty-five feet.
 - b. For moderate landslide hazard areas, the setback shall be forty feet from the top of slope.

Toe of slope building setback. A geotechnical report may be required based on slope height
 and stability indicators. Where slope hazard indicators are not identified, the requirements of
 Title 14.04 of this code, the Kitsap County Building and Fire Code will apply.

- 4. The department may require a larger native vegetation width than the standard buffer distance as determined above, if any of the following are identified through the geological assessment process:
 - a. The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse impacts; or
 - b. The area has a severe risk of slope failure or downslope stormwater drainage impacts.
- 5. The minimum native vegetation width and/or building setback requirement may be decreased if a geotechnical report demonstrates that a lesser distance, through design and engineering solutions, will adequately protect both the proposed development and the erosion or landslide hazard area. The department may decrease the setback when such a setback would result in a greater than 1:1 slope setback.
- B. Seismic Hazard Development Standards.
 - Development activities or actions requiring a project permit occurring within 200 feet of a
 "High Hazard" seismic hazard area may be allowed with an approved geotechnical report that
 confirms the site is suitable for the proposed development and addresses any fill or grading
 that has occurred on the subject parcel.
 - Development activities or actions requiring a project permit within in a seismic hazard area shall be in accordance with Chapter 14.04 of this code, the Kitsap County Building and Fire Code.

24 19.400.440 Review Procedures.

- A. Map review. The Kitsap County Geologically Hazardous Areas Maps (Erosion, Landslide, and Seismic)
- 26 provide an indication of where potential geologically hazardous areas are located within the County. The
- department will complete a review of the map to determine if the proposed activity is located within a
- 28 hazard area.

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- 29 B. A geological assessment shall be required when the proposed activity is located within a potential
- 30 hazard area.

1 C. A qualified professional, as described in 19.700.715, shall complete a field investigation and geological assessment to determine whether or not the site for the proposed activity is affected by the geologic

3 hazard, as provided in (D) below.

- 4 D. The geological assessment shall be submitted in the most applicable form as follows:
 - A geological letter. When the geologist or geotechnical professional finds that no hazard area exists within 200 feet of the site, a stamped letter may be submitted demonstrating those findings;
 - 2. A geological report. When the geologist finds that a geologically hazardous area exists within 200 feet of the site, but will not impact the site or need engineering design recommendations;
 - 3. A geotechnical report. When the geotechnical engineer finds that a geologically hazardous area exists within 200 feet of the site, and will require engineering design recommendations or other mitigation measures necessary in order to construct or develop within the geologically hazardous area.
 - E. The department shall review the geological assessment and either:
 - 1. Accept the geological assessment and approve the application; or
 - 2. Reject the geological assessment and require revisions or additional information.

19.400.445 Recording and disclosure.

- The following information shall be included in a Notice to Title that must be signed, notarized, recorded with the County Auditor prior to permit issuance for development in a geologically hazardous area requiring a geotechnical report:
 - A. An abstract and description of the specific types of risks identified in the geotechnical report;
 - B. A statement that the owner(s) of the property understands and accepts the responsibility for the risks associated with developments on the property given the described condition, and agrees to inform future purchasers and other successors and assignees of the risks; and
 - C. A statement that the owner(s) of the property acknowledge(s) that this chapter does not create liability on the part of Kitsap County, any officer or employee thereof for any damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

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3 4	Chapter 19.500 FREQUENTLY FLOODED AREAS
5	Sections:
6	19.500.505 Purpose.
7	19.500.505 Purpose.
8	The purpose of this section is to protect the public health, safety and welfare from harm caused by
9	flooding. It is also the intent to prevent damage and/or loss to both public and private property. In addition
10	this section will give special consideration to anadromous fish habitat in combination with Chapter 19.300
11	Fish and Wildlife Habitat Conservation Areas and Title 22 Shoreline Master Program. To fulfill this
12	purpose, Kitsap County uses the Title 15 of this code (Flood Hazard Areas), adopted by reference, which
13	designates special flood hazard areas and establishes permit requirements for these areas.
14	In addition, the Kitsap County Geographic Information System (GIS) database for critical drainage areas,
15	as defined in Title 12 of the Kitsap County Code (Stormwater), will be included for areas of review under
16	Frequently Flooded Areas.
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2		Chapter 19.600
3		CRITICAL AQUIFER RECHARGE AREAS
4	Sections:	
5	19.600.605	Durnoco
		Purpose.
6	19.600.610	Critical aquifer recharge area categories.
7	19.600.615	Development standards.
8	19.600.620	Activities with potential threat to groundwater.
9	19.600.605 F	Purpose.
10	Potable water	er is an essential life-sustaining element for people and many other species. The majority of
11	Kitsap Count	ty drinking water comes from groundwater supplies in aquifers. Critical aquifer recharge
12	areas are ve	ry important to ensure the quality and quantity of shallow and deepwater aquifers. Once
13	groundwater	is contaminated, it is difficult, costly, and sometimes impossible to clean up. Preventing
14	contaminatio	n is necessary to avoid exorbitant costs, hardships, and potential physical harm to people
15	and ecosyste	ems. In addition, without replenishment, the amount of water for potable use can be
16	diminished o	r even depleted. The intent of this chapter is thus to identify and classify aquifer recharge
17	areas in acco	ordance with RCW 36.70A.170 and address land use activities that pose a potential to
18	directly or inc	directly contaminate or otherwise threaten aquifer water quality and quantity. This section
19	does not affe	ect any right to use or appropriate water as allowed under state or federal law. In addition,
20	these require	ements do not apply to those activities that have potential contaminant sources below
21	threshold am	nounts as set forth in applicable statutes of the Revised Code of Washington or local
22	regulations.	

- 23 It is the policy of Kitsap County to accomplish the following:
- A. Identify, preserve and protect aquifer recharge areas that are susceptible to contamination by
- preventing degradation of the quality and, if needed, the quantity of potable groundwater;
- 26 B. Recognize the relationship between surface and groundwater resources; and
- 27 C. Give priority to potable water resource areas per WAC 365-190-100 in the planning and regulation of
- 28 land uses that may directly or indirectly contaminate or degrade groundwater.
- 29 D. Balance competing needs for water supply while preserving essential natural functions and
- 30 processes, especially for maintaining critical fish and wildlife habitat conservation areas.

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2 19.600.610 Critical aquifer recharge area categories.

- 3 As defined at Section 19.150.210, a critical aquifer recharge area means those land areas that contain
- 4 hydrogeologic conditions that facilitate aguifer recharge and/or transmit contaminants to an underlying
- 5 aguifer. Critical aguifer recharge areas under this title may be established based on general criteria,
- 6 specifically designated due to special circumstances, or based on scientific studies and mapping efforts.
- 7 Factors considered in the identification of critical aguifer recharge areas include depth to water table,
- 8 presence of highly permeable soils (specifically Group A Hydrologic Soils), presence of flat terrain, and
- 9 the presence of more permeable surficial geology.
- 10 A. Category I Critical Aquifer Recharge Areas. Category I critical aquifer recharge areas are those areas
- where the potential for certain land use activities to adversely affect groundwater is high. Category I
- critical aquifer recharge areas include:
- Areas inside the five-year time of travel zone for Group A water system wells, calculated in
 accordance with the Washington State Well Head Protection Program.
 - 2. Areas inside the ten-year time of travel zones in wellhead protection areas when the-well draws its water from an aquifer that is at or above sea level and is overlain by permeable soils without any underlying protective impermeable layer.
 - 3. Areas identified as significant recharge areas due to special circumstances or identified in accordance with WAC 365-190-100(4) as aquifer areas of significant potable water supply with susceptibility to groundwater contamination, including but not limited to the following:
 - a. Hansville Significant Recharge Area. The Hansville aquifer is a significant potable water supply that is highly susceptible to the introduction of pollutants. Additional information regarding this aquifer is available from the Kitsap Public Utility District.
 - b. Seabeck Significant Recharge Area. The Seabeck aquifer is a significant potable water supply that is being developed for use in central and north Kitsap County. Additional information regarding this aquifer is available from the Kitsap Public Utility District.
 - c. Island Lake Significant Recharge Area. The Island Lake aquifer is a significant potable water supply for the Silverdale area. Additional information regarding this aquifer is available from the Silverdale Water District.

d. Gorst Significant Recharge Area. Aquifers in the Gorst basin are highly susceptible to the introduction of pollutants and provide significant potable water supplies for the City of Bremerton.

- e. Poulsbo Significant Recharge Area. The Poulsbo aquifer is highly susceptible to the introduction of pollutants and provides a significant potable water supply for the Kitsap Public Utility District and City of Poulsbo.
- 4. The department may add, reclassify or remove Category I critical aquifer recharge areas based on additional information about areas of significant potable water supply with susceptibility to groundwater contamination or supply reduction, or based on changes to sole source aquifers or wellhead protection areas as identified in wellhead protection programs.
- B. Category II Critical Aquifer Recharge Areas. Category II critical aquifer recharge areas are areas that provide recharge effects to aquifers that are current or potentially will become potable water supplies and are vulnerable to contamination based on the type of land use activity. The general location of these areas is available on the Kitsap County geographic information system. Category II critical aquifer recharge areas include:
 - Highly Permeable Soils (Group A Hydrologic Soils). The general location and characteristics of Group A Hydrologic Soils in Kitsap County is given in the Soil Survey of Kitsap County by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). The soil survey information is available on the Kitsap County geographic information system (GIS).
 - 2. Areas above shallow aquifers or surface areas that are separated from the underlying aquifers by an impermeable layer that provides adequate protections from contamination to the aquifer(s) below. The general location of shallow aquifers in Kitsap County is based upon the professional judgment of licensed hydrogeologists with knowledge of the area. The location of shallow aquifers is available on the Kitsap County geographic information system (GIS).
 - 3. Areas above the Vashon Aquifer. Surface areas above the Vashon Aquifer that are not separated from the underlying aquifers by a poorly permeable layer that provides adequate protections to preclude the proposed land use from contaminating the Vashon aquifer below. Vashon aquifers in Kitsap County are typically mapped as "Qva" (Vashon advance aquifer) or "Qvr" (Vashon recessional aquifer) on geologic maps. Best available information concerning the location of Vashon aquifers is available on the Kitsap County geographic information system (GIS).
 - 4. Areas with high concentration of potable water supply wells.

5. The department may add, reclassify or remove Category II critical aquifer recharge areas based on additional information about areas of potential potable water supply with susceptibility to groundwater contamination or supply reduction, or based on changes to sole source aquifers or wellhead protection areas as identified in wellhead protection programs.

5 C. Mapping. Kitsap County, in coordination with water purveyors and other agencies, will produce maps

6 indicating the location of critical aquifer recharge areas and their defining characteristics.

19.600.615 Development standards.

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- 8 A. Category I Critical Aquifer Recharge Areas.
- 9 1. Land uses identified in Table 19.600.620 are prohibited in Category I critical aquifer recharge areas, unless a waiver is granted by the department.
- 2. Requests for waivers for activities listed in Table 19.600.620 shall include a hydrogeological report (See Chapter 19.700, Special Reports) that includes a detailed risk-benefit analysis that considers credible, worst-case scenarios. The hydrogeological report shall evaluate potential impacts of a proposed land use or activity on both groundwater and surface water quality and quantity. The waiver will be evaluated and treated as a special use review (19.100.145) and be reviewed by the department, Kitsap Public Health, affected tribes, and the affected water purveyors.
- 18 B. Category II Critical Aquifer Recharge Areas.
 - Land uses identified in Table 19.600.620 that are proposed in a Category II aquifer recharge
 area may be required to submit a hydrogeological report (See Chapter 19.700, Special Reports),
 as determined in subsection (2) below. The scope of the report shall be based on site-specific
 conditions.
 - 2. The need for a hydrogeological report will be determined by the department, the health district and the affected water purveyor_when the proposed land use or activity may impact groundwater and surface water quality and quantity. Based on the results of the report, controls, mitigation, and/or other requirements will be established as a condition of approval.
- 27 C. Notification and Review.
 - Affected water purveyors, tribes and the Kitsap Public Health will be notified and invited to comment during the preliminary phases of the county's review of any development application in a critical aquifer recharge area. The purveyor may recommend appropriate mitigation to reduce

potential impacts and the department will consider these recommendations to develop
 appropriate permit conditions.

- The department will also notify Kitsap Public Health and affected water purveyors through the environmental review process when those development activities listed in Table 19.600.620 are proposed outside the areas designated critical aquifer recharge areas.
- D. Stormwater. Stormwater best management practices shall be accomplished in accordance with Title
 12 KCC.
- 8 19.600.620 Activities with potential threat to groundwater quality.

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TABLE 19.600.620 ACTIVITIES WITH POTENTIAL THREAT TO GROUNDWATER QUALITY

A.	Abo	ove & Below Ground Storage Tanks
	1.	Hazardous and industrial waste treatment
	2.	Hazardous and industrial waste storage
	3.	Hazardous material storage
В.	Animal Feedlots	
C.	Commercial Operations	
	1.	Gas stations/service stations/truck terminals
	2.	Petroleum distributors/storage
	3.	Auto body repairs shops/rust proofers
	4.	Auto chemical supply storers/retailers
	5.	Truck, automobile, and combustion engine repair shops
	6.	Dry cleaners
	7.	Photo processors
	8.	Auto washes (If not on a sewer system with a treatment plant)
	9.	Laundromats (If not on a sewer system with a treatment plant)
	10.	Beauty Salons (If not on a sewer system with a treatment plant)

	11.	Research or chemical testing laboratories, which handle significant quantities of hazardous materials	
	12.	Food processors/meat packers/slaughter houses	
	13.	Airport maintenance/fueling operation areas	
	14.	Junk and salvage yards	
	15.	Storing or processing manure, feed, or other agriculture by products by commercially permitted businesses	
	16.	Large-scale storage or use of pesticides, insecticides, herbicides, or fertilizer by commercial or agricultural operations	
	17.	Golf courses	
	18.	Cemeteries	
D.	Dee	ep Injection Wells	
	1.	Waste-water disposal wells (wells that, after treatment, inject water back into the aquifer)	
	2.	Oil and gas activity disposal wells	
	3.	Mineral extraction disposal wells	
E.	De-	icing Salts Storage Piles	
F.	Indu	ustrial Operations	
	1.	Furniture strippers/painters/finishers	
	2.	Concrete/asphalt/tar/coal companies	
	3.	Industrial manufacturers: chemicals, pesticides/herbicides, paper, leather products, textiles, rubber, plastic/fiberglass, silicone/glass, pharmaceuticals, electrical equipment	
	4.	Metal platers/heat treaters/smelters/annealers/descalers	
	5.	Wood preserves	
	6.	Chemical reclamation facilities	
	7.	Boat refinishers	
	8.	Hydrocarbon extraction	
G.	Lan	d Application	

	1.	Waste-water application (spray irrigation)
	2.	Waste-water byproduct (sludge) application
	3.	Petroleum refining waste application
	4.	Hazardous waste applications
Н.	Landfills	
	1.	Industrial hazardous and non-hazardous landfill
	2.	Municipal sanitary landfill
I.	Material Transfer Operations	
	1.	Hazardous and industrial waste transfers
	2.	Hazardous material transfers
J.	Materials Stockpiles	
K.	Mining and Mine Drainage	
L.	Onsite Septic Systems (Large Onsite Septic System or LOSS Category)	
M.	Pipelines	
	1.	Hazardous and industrial waste transfer
	2.	Hazardous material transfer
N.	Rad	lioactive Disposal Sites and Processing of Radioactive Wastes
О.	Sand and Gravel Mining Operations	

Chapter 19.700 SPECIAL REPORTS

- 3 Sections:
- 4 19.700.705 Special reports.
- 5 19.700.710 Wetland delineation report.
- 6 19.700.715 Wetland mitigation report.
- 7 19.700.720 Habitat management plan (HMP).
- 8 19.700.725 Geological assessments.
- 9 19.700.730 Hydrogeological report.
- 10 **19.700.705** Special reports.
- 11 A. Purpose. The following special reports may be required to provide environmental information and to
- present proposed strategies for maintaining, protecting and/or mitigating impacts to critical areas:
- 1. Wetland Delineation Report (Section 19.700.710)
- 14 2. Wetland Mitigation Plan (Section 19.700.715).
- 15 3. Habitat Management Plan (Section 19.700.720).
- Geotechnical Report / Geological Report (Section 19.700.725).
- 17 5. Hydrogeological Report (Section 19.700.730).
- 18 B. When Required. Special reports shall be submitted by the applicant for approval by the department
- when required by this title.
- 20 C. Responsibility for Completion. The applicant shall pay for or reimburse the county for the costs
- 21 incurred in the preparation of special reports or tests, and for the costs incurred by the county to engage
- 22 technical consultants or staff for review and interpretation of data and findings submitted by or on behalf
- 23 of the applicant. The applicant shall pay permit fees or technical assistance fees as required by the Title
- 24 21 of the Kitsap County Code, as now or hereafter amended. In such circumstances where a conflict in
- the findings of a special report and the findings of the county in review of the special report exists, the
- applicant or affected party may appeal such decisions of the county pursuant to the procedures in Section
- 27 19.100.150 (Appeals) and KCC 21.04 of this code.

1 Qualifications of Professionals. Any special report required herein shall be prepared and signed by 2 the professionals identified below and in chapter 19.150, and shall include his or her resume, or other list 3 of qualifications, to aid the department in assessing these qualifications. 4 5 19.700.710 Wetland delineation report. 6 A. Wetland delineation reports shall be valid for a period of five years from the date of the report unless a 7 longer or shorter period is specified by the department. An extension of an original report may be granted 8 upon submittal of a written request to the department prior to expiration. Prior to granting an extension, 9 the department may require updated studies if, in its judgement, the original intent of the application is 10 altered, enlarged or if circumstances relevant to the review and issuance of the original permit have 11 changed substantially, or if the applicant failed to abide by the terms of the original approval. Time 12 extensions shall be granted in writing and documented in the file. 13 B. A wetland delineation report shall include, but not be limited to, the following: 14 1. Vicinity map; 15 2. When available: 16 a. A copy of a National Wetland Inventory Map (U.S. Fish and Wildlife Service) and/or a 17 Kitsap County Wetland Inventory Map identifying the wetlands on or within two hundred 18 fifty feet of the site; 19 b. A copy of any known previous delineations or investigations; 20 c. A copy of forms used to delineate the wetland area (1987 Wetland Delineation Manual, 21 Western Mountains, Valleys, and Coast Regional Supplement). 22 3. A site map setting forth all of the following: 23 Surveyed wetland boundaries based upon a delineation by a wetlands specialist; 24 Site boundary property lines and roads; 25 Internal property lines, right-of-way, easements, etc.; C. 26 d. Existing physical features of the site including buildings, fences, and other structures, 27 roads, parking lots, utilities, water bodies, etc.;

1	e. Contours at the smallest readily available intervals, preferably at two-root intervals,
2	f. Hydrologic mapping showing patterns of surface water movement and known
3	subsurface water movement into, through, and out of the site area.
4	g. Location of all test holes and vegetation sample sites, numbered to correspond with
5	flagging in the field and field data sheets.
6	h. The most recent, dated air photo with overlays displaying the site boundaries and
7	wetland delineation.
8	4. Location information (legal description, parcel number and address);
9	5. Discussion of wetland boundary. The delineation report shall delineate the entire wetland
10	boundary. If the wetland extends outside the site, the delineation report shall discuss methods for
11	delineation beyond the site if physical access was not granted. Remote mapping methods may be
12	used, but this should be noted in the report.
13	6. General site conditions within one quarter mile of the subject wetland(s), including
14	topography, acreage, and surface areas of all wetlands identified in the Kitsap County Wetland
15	Inventory Map and water bodies, including ditches and streams;
16	7. Hydrological analysis, including topography, of existing surface and known significant sub-
17	surface flows into and out of the subject wetland(s), and location of the wetland within the
18	watershed;
19	8. Analysis of the functional values of existing wetland(s), including vegetative, fauna, habitat,
20	water quality, and hydrologic conditions;
21	9. A summary of proposed activity and potential impacts to the wetland(s);
22	10. Recommended wetland category using the Washington State Wetlands Rating System
23	Categories (See Chapter 19.800, Appendix "A"), including rationale for the recommendation and
24	a copy of the completed Wetland Rating Summary Form with associated figures;
25	11. Recommended buffer boundaries, including rationale for boundary locations;
26	12. Site plan of proposed activity, including location of all parcels, tracts, easements, roads,
27	structures, and other modifications to the existing site. The location of all wetlands and buffers
28	shall be identified on the site plan.

1 C. Administrative Wetland Boundary and Ranking Evaluation.

1. The department may delineate and evaluate wetland areas for any proposed single-family dwelling project listed in Chapter 19.200 (Wetlands), unless the applicant wishes to employ a qualified wetland biologist at the applicant's expense, or a wetland delineation report is required by the department. Fees may be collected for this determination and evaluation, as specified in Title 21 of the Kitsap County Code.

- 2. The wetland boundary shall be field-staked prior to department review and this line shall be depicted on the building site plan application.
- 3. The wetland boundary and buffer shall be identified on all grading, building site, utility or other development plans submitted on the project. Wetland delineation stakes shall remain in place for the duration of the application process and not removed until project completion / final inspection when wetland buffer signs have been reviewed and installed.

19.700.715 Wetland mitigation report.

- A. Compensatory mitigation shall be required for activities that result in the loss of wetland acreage or functions, in accordance with 19.200.230 (Wetland Mitigation Requirements).
 - 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 wetland specialist to indicate that the plan is in accordance with specifications as determined by the wetland specialist. A signed original mitigation plan shall be submitted to the department.
 - 3. Approval of the detailed mitigation plan shall be signified by a notarized memorandum of agreement, signed by the applicant and department director or designee. The agreement shall refer to all requirements for the mitigation project.
 - 4. The mitigation project shall be completed according to a schedule agreed upon between the department and the applicant.
 - 5. Wetland mitigation shall occur according to the approved wetland mitigation plan and shall be consistent with provisions of this chapter and title.

1	6. The wetland specialist shall be onsite during construction and plant installation phases of all
2	mitigation projects.
3	7. Upon completion of construction for the wetland mitigation project, the wetland specialist
4	shall submit an as-built report to the department for review and approval.
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6	B. As required by Section 19.200.230 (Wetland Mitigation Requirements), a mitigation report shall be
7	prepared and a shall contain the following:
8	1. Cover / Title Page
9	a. Project name.
10	b. Reference numbers to other permit applications (Local, State and/or Federal).
11	c. Date of publication.
12	d. Who it was prepared for / contact information.
13	e. Who is was prepared by / contact information.
14	2. Table of Contents, including a list of figures and tables
15	3. Responsible Parties. Provide the names, titles, addresses, phone numbers, and information
16	regarding the professional experience (if applicable) for those involved in the development
17	and mitigation projects. Provide the name of the company or agency, as well as the
18	individuals involved.
19	a. Applicant(s).
20	b. Applicant's representative / agent.
21	c. Preparer(s) of the wetland delineation report
22	d. Preparer(s) of the mitigation report, mitigation construction plans and specifications.
23	e. Parties responsible for monitoring, long-term maintenance, and contingency plans. It
24	this is unknown at the time the mitigation report is submitted, provide this
25	information with the monitoring reports.
26	4. Executive summary that summarizes the project, its potential wetland related impacts, and the
27	proposed mitigation. The executive summary shall include the following information:
28	a. Applicant Name/Address/Phone.
29	b. Agent/Consultant.
30	c. Description of land use proposal and location.

1	 Description of the measures taken to avoid and minimize the impacts to the wetland
2	and other aquatic resources.
3	e. Description of unavoidable wetland impacts and the proposed compensatory
4	mitigation measures:
5	i. Size (acres);
6	ii. Cowardin Wetland classification;
7	iii. Hydrogeomorphic (HGM) classification;
8	iv. Wetland rating;
9	v. Wetland functions;
10	vi. Compensation ratios used.
11	f. Description of mitigation area.
12	g. Explanation of other unavoidable impacts to other aquatic resources.
13	h. Other relevant details, including but not limited to:
14	i. Goals and objectives.
15	ii. Proposed improvements to the functions and environmental processes of the
16	larger watershed.
17	iii. Proposed buffers for the compensatory mitigation site (minimum and
18	maximum width and total area).
19	5. Project Description.
20	a. Type of development (existing and proposed land uses).
21	b. Development project size.
22	c. Implementation schedule (start date and duration).
23	d. Project location and maps.

1	i. Section, Township, Range
2	ii. Water Resource Inventory Area (WRIA)
3	iii. Watershed and subwatershed
4	iv. Vicinity Map
5	e. Description of the Development Site.
6 7	i. Historic and current land uses, zoning designations, and structures on development site and adjacent properties (if known).
8 9	ii. A local area map (zoning, land use, wetlands, other aquatic resources, 100-year floodplain).
10 11	iii. Existing wetlands on or adjacent to the development site. Attach delineation report.
12 13	iv. Other aquatic resources on the site or adjacent properties, noting hydrologic connections. Describe any flooding that affects the development site and the
14	location of the development within the floodplain, where applicable.
15	v. Known historic or cultural resources on the development site.
16	6. Ecological Assessment of Impact.
17	a. Description of the impacts and extent of disturbance to wetlands (including
18	acreage). This includes temporary, indirect, and direct impacts.
19	b. Description of the site in context of other wetlands/water bodies.
20	c. Description of the water regime.
21	i. Describe the source of water to the wetland being affected by the development
22	project. For multiple sources, estimate the percentage of each.
23	ii. Describe the hydrologic regime of the wetland being affected through
24	qualitative estimates of duration and frequency of inundation / saturation.

1	iii. Map of the surface and groundwater flowing into the impacted areas with the
2	directions of water flow indicated.
3	d. Description of the soils.
4	i. Description of the soil characteristics of the wetland being affected including;
5	soil type and classification; and a description of texture, color, structure,
6	permeability, and organic content.
7	ii. Soil survey map (indicate the source of the map).
8	iii. Map showing soil sampling locations (typically the location of the soil pits used
9	for delineation).
10	e. Description of the plant communities.
11	i. Qualitative descriptions of the different Cowardin (1979) classes at the wetland
12	being affected (including subclass and water regime modifiers). If a forested
13	class is present, also estimate the average age of the canopy species.
14	ii. Estimate the relative abundance of dominant and subdominant plants within
15	each Cowardin class (use information collected during routine delineation unless
16	more detailed data are available).
17	iii. List of the wetland indicator status of dominant and subdominant species
18	(obligate-OBL, facultative-FAC, facultative wet-FACW)
19	iv. Description of the prevalence and distribution of non-native and/or invasive
20	species, if any are present at the wetland being affected.
21	v. General description of upland plant communities within 330 ft (100m) of the
22	wetland being affected, if any.
23	vi. List of rare plants and plant communities that are known to occur on the
24	development project site or adjacent properties. If any of these species are
25	observed on the site, include descriptions of the occurrence and any potential
26	impacts to them.
27	f. Description of any fauna using the site. If a biological assessment was prepared for
28	the project, the report may simply be referenced in this mitigation report.

1	i. Description of any animals (including amphibians) using the wetland being
2	affected or its buffer. Especially note evidence of past or present beaver use. In
3	most cases, a list of species likely to use the habitats on the site is sufficient, with
4	brief descriptions of the existing habitats.
5	ii. Include a description of endangered, threatened, sensitive, and candidate
6	animal species that are known to occur in the general areas (distance depends
7	on species) of the development site, as well as observations of such species.
8	Also, include those listed as "Priority Species" or "Species of Concern" by the
9	Washington Department of Fish and Wildlife.
10	g. Landscape position and geomorphology.
11	i. Class of the wetland being affected by the development project. Use the
12	hydrogeomorphic classification (class and subclass) to describe its position in the
13	watershed.
14	ii. Qualitative description of the functions performed by the wetland affected
15	relative to the position in the watershed. This may include its role in attenuating
16	flooding, as a corridor for wildlife between different region of the watershed, as
17	part of a regional flyway, or in improving water quality regionally.
18	h. Description of functions provided.
19	i. Description of the functions provided by the wetland being affected and to what
20	level they are performed. The method used to assess functions, varies
21	depending on the scale of the impact (size/type), the complexity of the wetland,
22	etc. The same method must be used for assessing the impact site and the
23	mitigation site, as well as for monitoring.
24	ii. Qualitative or quantitative description of the characteristics that enable the
25	wetland being affected to perform specific functions, depending on the method
26	used.
27	iii. Description of the sampling and assessment methods used.
28	iv. Documentation of the training of professionals assessing the functions.
29	v. List of the references consulted.

2	i. The category of the wetland being affected using the Washington State rating
3	system for western Washington, as revised.
4	ii. Copies of the original data sheets used to rate the wetland.
5	iii. Size (width) of the undeveloped upland buffer within 330 feet (100m) of the
6	wetland being affected by the development project.
7	iv. Qualitative description of the dominant vegetation in the buffer and the
8	physical structure of the plants in it (e.g., deciduous forest, coniferous forest, and
9	prevalence of snags and downed woody debris.)
10	v. Maps of the buffer areas and the vegetation types.
11	j. Information on water quality, where applicable.
12	i. Description of any known or observable water quality problems at the
13	development site and whether they will continue after the development project is
14	completed. Basic water quality parameters that should be considered include
15	dissolved oxygen (DO), pH and alkalinity, temperature, turbidity/suspended
16	solids/sediment accretion, nutrients, fecal coliform, and heavy metals.
17	ii. Assessment of whether the development project is expected to worsen or
18	improve existing water quality conditions.
19	7. Mitigation Approach.
20	a. Mitigation sequencing followed.
21	i. Descriptions of the specific steps taken to avoid and minimize impacts to the
22	maximum extent practicable. Larger projects may need to include an Alternatives
23	Analysis in an appendix.
24	ii. Description of the specific steps to minimize wetland impacts to the site or
25	reduce impacts over time (timing of project, redesign of project, orientation and/or
26	location). Where applicable, note how proposed stormwater treatment facilities
27	may reduce water quality impacts.

1	iii. Discussion of wetland rectification strategies. Where applicable note how
2	temporary impacts, occurring during implementation of the development project,
3	could be rectified through restoration and maintenance activities.
4	iv. Notation of the size and type of compensation being proposed. Include a
5	description of the mitigation ratios and why they are adequate to compensate for
6	the lost or degraded area and functions. A full description of the compensatory
7	mitigation should be provided as described in the following sections.
8	b. Goals and objectives. Identify the goal or goals of the compensatory mitigation project.
9	c. Mitigation strategy. Describe in general terms the strategies (actions) that will be
10	used to achieve the goals.
11	8. Proposed Mitigation Site.
12	a. Site description (location, size, maps):
13	i. Ownership;
14	ii. Total area of mitigation site (acres);
15	iii. Current/past land use. Include, also, a description of the constraints at the
16	mitigation site that could affect the success of the mitigation project, and
17	strategies used to address each constraint.
18	b. Site selection rationale. Discuss how the site fits with the environmental needs in the
19	watershed. If watershed or regional planning efforts exist for the area, explain how the
20	selection of the compensation site is consistent with those plans.
21	c. Existing/baseline ecological conditions of the mitigation site:
22	i. Summary of historic and current on-site and nearby land uses;
23	A. Historic land uses and structures on the mitigation site and adjacent
24	properties, if known;
25	B. Current land uses and structures on the mitigation site;
26	C. Current land uses and zoning designations of adjacent properties;

1	D. A local area map showing land uses and zoning designations.
2	ii. Description of any known cultural resources on the site. If a separate report
3	on cultural/historic resources was prepared, it may be referenced in the
4	mitigation report.
5	A. List of structures listed or eligible for historic registers;
6	B. Brief description of resources having archaeological or cultural
7	significance.
8	iii. Description of the site in context of other wetlands. Any existing wetland
9	boundaries shall be summarized here, but may reference the delineation report.
10	A. A topographic base map (scale 1 in. = 400 ft. or smaller) outlining the
11	boundaries of the wetlands that are under state, federal, or local
12	jurisdiction;
13	B. Name of the delineation manual and method used. Included date field
14	work was performed, field data sheets documenting the data collected on
15	the three criteria (hydrology, vegetation, soils);
16	C. Provide the total area of wetlands on the mitigation site, identifying the
17	area (acres) of individual wetlands.
18	iv. Description of other aquatic resources on the mitigation site and adjacent
19	properties.
20	A. Description of the other aquatic resources (e.g., streams, lakes, tidal
21	waters) on the mitigation site and adjacent properties, noting hydrologic
22	connections among them and with existing wetlands.
23	B. Include and/or reference a map showing the approximate location of
24	all aquatic resources.
25	C. Description of any flooding that affects the mitigation site and location
26	of the development within the floodplain, where applicable, indicating on
27	a map whether the project is located within the mapped 100-year
28	floodplain).

1	v. Description of the water regime.
2	A. Description of the source of water to the mitigation site. If several
3	sources are present, estimate the percentage contribution from each;
4	B. Description of the existing water regimes at the mitigation site (ie.,
5	rough, qualitative estimate of duration and frequency of inundation
6	and/or saturation.
7	C. Map of the surface and groundwater flowing into the mitigation area
8	with the directions of water flow indicated.
9	vi. Description of the soils;
10	A. Description of the soil characteristics of the mitigation site including;
11	soil type and classification; and a description of texture, color, structure,
12	permeability, and organic content. Use soil surveys confirmed by
13	representative soil samples:
14	B. Soil survey map (indicate source);
15	C. Map showing soil sampling locations (typically the location of the soil
16	pits used for delineation).
17	vii. Description of the plant communities;
18	A. Qualitative descriptions of the different Cowardin (1979) classes at the
19	mitigation site (include subclass and water regime modifiers). If a
20	forested class is present, also estimate the average age of the canopy
21	species;
22	B. Estimate the relative abundance of dominant and subdominant plants
23	within each Cowardin class (use information collected during routine
24	delineation unless more detailed data are available);
25	C. List of the wetland indicatory status of dominant and subdominant
26	species (obligate-OBL, facultative-FAC, facultative wet-FACW);
27	D. Description of the prevalence and distribution of non-native and/or
28	invasive species, if any are present;

1	E. General description of upland plant communities within 330 ft (100m)
2	of the mitigation site, if any;
3	F. List of rare plants and plant communities that are known to occur on
4	the mitigation site or adjacent properties. If any of these species area
5	observed on the site, include descriptions of the occurrence and any
6	potential impacts to them.
7	viii. Description of any fauna using the site if a biological assessment was
8	prepared for the project, the report may simply be referenced in this mitigation
9	plan.
10	A. Description of any animals (including amphibians) using the wetland
11	being affected or its buffes. Especially note evidence of past or present
12	beaver use. In most cases, a list of species likely to use the habitats on
13	the site is sufficient, with brief descriptions of the existing habitats.
14	B. Include a description of endangered, threatened, sensitive, and
15	candidate animal species that are known to occur in the general areas
16	(distance depends on species) of the development site, as well as
17	observations of such species. Also, include those listed as "Priority
18	Species" or "Species of Concern" by the Washington Department of Fish
19	and Wildlife.
20	ix. Landscape position and geomorphology.
21	A. Class of any existing wetlands on the mitigation site. Use
22	hydrogeomorphic classification (class and subclass) to describe the
23	position in the watershed;
24	B. Qualitative description of the functions performed by the mitigation site
25	relative to the position in the watershed. This may include its role in
26	attenuating flooding, as a corridor for wildlife between different regions of
27	the watershed, as part of a regional flyway, or in improving water quality
28	regionally.
29	x. Description of functions provided.

1	A. Description of the functions provided by the wetland being affected
2	and to what level they are performed. The method used to assess
3	functions, varies depending on the scale of the impact (size/type), the
4	complexity of the wetland, etc. The same method must be used for
5	assessing the impact site and the mitigation site, as well as for
6	monitoring;
7	B. Qualitative or quantitative description of the characteristics that enable
8	the wetland being affected to perform specific functions, depending on
9	the method used;
10	C. Description of the sampling and assessment methods used;
11	D. Documentation of the training of professionals assessing the
12	functions; and
13	E. List of the references consulted.
14	
15	xi. Wetland rating of any existing wetlands, buffer requirements.
16	A. The category of the wetland being affected using the Washington
17	State rating system for western Washington, as revised;
18	B. Copies of the original data sheets used to rate the wetland;
19	C. Size (width) of the undeveloped upland buffer within 330 feet (100m)
20	of the mitigation site. Note how much of the existing buffers extend off-
21	site;
22	D. Qualitative description of the dominant vegetation in the buffer and the
23	physical structure of the plants in it (e.g., deciduous forest, coniferous
24	forest, and prevalence of snags and downed woody debris.); and
25	E. Maps of the buffer areas and the vegetation types.
26	xii. Information on water quality, where applicable.

1	A. Description of any known or observable water quality problems at the
2	mitigation site and whether they will continue after the mitigation project
3	is completed. Basic water quality parameters that should be considered
4	include dissolved oxygen (DO), pH and alkalinity, temperature,
5	turbidity/suspended solids/sediment accretion, nutrients, fecal coliform,
6	and heavy metals.
7	B. Assessment of whether the mitigation project is expected to worsen or
8	improve existing water quality conditions.
9	d. Site constraints.
10	9. Preliminary Site Plan.
11	a. A qualitative description of the water regime and of how adequate hydrology will be
12	provided to support a wetland over the long term.
13	b. Discussion of how project was designed to provide the proposed functions, including
14	description of the hydrologic data that will support the proposal. Provide a rationale for
15	each proposed function and describe the design features that will contribute to providing
16	the function.
17	c. Schematic drawings:
18	i. Change in topography:
19	ii. Hydrologic (water control) structures;
20	iii. Soils;
21	iv. Vegetation distributions;
22	v. Habitat attributes (structures) and their location;
23	vi. Existing and proposed buffers.
24	d. Section drawings showing relationship of topography to water regime and vegetation.
25	10. Final Site Plan/Design.
26	a. Site survey and topography.

1	 Site surveys are needed when the mitigation project includes changes to 	
2	ground elevations. If no changes to grade are proposed, then a simpler map of	
3	the site will be sufficient showing property and wetland boundaries, landmarks,	
4	scale, site features, and other existing conditions;	
5	ii. Orientation and scale (north arrow; typically scales are 1 inch = 25 or 50 ft.);	
6	iii. Existing and proposed elevation contours. Contours at one-foot intervals are	
7	typically sufficient for most mitigation reports. Contours at 6-inch intervals may be	
8	desirable in certain cases where the seasonal fluctuation of water levels is low or	
9	in specific areas on the mitigation site where it is critical to have a high level of	
10	accuracy;	
11	iv. Spot elevations for low points, high points and structures (culverts, hydraulic	
12	controls, utilities, and roads);	
13	v. Property boundaries;	
14	vi. On-site wetland boundaries (including all wetlands existing and after	
15	mitigation);	
16	vii. Survey benchmarks;	
17	viii. Location and elevation of soil borings or test pits and water level sampling	
18	devices;	
19	ix. Location of soils to be stockpiled, if any;	
20	x. Description of methods of erosion control and bank stabilization, if applicable;	
21	xi. Buffer areas proposed for the mitigation site and their boundaries.	
22		
23	b. Water regime including:	
24	i. Description of the proposed frequency and duration of flooding, inundation, or	
25	soil saturation;	

1	ii. Desciption of the proposed groundwater and surface water sources and	
2	characteristics;	
3	iii. Description of the elevation of the water table and dates when measureed	
4	(note if table is perched).	
5	iv. Engineering drawings of any proposed water control structures;	
6	c. Soil amendments.	
7	i. Soil logs from an on-site evaluation. Depending on proposed depth of grading,	
8	soil information may come from hand-dug shallow pits or from deeper samples	
9	that are typically obtained with small drilling rigs. As a minimum, the shallow soil	
10	profile should be described even if no changes in site elevations are proposed.	
11	ii. Description of how the soil characteristics will be affected by the mitigation	
12	activities.	
13	d. Landscape plans. For most projects, planting plans should be prepared by a	
14	landscape architect with assistance from a wetland or plant ecologist. In some cases	
15	where very simple planting plans are proposed for small areas, the level of expertise	
16	provided by a landscape architect may not be needed. The list below includes the	
17	minimum information needed for planting plans.	
18	i. Section drawing of proposed plant distribution, density and spacing, in	
19	relation to topography and water levels. The projected average water level during	
20	winter wet season, early growing season, and late summer dry season should be	
21	displayed;	
22	ii. List of plant materials (common and Latin names, sizes, sources, quantity,	
23	etc);	
24	iii. Location of existing or proposed upland buffers;	
25	iv. Description of the methods that will be used to control invasive and exotic	
26	plants if they exist in the vicinity;	
27	v. A plan for irrigating the plants until they are established including method,	
28	frequency, and amount of water;	

1	vi. Erosion control;
2	vii. Map of the location of habitat structures or habitat features;
3	viii. Location of upland buffers;
4	ix. Description of the soil amendments, including use and sources of mulch.
5	e. Construction specifications.
6	11. Monitoring Plan. A monitoring plan describes the methods used to collect and analyze data
7	needed to show that performance standards are being met. They are also used to track
8	environmental changes at mitigation sites throughout the monitoring period. Monitoring plans will
9	vary depending on mitigation objectives and performance standards, but all must be designed to
10	assess the quantitative or qualitative performance standards. The methods used for monitoring
11	specific variables generally need to be the same as those used in establishing baseline data at
12	the wetland affected by the development project. Monitoring plans will typically include the
13	elements described below.
14	a. Variables to be measured (plant survival, canopy cover, plat diversity, water levels and
15	duration or inundation/saturation);
16	b. Sampling methods for each variable;
17	c. A map of the sampling locations for each variable or a description of the methods that
18	will be used to determine sampling locations for each monitoring event. Permanent
19	sampling locations may be the best choice for some variables, but for others, such as
20	percent cover of vegetation, sampling locations may be varied through random selection
21	or other methods for each monitoring event. The map should include clearly identifiable
22	markers on the ground to act as reference points for orientation. These may include
23	roads, benchmarks, and permanent structures;
24	d. Laboratory methods to be used, if applicable;
25	e. Provide a timetable for reporting monitoring results to the agencies. It is preferred to tie
26	the specific dates to the start of construction;
27	12. Site Protection.
28	a. Physical site protection.

1 b. Legal protection (deed restriction, conservation easement). Provide copies. 2 Buffers. c. 3 13. Maintenance and Contingency Plans. The need for activities such as inspecting irrigation 4 systems, replacing plants, weeding, preventing or managing herbivory, removing trash, and 5 controlling erosion (and the funding to conduct them) should be anticipated based on the site 6 characteristics, level of public access to the mitigation site, and typical uses of adjacent areas. 7 Frequency of the activities may changes through the monitoring period, so maintenance plans 8 should be written with room for flexibility. Contingency plans contain corrective measures that will 9 be taken if monitoring indicates that performance standards are not being met. 10 Maintenance schedule for each activity. Include a description of and reason for each 11 maintenance activity planned. 12 b. Contingency plan: 13 i. Description of initiating procedures. If a performance standard is not met 14 within the time specified in the mitigation plan the permitee will be required to 15 complete the activities in the following list 16 A. An analysis of the causes of failure; 17 B. Description of the proposed corrective actions; 18 C. Timeframe for implementing these actions. 19 Description of a contingency fund. A contingency fund should be established 20 for use if any corrective actions are necessary. The description should include 21 what funds will be available for planning, implementing and monitoring any 22 contingency procedures that may be required to achieve the mitigation goals. 23 Generally, the fund amount should equal 20% of the total cost of mitigation 24 associated with the project. 25 iii. Responsible parties. 26 14. Implementation Schedule. 27 a. Construction sequence and time schedule for project start, grading, water diversions, 28 plantings, completion etc. The applicant must work with the department to develop an agreed

construction schedule for the mitigation project. Delays in implementing the construction of the mitigation site may result in an increase in the mitigation required and enforcement actions.

- b. Completion. Acknowledgement that the wetland specialist will submit an as-built report to the department for review and acceptance.
- 15. Permit Conditions. Any compensation project prepared pursuant to this section and approved by the department shall become part of the application for the permit. The department will require an additional growing season year for approval of mitigation plan unless the applicant requests an inspection for final monitoring year during the final monitoring year assessment.
- Performance Bonds and Demonstration of Competence. A demonstration of financial resources, administrative, supervisory, and technical competence and scientific 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. A performance bond, assignment of savings, or other like security will be required by the department in an amount necessary to provide for future site monitoring and possible corrective action required for compensatory mitigation projects. Typically, this amount is one and a half times the estimated cost of mitigation. Once the project is completed and a maintenance bond is established, the performance bond will be released. The maintenance bond, as determined by the wetland specialist, will be released upon success of the project, as determined by the metrics in the Mitigation Plan, and no earlier than five years after completion of the mitigation project. If the approved mitigation is not completed or fails to meet its success standards, the property owner must agree to a property access release form, with forfeiture of funds after the specified monitoring period.
- 17. Waiver. The department may waive portions of a wetland mitigation report if there is adequate information available on the site to determine its impacts and appropriate measures.
- 18. List of Qualified Consultants. The department shall establish a list of qualified consultants to prepare mitigation plans.

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1 19.700.720 Habitat management plan (HMP).

2 A. A HMP is a site investigation report to evaluate the potential presence or absence of a regulated fish

- 3 or wildlife species or habitat affecting a subject property and proposed development. This report shall
- 4 identify how development impacts to fish and wildlife habitat from a proposed project will be mitigated.
- 5 WDFW Priority Habitat and Species (PHS) management recommendations, dated May 1991 and all
- 6 applicable volumes and revisions, or the National Bald Eagle Management Guidelines may serve as
- 7 guidance for this report.
- 8 B. The HMP shall contain a map prepared at an easily readable scale, showing:
- 9 1. The location of the proposed development site;
- 10 2. The relationship of the site to surrounding topographic, water features, and cultural features;
- Proposed building locations and arrangements;
- 4. A legend that includes a complete legal description, acreage of the parcel, scale, north arrow,
 and date of map revision; and
- A WDFW PHS Data Base search that is no older than one year from the project submittal.
- 15 C. The habitat management plan shall also contain a report which describes:
- 16 1. The nature and intensity of the proposed development;
- An analysis of the effect of the proposed development, activity or land use change upon the
 wildlife species and habitat identified for protection; and
- A discussion on how the applicant proposes to avoid, minimize and mitigate any adverse impacts to fish and wildlife habitats created by the proposed development. (See Sections 19.700.710 and 19.700.715, Wetland Report/Wetland Mitigation Plan requirements.).
- 22 D. Examples of mitigation measures to be included in the HMP report, include, but are not limited to:
- Establishment of Buffer Zones. When applicable, the order of sequence for buffer reductions
 shall be as follows:
- a. Reduction of building setback;

1	b. Use of buffer averaging maintaining one hundred percent of the buffer area under the
2	standard buffer requirement;
3	c. Reduction of the overall buffer area by no more than twenty-five percent of the area
4	required under the standard buffer requirement;
5	d. Enhancement of existing degraded buffer area and replanting of the disturbed buffer
6	area;
7	e. The use of alternative on-site wastewater systems in order to minimize site clearing;
8	f. Infiltration of stormwater where soils permit; and
9 10	g. Retention of existing native vegetation on other portions of the site in order to offset habitat loss from buffer reduction.
11	2. Preservation of native plants and trees that is essential to maintaining habitat function,
12	including connection to existing wildlife corridors;
13	3. Limitation of access to habitat areas;
14	4. Seasonal restriction of construction activities; and
15 16	5. Establishing phased development requirements and/or a timetable for periodic review of the plan.
17	E. A HMP shall be prepared by a fish or wildlife biologist, as defined at Sections 19.150.320 and
18	19.150.695. For proposed single-family dwelling construction, the department may complete the plan.
19	Fees may be collected for this plan as specified in Title 21 of the Kitsap County Code.
20	
21	19.700.725 Geological Assessments.
22	Whenever development is proposed in a potentially geologically hazardous area or shoreline setback as
23	defined in Chapters 19.300 and 19.400 of this title, or when the department determines that additional
24	soils and slope analysis is appropriate on a particular site, the applicant is required to submit a geological
25	assessment. This assessment may be in the form of a letter, a geological report, or geotechnical report,
26	as determined in 19.400. These assessments evaluate the surface and subsurface soil conditions on the
27	site.

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1	Λ	Qualifications
	_	Conditions

1. Geotechnical reports shall be prepared by a geotechnical engineer (defined at Section

- 3 19.150.365.
- 2. Geological reports_or letters may be prepared by a licensed geologist (Section 19.150.360, or geotechnical engineer (Section 19.150.365).
- 6 B. General Provisions. Report recommendations for earthwork, clearing or siting structures in
- 7 geologically hazardous areas shall be based on existing site conditions rather than measures that have
- 8 not yet been successfully approved, designed, or constructed (e.g., slope recontouring, slope retaining
- 9 walls, vegetation improvements, bulkheads, etc.). Shoreline bulkheads and retaining walls may only be
- utilized only as an engineering solution where it can be demonstrated that:
- An existing residential structure or other permitted existing public or private structures or public
 facilities such as roads or highways, cannot be safely maintained without such measures;
- Other non-structural methods of beach stabilization have been considered and determined
 infeasible; and
- 3. The resulting stabilization structure is the minimum necessary to provide stability for the
 existing structure and appurtenances.
- 17 Minor repair activities on existing permitted structures (e.g., those that do not involve design
- 18 modifications, changes in structure location, and/or demolition or abandonment of failed structure and
- 19 replacement with new structure) are not subject to the following project submittal standards.
- 20 C. Geological Report Submittal Standards. A Geological Report is required for site development
- 21 proposals that involve development activity or the installation of structures within a geologically hazardous
- area or shoreline setbacks, or as otherwise required pursuant to Chapters 19.300 and 19.400 of this title,
- but do not involve or require engineering design recommendations. The following minimum information is
- 24 required:
- 1. Site information regarding the Kitsap County Shoreline Environment Designation and critical
- 26 areas designations that affect site features.
- 2. Description of surface and subsurface conditions, including ground materials, vegetation,
- 28 surface drainage, groundwater, and a preliminary geologic hazard assessment which includes the

locations of structures and the identification of the slope and/or coastal processes occurring at the site and factors that contribute to them;

- 3. Review of available site information, literature, and mapping;
- 4. Detailed description of slope and other topographic features; and

- Conceptual siting of structures and general recommendations, which include methods and
 practices that avoid and/or reduce slope and shore impacts. Minimum recommendations should
 include upland and slope drainage control, groundwater control, site vegetation management, and
 erosion control.
- D. Geotechnical Report Submittal Standards. A geotechnical report is required when the department or a Geological Report determines that a site development proposal requires additional site information such as engineering design recommendations, slope stability analysis, subsurface exploration and testing, coastal process analyses, or construction recommendations. Depending on the level of activity proposed, the report will either be a more limited geotechnical slope evaluation report or a full geotechnical design investigation report as described below.
 - 1. Geotechnical Slope Evaluation Report. A geotechnical slope evaluation report is required when slope stability analyses are confined to addressing only existing surface and/or drainage conditions, including the relationship of natural and constructed slope features to proposed changes in environmental conditions such as drainage, vegetation removal and slope geometry. The following minimum information is required:
 - a. All the information required under subsection C, above (Geological Report);
 - b. Subsurface data, exploration logs, and testing data, when required by the geotechnical engineer;
 - c. Estimated (or surveyed) site plan with ground surface profiles and typical cross-sections;
 - d. Relative location of Ordinary High Water (OHW) on the surface profile and crosssections, which includes Mean Higher High Water (MHHW) for the site location, where applicable;
 - e. Soil strength parameters:
 - f. Stability analysis of existing site;

g. Analysis of the relationship of vegetation and slope stability; and

2	h. Conceptual site development plans and cross-sections.
3	2. Geotechnical Design Investigation Report. A geotechnical design investigation report is
4	required for site development activities that propose design and construction measures at the slope
5	crest, face and/or toe. If a designed structure does not impact slope stability or coastal processes,
6	the report will not be required to perform all items listed under this section, as long as each item is
7	addressed and the report details why a particular item does not apply. The report shall include all
8	items considered necessary by the engineer to fully address the engineering design requirements
9	of the site. The following minimum information is required:
10	a. All the information required under subsection (D)(1), above (Geotechnical Report);
11	b. Geotechnical requirements and measures to reduce risks;
12	c. Geotechnical criteria used for any designs including all critical dimensions, lateral earth
13	pressures, soil bearing pressures, location and limits of structures on or near the slope,
14	maximum constructed slope angles, minimum soil reinforcement embedment, soil compaction
15	requirements, and structure heights;
16	d. Temporary construction slope stability recommendations and analysis of proposed final
17	site stability measures;
18	e. Required construction specifications and construction monitoring procedures;
19	f. Revegetation and surface and groundwater management requirements;
20	g. Evaluation of erosion potential, recommendations for erosion avoidance and any
21	proposed mitigation measures;
22	h. Detailed tabulation of all basic geotechnical engineering test results pertinent to design
23	and construction, and when required for clarification, detailed examples of tests conducted for
24	the project; and
25	i. Information outlined in the geotechnical design investigation report site evaluation
26	checklist (See subsection (F), below).

E. Additional Requirements for Sites in Geologically Hazardous Areas. When a project site is located within a landslide-prone geologically hazardous area, as classified in Section 19.400.415, the following additional project submittal requirements shall apply:

- 1. Erosion Control Information. An evaluation of the erosion potential on the site during and after construction is required. The evaluation shall include recommendations for mitigation, including retention of vegetative buffers and a revegetation program. The geotechnical engineer shall provide a statement identifying buffer areas at the top or toe of a slope based on geotechnical site constraints and the impacts of proposed construction methods on the erosion potential of the slope.
- 2. Seismic Information. The geotechnical engineer shall submit a statement that the design criteria consider the one-in-one-hundred-year seismic event (an earthquake ground motion that has a 40 percent probability of exceedance in 50 years). Calculations of soil bearing capacity, general soil stability, and wall lateral earth pressures shall be adjusted to reflect a one-in-100 year seismic event and the structural plans for the project shall be reviewed by the geotechnical engineer for consistency with these design criteria.
- Analysis for the one-in-one-hundred-year seismic event shall be based on a near crustal event having an assumed magnitude of 6.5 and occurring directly below the site. Based on regional studies performed by others, the department will allow the use of the following minimum general values of horizontal peak ground accelerations for this event:
- a = 0.2g for fill, alluvial soils
- a = 0.17g for till, firm glaciated soils
- a = 0.15g for rock.

- The appropriateness of the above accelerations shall be confirmed by the geotechnical engineer based on the actual site characteristics. Reduction in the above values may be considered when supported by the appropriate analytical evidence. Slope stability, lateral pressures, and liquefaction of the site shall be assessed by using subsurface soil, rock and groundwater conditions, as well as the seismic parameters discussed above.
 - 3. Recommendations on Relative Site Stability. The geotechnical engineer shall make recommendations as to which portion of the site are the least prone to instability and the preferred location of the structure. The limits of any area proposed for grading activity shall be identified.

4. Construction Season Limitation. In general, no excavation will be permitted in landslide-prone geologically hazardous areas during the typically wet winter months. When excavation is proposed, including the maintenance of open temporary slopes, between October 1 and April 30, technical analysis shall be provided to ensure that no environmental harm, threat to adjacent properties, or safety issues would result. In addition, recommendations for temporary erosion control and shoring/mitigating measures shall be provided. The technical analysis shall consist of plans showing mitigation techniques and a technical memorandum from the geotechnical engineer.

- 5. Revisions to Geotechnical Report. Further recommendations shall be provided by the geotechnical engineer should there be additions or exceptions to the original recommendations based on the plans, site conditions, or other supporting data. If the geotechnical engineer who revises the plans and specifications is not the same engineer who prepared the geotechnical report, the new engineer shall, in a letter to the department, express his or her agreement or disagreement with the recommendations in the geotechnical report and state whether the plans and specifications conform to his or her recommendations.
- 6. Plan and Specification Review. The geotechnical engineer shall submit a statement that in his or her judgment, the plans and specifications (if prepared by others) conform to the recommendations in the geotechnical report and that all portions of the site which are disturbed or impacted by the proposed development have appropriate measures or specifications that permit construction to occur while addressing slope stability so that the work does not create additional risk. The statement shall also indicate whether or not a relative gain in slope stability will be achieved after construction is complete.
- 7. Construction Inspection. A final inspection report shall be provided by the geotechnical engineer stating that construction has or has not implemented the design recommendations of the geotechnical report, and evaluating of any deviation from the design recommendations.
- F. Geotechnical Design Investigation Report Site Evaluation Checklist. The following are general report guidelines for geotechnical design investigation reports. The following guidelines are not intended to be all-inclusive. It is the responsibility of the geotechnical engineer to address all factors, which in their opinion are relevant to the site. The checklist information shall be included as part of the geotechnical design investigation report. All items listed below must be addressed in the report. Information shall be provided for those items, which are not relevant to a given site to demonstrate why the items are not applicable.
 - 1. Project Information:

1 a. Site Owner Name; 2 b. Project Proponent Name; 3 c. Shoreline Environment Designation (where applicable); and d. Critical Areas Ordinance (CAO) designations affecting site features. 4 2. Project Description: 5 6 Description of proposed structures, site improvements, and adverse impact avoidance 7 and reduction methods. 8 b. Location and total area of the construction zone. 9 10 19.700.730 Hydrogeological report. 11 The report shall address the impact the proposed land use will have on both the quality and quantity of 12 the water transmitted to the aquifer. 13 A. The report shall be submitted to the department and shall address, at a minimum, the following 14 criteria: 15 Surficial soil type and geologic setting; 16 2. Location and identification of wells within 1,000 feet of the site; 17 3. Location and identification of surface water bodies and springs within 1,000 feet of the site with 18 recharge potential; 19 4. Description of underlying aquifers and aquitards, including water level, gradients and flow 20 direction; 21 Available surface water and groundwater quality data; 22 Effects of the proposed development on water quality; 23 7. Sampling schedules required to assure water quality; 24 Discussion of the effects of the proposed development on the groundwater resource;

1 Recommendations on appropriate BMPs (Best Management Practices) or mitigation to assure 2 no significant degradation of groundwater quality; and 3 Other information as required by the Kitsap Public County Health District. 4 11. The report shall also address the types of pesticides, herbicides and fertilizers that can safely 5 be used for the care of landscaping proposed by the applicant. 6 B. The hydrogeologic report shall be prepared by a professional geologist/hydrologist or by a soil 7 scientist with a strong background in geology (See Section 19.150.410). 8 C. Applications for development or operations with underground storage of petroleum products will be 9 processed using the appropriate procedure as specified in existing Kitsap County ordinances. 10 Analysis for a specific parcel(s), using the criteria outlined below, will be employed to confirm if the 11 soils present require a recharge area designation. Data collection will include, at a minimum, six soil logs 12 to a depth of ten feet (or to a depth four feet below the lowest proposed excavation point whichever is 13 greater) for each acre in the parcel(s) being evaluated. At least one well, two hundred feet or greater in 14 depth with an adequate drilling report, must be available within one mile. The associated data shall be 15 analyzed and included in the hydrogeologic report to determine the presence of highly permeable soils 16 with the recharge area designation. For development proposals within aquifer recharge areas of concern, the hydrogeological report may be 17 18 based on quarter-quarter section basis where the number of wells within a half-mile radius is thirty-six or 19 more. To facilitate computer analysis, the evaluation may be done on a quarter-quarter section basis 20 using the quarter-quarter section in which a parcel of interest is located and all the surrounding quarter-21 quarter sections, in place of the half-mile circle. 22 23 24 25 26 27 28 29

1 2	Chapter 19.800 APPENDICES		
3	The purpose of the appendices is to provide supporting documentation to assist in the implementation of		
4	the o	ordinance	codified in this title.
5	Con	tents:	
6	Арр	endix A	Washington State Wetlands Rating System Categories.
7	App	endix B	Washington State DNR Stream Typing System.
8	Арр	endix C	Kitsap County GIS Database of Critical Areas Information.
9	Арр	endix D	Site Development Figures.
10	Арр	endix E	Kitsap County Geologically Hazardous Area and Buffer Notice to Title.
11	Арр	endix F	Critical Area Decision Types.
12	Арр	endix G	Checklist and Sample Outline for a Delineation Report.
13	Арр	endix H	Mitigation Plan Checklist
14	Арр	endix A -	- Washington State Wetlands Rating System Categories (See Section 19.200.210)
15	This	system u	tilizes a four-tier process. The following text includes an additional categorization system for
16	wetl	ands.	
17	A.	Category	I Wetlands are:
18		1. V	Vetlands that 1) represent a unique or rare wetland type; or 2) are more sensitive to
19		distur	bance than most wetlands; or 3) are relatively undisturbed and contain ecological attributes
20		that a	re impossible to replace within a human lifetime; or 4) provide a high level of functions.
21		2. V	Vetlands with high quality native or regionally rare wetland communities with irreplaceable
22		ecolo	gical functions including, but not limited to, sphagnum bogs and fens, estuarine wetlands,
23		matur	e forested wetlands, or wetlands which qualify for inclusion as a Wetland of High
24		Conse	ervation Value.
25		3. V	Vetlands scoring 23 points or more (out of 27) on the questions related to functions in the
26		Wash	ington State Wetland Rating System for Western Washington, revised 2014, or as hereafter
27		amen	ded.
28	В.	Category	Il Wetlands are:
29		1. V	Vetlands that are difficult, though not impossible, to replace, and provide high levels of some
30		functi	ons.

1		2. Wetlands which are disturbed and may be estuarine and interdunal greater than 1 acre.
2		3. Wetlands scoring between 20-22 points (out of 27) on the questions related to functions in
3		the Washington State Wetland Rating System for Western Washington, revised 2014, or as
4		hereafter amended.
5	C.	Category III Wetlands are:
6		1. Wetlands that are 1) wetlands with a moderate level of functions (scores between 16 – 19
7		points) and 2) interdunal wetlands between 0.1 and 1 acre in size.
8		2. Wetlands scoring between 16 – 19 points and have generally been disturbed in some ways
9		and are often less diverse or more isolated from other natural resources in the landscape than
10		Category II wetlands.
11	D.	Category IV Wetlands are:
12		1. Wetland with the lowest levels of function (scores less than 16 points) and are often heavily
13		disturbed.
14		2. Wetlands that may provide some important functions and have a high probability for
15		successful replacement and/or improvement.
16		
17		
18		
19		
20		
21		
22		
23		
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Appendix B – Washington State Department of Natural Resources Stream Typing System

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Water Type Conversion Table

	1	1
4	Permanent Water Typing	Previous Water Typing
5	Stype S	Type 1
6	Type F	type 2 and 3
7	Type Np	Type 4
/	Type Ns	Type 5

8

- 9 A. "Type S Streams" are those surface waters which meet the criteria of the Washington Department
- 10 of Natural Resources, WAC 222-16-030(1) as now or hereafter amended, as a Type S Water and are
- inventoried as "Shorelines of the State" under the Shoreline Management Master Program for Kitsap
- 12 County, pursuant to RCW Chapter <u>90.58</u>. Type S waters contain salmonid fish habitat.
- 13 B. "Type F Streams" are those surface waters, which meet the criteria of the Washington Department
- of Natural Resources, WAC <u>222-16-030(2)</u> as now or hereafter amended, as Type F Water. Type F
- 15 streams contain habitat for fish.
- 16 C. "Type Np Streams" are those surface waters, which meet the criteria of the Washington
- 17 Department of Natural Resources, WAC <u>222-16-030(3)</u> as now or hereafter amended, as Type Np Water.
- 18 Type Np waters do not contain fish habitat.
- 19 D. "Type Ns Streams" are those surface waters, which meet the criteria of the Washington
- 20 Department of Natural Resources, WAC 222-16-030(4) as now or hereafter amended, as a Type Ns
- 21 Water. These streams are areas of perennial or intermittent seepage, ponds, and drainage ways having
- short periods of spring or storm runoff. Type Ns waters do not contain fish.

23

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Appendix C – Kitsap County's GIS Database of Critical Areas Information

CRITICAL AREA	GIS DATA	INFORMATION SOURCE
Wetlands	National Wetlands Inventory	U.S. Fish and Wildlife Service
Wettallus	Soil Survey of Kitsap County	U.S. Dept. of Agriculture — Natural Resource Conservation Service
	National Wetlands Inventory Information System Database	U.S. Fish and Wildlife Service
Fish And Wildlife Habitat Conservation Areas	Priority Species Habitat Database Washington Rivers	WA. Dept. of Fish and Wildlife
	Waters of Washington State	WA. Dept. of Natural Resources
	Washington Coastal Zone Atlas	WA Dept. of Ecology
	Stream Typing of Select WRIA 15 Watersheds	Wild Fish Conservancy
Frequently Flooded Areas	Flood Insurance Rate Map	Federal Emergency Management Agency
	Washington Coastal Zone Atlas	WA Dept. of Ecology
	Soil Survey of Kitsap County	U.S. Dept. of Agriculture — Natural
On the single-line transfers	Quaternary Geology and	Resource Conservation Service
Geologically Hazardous Areas	Stratigraphy of Kitsap County	Jerald Deeter, 1979
Alcus	Light Distancing and Radar (LiDAR) Mapping	Puget Sound LiDAR Consortium
	Geologically Hazardous Areas Map Update	Kitsap County (GRI Consulting)
	Critical Aquifer Recharge Areas	Kitsap Public Utilities District (PUD) #1
Aquifers	Aquifer Recharge Areas of Concern	Kitsap PUD #1

Principal Aquifers	Kitsap PUD #1
Soil Survey of Kitsap County	U.S. Dept. of Agriculture — Natural Resource Conservation Service

1

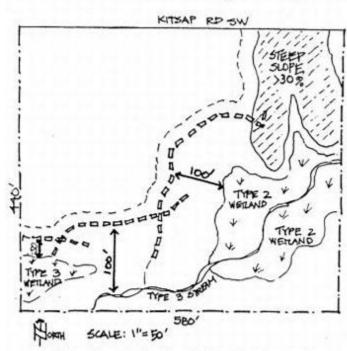
2

Appendix D - Site Development Figures

4

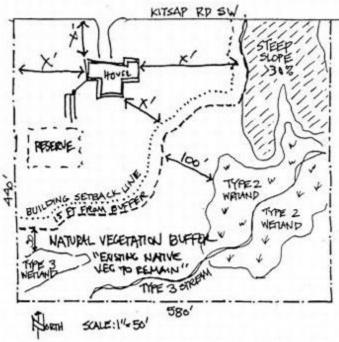
3

Protecting Critical Areas in Residential Sites



Site Characteristics Before Development

The site drawing above shows the location and types of critical areas and the required buffers.



Site Plan Showing Development

You must identify specific items on your site plan development proposal:

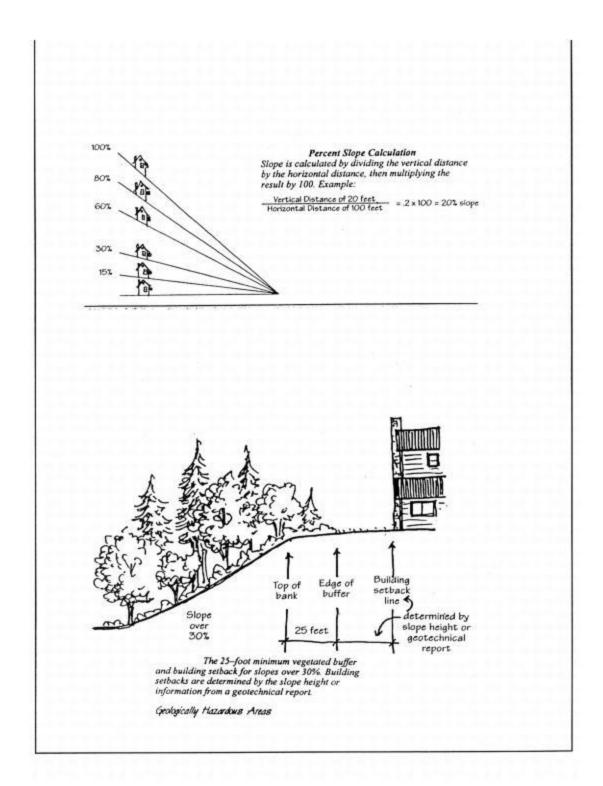
- Location of known critical areas

 Location of the proposed building

 Distance of proposed building from critical areas

 Required vegetated buffer widths on critical areas (Make a note on the plan which reads, "Natural vegetation buffer; existing natural vegetation to remain.")
- · North arrow and plan scale

Site Applications



1	Appendix E – Kit	sap County Geological	y Hazardous Area and But	ffer Notice
2	When recorded, Return to:			
3 4 5 6	Kitsap County Department of Community Development MS-36			
7				
8	Kitsap	County Geologically	Hazardous Area Notice	•
9				
LO	Tax Account # Parcel Number			
l1 l2	ABBREVIATED LEGAL DESC and/or block number; or Short			
L3	Current Property Owner: Lega	l Tax Payer Name		
14 15 16 17 18	NOTICE IS HEREBY GIVEN thazardous area as defined by Ordinance. Abstract or description Information regarding the geol restrictions imposed on the de Community Development in the	the Kitsap County Deparention of the specific types ogically hazardous area, velopment or use of the parents.	tment of Community Develo of risks identified in the geo the associated geotechnical property can be obtained by	pment's Critical Area technical report. I report(s), and any
20				
21	Enter Type of Permit	Application #	, filed on	Date
22 23				
24 25 26 27	Development in geologically he through proper development per alteration of the land and structure occur following a review for co	ractices. To ensure conti	nued safety and habitability geologically hazardous area	any future use and or its buffer may only
28 29 30 31 32	The owner(s) of the property of development on the property of successors, and assignees of damages that result from relial decision lawfully made thereur employee thereof.	given the described condi the risks. The owner(s) on the Kitsap County	tion, and agrees to inform further the property also acknowled Critical Areas Ordinance, o	iture purchasers, edges that any r any administrative
34				
35				
36	STATE OF WASHINGTON)		
37)		
38	COUNTY OF KITSAP)		

1	On this day, before me, personally appeared, to me know be the individual(s) described herein and who executed the within and foregoing instrument, and					
2 3 4	acknowledged that they signed the same purposes therein mentioned.	e as their free and voluntary act and deed, for the uses	and			
5 6		GIVEN under my hand and official seal the	day of			
7						
8						
9		NOTARY PUBLIC in and for the State of Wash	ington,			
10		Residing at				
11	Notary Seal	My Commission expires:				
12						
13						
14						
15	Property Owner signature	Property Owner signature				
16						
47						
17						
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Appendix F – Critical Area Decision Types

2 Below are the decisions and their respective decision-making bodies included in Title 19 of the Kitsap

3 County Code.

CRITICAL AREA DECISION TYPES			
	Type I	Type II	Type III
Written Notice (To Interested Parties and Neighbors Within 400 feet of Project)	No	Yes	Yes
Decision Making Body	Director	Director	Hearing Examiner (Public Hearing)
WETLANDS			
Uses within Wetlands and Buffers	Х		
Mitigation Plans/Requirements	Х		
Buffer Averaging (Cat. III and IV w/habitat scores <5, up to 50%)	Х		
Buffer Averaging (all other wetlands, <25%)	Х		
Administrative Buffer Reduction (<25% and not less than 30 feet for single family residence, and not less than 40 feet for all other uses	X		
Variance (>25% for buffer reduction or averaging, or >50% for buffer averaging of Cat. III and IV wetlands w/habitat scores <5)			X
Appeals			Х
STREAMS AND SHORELINE	s		
Buffer Averaging	Х		
Administrative Buffer Reduction (<25%)	Х		
Administrative Buffer Reduction (25-50% for single family residence)		Х	
Variance (>50% for single family residence, or >25% for all other uses)			X
Appeals			Х
WILDLIFE CONSERVATION AR	EAS		

Habitat Management Plan Approval	Х		
Appeals			X
GEOLOGICALLY HAZARDOUS AREAS (S	STEEP SLO	OPES)	
Buffer/Setback Reduction (with Geotechnical Report Approval)	Х		
Appeals			Х
CRITICAL AQUIFERS RECHARGE	AREAS		
Hydrological Report Approval	Х		
Appeals			Х

1 APPENDIX G – Checklist and Sample Outline for a Delineation Report

At a	MINIMUM, a delineation report should include:
	Field data sheets (complete set that were filled out during the wetland determination and delineation). These could be added as an Appendix to the report.
	A map identifying wetland boundaries and the locations of all data collection points (for large and/or complex projects, a large scale [1":400' to 1":100'] aerial photo with overlays displaying site property and wetland boundaries is helpful). This map must also clearly delineate the boundaries of the area evaluated.
	An explanation of the approach used to delineate the wetlands and synthesize the data. Describe the vegetation, soils, and hydrologic characteristics and summarize the available information used in making the wetland determination. The following are examples of potential sources of information ¹¹ :
	 USGS quadrangle map (or other topographic map of the area).
	National Wetland Inventory (NWI) map.
	 Local wetland inventories.
	■ County soil surveys.
	 Stream and tidal gage data.
	 Previous site documentation and/or analysis (e.g., environmental checklist, environmental impact assessment or statement (EIA or EIS), geotechnical report).
	 Federal Emergency Management Agency (FEMA) flood insurance rate maps.
	 Regional maps that characterize the area.
	 Local experts.
	 USGS land use and land cover maps.
	 Survey plans and engineering designs for the proposed development project.
	Aerial photos.
	 Other site specific information.
	Information on rare plants and high-quality wetlands from the Washington National Heritage Program.
	Information on priority habitats and species from the Washington Department of Fish and Wildlife.

These are potential sources of information that may have been helpful in making a determination, but not all listed sources of information may be applicable to a given situation. The delineator is not required to obtain information from all of the listed sources of information.

The following sample outline for a wetland delineation report has been copied with permission from the *Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual* prepared by the Wetland Training Institute. Additional information can be found at the end of that field guide in the section of the document entitled "Preparing a Delineation Report."

I. Introduction

- A. Who authorized the delineation
- B. Why is it being done
- C. Location of site (Map)
- D. Date of site visit (s)
- E. Identification of delineators

II. Methods

- A. Brief description of method used
- B. Any modification of methods
- C. Sources of existing information used

III. Results and Discussion

- A. Description of the site
 - Topography
 - 2. Plant communities
 - 3. Soils mapped and found (map)
 - 4. Hydrology information
 - 5. Existing wetland mapping (e.g., NWI/state/local)

B. Findings

- Types of wetlands identified (e.g., Cowardin, et al 1979)
 - Description
 - Locations
 - c. Area
 - Contrast with nonwetland
 - e. How was boundary chosen (e.g., feature on the landscape)
- 2. Types of other waters identified
 - Description
 - Locations
 - c. Area
 - d. Contrast with nonwetland
 - e. How was boundary chosen (e.g., feature on the landscape)
- 3. Include maps/drawings showing results

IV. Conclusion

- A. Brief summary of total area and types of wetlands and other regulated waters
- B. Statement regarding the need for permits
- C. Caution that final authority rests with the appropriate agencies

V. Literature Cited

VI. Appendix A (Data Sheets)

APPENDIX H - Mitigation Plan Checklist

Included	Omitted	Introduction and Summary of Document
		Cover / Title Page
		Project Name
		Reference #'s (e.g., Corps application #)
		Date of publication
		Who it was prepared for and by / contact information
		Table of Contents
		List of Figures
		List of Tables
		Responsible Parties
		Executive Summary
		Proposed Development Project
		Project description
		Project location, maps
		Type of development (existing and proposed land uses)
		Size of the development project
		Construction schedule
		Description of the development site (baseline conditions)
		Historic and current land uses and zoning designations
		Existing wetlands on or adjacent to the development site
		Other aquatic resources on or adjacent to the development site
		Known historic or cultural resources on the development site
		Maps showing the baseline conditions of the development site and adjacent properties

Assessment of the Impacts at the Development Site
Area (acreage) of wetland impacts
Description of the water regime
Description of the soils
Description of the vegetation
Description of fauna using the site
Position and function of the wetland(s) in the landscape
Description of functions provided by the wetlands

Wetland rating
Buffers
*Water quality
Mitigation Approach
Mitigation sequencing
Project-specific goals
Mitigation strategy
Proposed Mitigation Site(s)
Location, including map
Site ownership
Site selection rationale
Site constraints
Existing (Baseline) Conditions of the Mitigation Site
Historic and current land uses and zoning designations
Known historic or cultural resources on the mitigation site
Existing wetlands on or adjacent to the development site
Other aquatic resources on or adjacent to the development site
*Maps showing current contours as surveyed. This is needed particularly when mitigation activities will alter ground elevations.
Description of the water regime
Description of the soils
Description of the vegetation
Description of fauna using the site
Position and function of the wetland(s) in the landscape
Description of functions provided by the wetlands
Wetland rating
Buffers

Maps related to the existing conditions of the mitigation site, existing wetlands, and adjacent

*Water quality

properties.

2

Mitigation Site Plans / Design
Description of Site Plan/Design
Description of the water regime and how adequate amounts of water will be provided to support a wetland
Type of development (existing and proposed land uses) Discussion of how the mitigation plan will compensate for lost and degraded functions
Schematic drawings
*Section drawings showing relationship of topography to water regime and vegetation
Grading Plan / Site Maps
Orientation and scale
*Existing and proposed elevation contours
*Spot elevations for low points, high points, and structures
Property boundaries
On-site wetland boundaries
*On-site floodplain and ordinary high water mark boundaries
*Survey of benchmarks
*Location and elevation of soil borings or test pits
*Location and elevation of water level sampling devices
*Location of soils to be stockpiled, if any
*Description of methods of erosion control and bank stabilization
Buffer areas for the mitigation site and their boundaries
Water Regime
Description of the proposed frequency and duration of flooding, inundation, or soil saturation
Description of the proposed groundwater and surface water sources and characteristics
*Description of the elevation of the water table and dates measured
*Engineering drawings of any proposed water control structures

*Description of the elevation of the water table and dates measured
*Engineering drawings of any proposed water control structures
Soils
Soils logs from on-site evaluation
Description of how the soil characteristics will be affected by the mitigation activities
*Description of the elevation of the water table and dates measured
*Engineering drawings of any proposed water control structures

Planting / Landscape Plans
Topographic map showing typical planting scheme (distribution and spacing of vegetation)
List of plant materials
Other planting details
Expected natural revegetation from existing seed bank and natural recruitment from nearby sites.
Description of methods to control invasive species
A plan for irrigating the plants
Description of soil amendments
*Section drawings showing water levels in relation to plant distributions
Description of protective features (fences, signs)
Map of location and type of habitat structures
*Examples of Similar Mitigation Projects
*Description of the experience the designer has had with the type of mitigation proposed
*Examples of other sites that have used the same approach
*Other information that demonstrates that the high-risk plan will be successful
Site-Specific Goals, Objectives, and Performance Standards
Goals
Objectives for each goal
Performance standards for each objective

Monitoring Plan
Variables to be measured
Sampling methods for each variable
Schedule for sampling each variable
A map of sampling locations or describe how the locations with be determined for each monitoring event
*Laboratory methods to be used, if applicable
Timetable for reporting monitoring results to the agencies (final plan only)
Site Protection
Describe measures that will be taken to protect the site over the long term
Copies of legal documents (e.g., conservation easement, deed restriction) (final plan only)

Maintenance and Contingency Plans (final plan only)
Maintenance plan
Description of and reason for each maintenance activity planned
Maintenance schedule for each activity (where applicable)
Contingency plan
Initiating procedures
*Description of contingency funds
Implementation Schedule (final plan only)
Construction sequence for grading, water diversions, plantings, etc.
Time schedule and completions dates
Permit conditions specifying time limits
*Financial Assurances (final plan only)

ltems with asterisk (*) are required for more complex projects. If an item is not required for a draft mitigation plan, it is indicated in parenthesis (final plan only).

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