

Only those portions of Title 18E that are proposed to be amended are shown.
Remainder of text, tables, maps and/or figures is unchanged.

Title 18E

DEVELOPMENT REGULATIONS – CRITICAL AREAS

Chapter 18E.10

GENERAL PROVISIONS

18E.10.070 Administration.

D. Review.

1. **Initial Review.** The Department shall conduct an initial review of any application in accordance with the provisions outlined in Chapter 18.60 PCC, Development Regulations – General Provisions.
2. **Review Responsibilities.**
 - a. The Department is responsible for administration, circulation, and review of any applications and approvals required by this Title 18E PCC.
 - b. The Examiner shall be the decision authority for any approval under this Title 18E PCC requiring a public hearing; including, but not limited to Reasonable Use Exceptions and Variances.
 - c. Other County departments and State agencies, as determined by the Department, may review an application and forward their respective recommendations to the Director or Examiner, as appropriate.
3. **Review Process.**
 - a. The Department shall perform a critical area review for any application submitted for a regulated activity; including, but not limited to those set forth in Section PCC 18E.20.020. Reviews for multiple critical areas shall occur concurrently. For critical areas within shoreline jurisdiction, critical area review shall occur as part of the shoreline review process.
 - b. The Department shall, to the extent reasonable, consolidate the processing of related aspects of other Pierce County regulatory programs which affect activities in regulated critical areas, such as subdivision or site development, with the approval process established herein so as to provide a timely and coordinated review process.
 - c. As part of the review of all development or building-related approvals or permit applications, the Department shall review the information submitted by the applicant to:
 - (1) Confirm the nature and type of the critical area and evaluate any required assessments, reports, or studies;

- 1 (2) Determine whether the development proposal is consistent with this Title
2 18E PCC;
3 (3) Determine whether any proposed alterations to the site containing critical
4 areas are necessary; and
5 (4) Determine if the mitigation and monitoring plans proposed by the applicant
6 are sufficient to protect the public health, safety, and welfare consistent with
7 the goals, purposes, objectives, and requirements of this Title 18E PCC.

8 d. Activities associated with a proposed single-family residence or associated
9 features within an undeveloped lot (one lacking a residential dwelling), may be
10 waived from critical area review requirements when the following conditions
11 have been met:

- 12 (1) The boundary of the critical area can be accurately determined without the
13 need for a field review, using secondary data sources such as, but not
14 limited to: aerial photographs, topographic maps, and floodplain maps;
15 (2) The critical area buffer can be established without field review;
16 (3) All aspects of the project are located outside of the required buffer;
17 (4) The buffer is vegetated consistent with PCC 18E.40.060 G., Buffer and
18 Setback Functioning Condition; and
19 (5) Compliance with the buffer requirement is adequate to protect the regulated
20 species or habitat area from any impacts of the proposed activity. This
21 exemption may not apply where additional protective measures, such as
22 timing restrictions, are required.

23 de. When it is determined that regulated activities subject to SEPA (Title 18D PCC)
24 are likely to cause a significant, adverse environmental impact to the critical
25 areas identified in this Title 18E PCC that cannot be adequately mitigated
26 through compliance with this Title 18E PCC, mitigation measures may be
27 imposed consistent with the procedures established in PCC 18D.40.060.

28 ef. Critical area applications required under this Title shall be approved prior to
29 approval of any related action (parent application) such as, but not limited to, a
30 building permit, land division action, site development action, forest practice
31 application, Tacoma-Pierce County Health Department (TPCHD) permit, use
32 permit, or shoreline permit.

33 f. ~~The requirement to submit critical area assessments, reports, etc. required under
34 this Title may be waived at the Department's discretion when the proposed
35 project area for a regulated activity is located in an area that has been the subject
36 of a previously submitted and approved assessment, report etc. if all of the
37 following conditions have been met:~~

- 38 ~~(1) The provisions of this Title have been previously addressed as part of
39 another approval.
40 (2) There has been no material change in the potential impact to the critical area
41 or required buffer since the prior review.
42 (3) There is no new information available that is applicable to any critical
43 review of the site or particular critical area.
44 (4) The permit or approval has not expired or, if there is no expiration date, no
45 more than five years have elapsed since the issuance of that permit or
46 approval.~~

Chapter 18E.20

USE AND ACTIVITY REGULATIONS

Sections:

- 18E.20.010 Permitted Uses.
- 18E.20.020 Regulated Uses and Activities.
- 18E.20.030 Exemptions.
- 18E.20.035 Review Waiver Allowances.
- 18E.20.040 Nonconforming Uses and Structures.
- 18E.20.050 Reasonable Use Exceptions.
- 18E.20.060 Variances.
- 18E.20.070 Substantial Improvement and Substantial Damage.
- 18E.20.080 Current Use Assessment.

18E.20.010 Permitted Uses.

Uses permitted on properties containing critical areas shall be the same as those permitted in the zone classification shown in the Pierce County Zoning Atlas or those permitted in the Shoreline Environment Designation (SED) unless specifically prohibited by this Title 18E PCC.

18E.20.030 Exemptions.

This Section defines activities that are exempt from the provision of all or part of Title 18E PCC. Additional exceptions from the requirements of this Title are found in PCC 18E.40.030 B., Review Waiver Allowances.

A. Title 18E PCC. The following activities are exempt from Title 18E PCC:

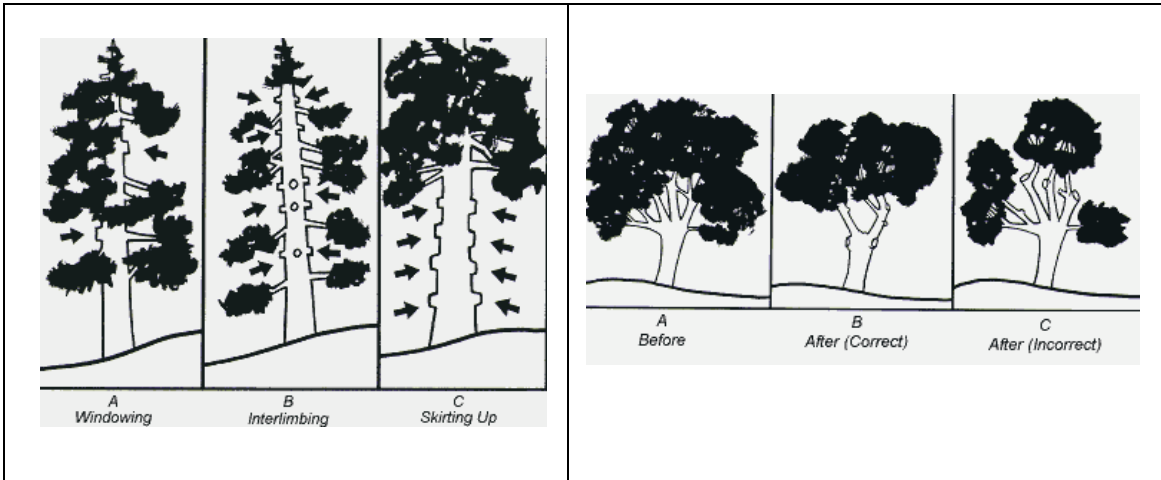
1. Interior or exterior reconstruction, remodeling, or maintenance of existing structures that do not result in an expansion of the building footprint or increase the building height. The exemption shall not apply to reconstruction which is proposed as a result of site or structural damage associated with a critical area, such as slope failure in a landslide hazard area or flooding in a flood hazard area.
2. A one-time expansion of primary single-family residential structures that does not result in the loss of significant trees, or reconstruction of an existing building footprint, when the following criteria are met:
 - a. The structure is located outside any flood hazard or active landslide hazard area;
 - b. The expansion/reconstruction is no greater than 25 percent;
 - c. The expansion/reconstruction either extends away from the shoreline, critical area or related buffer, or occurs parallel to the shoreline, critical area and upon existing impervious surfaces; and
 - d. The expansion/reconstruction is not the result of structural damage associated with a critical area, such as slope failure in a landslide hazard area or flooding in a flood hazard area.
3. A residential building permit for a lot which was created through a land division action subject to previous reports and assessments as required under this Title; provided that the previous reports and assessments adequately identified the impacts associated with the current development proposal; there has been no material change in the potential impact to the critical area or required buffer since the prior review;

1 and there is no new information available that is applicable to the review of the site
2 or the particular critical area.

- 3 4. Maintenance of lawfully established landscaping and gardens within a regulated
4 critical area or its buffer including, but not limited to mowing lawns, weeding,
5 removal of noxious and invasive species as identified by Pierce County, harvesting,
6 and replanting of garden crops, pruning and planting of vegetation to maintain the
7 condition and appearance of such areas as they existed on the effective date of this
8 Title 18E PCC* and planting of indigenous native species.

9
10 Code Revisor's Note: The effective date referred to in PCC 18E.20.030 A.4. above
11 is the effective date of Ordinance No. 2013-45s4.

- 12
13 5. An unpaved access path from a residential dwelling to a shoreline is allowed if:
14 a. The path width is limited to four feet;
15 b. The length of the path is minimized by keeping the path at a right angle to the
16 shoreline to the degree feasible; and
17 c. No trees are removed.
18 6. Recreational activities such as hunting, hiking, fishing, and wildlife viewing that
19 does not involve the construction of trails.
20 7. Enhancement actions that do not involve clearing, grading, or construction activities
21 (e.g., re-vegetation with native plants and installation of nest boxes).
22 8. Minor vegetation removal for purposes of providing views and protecting overhead
23 utility lines. Vegetation removal shall be limited to selective limbing of trees and
24 removal of shrubs. Tree limbing shall be done consistent with the following
25 illustration from Vegetation Management: A Guide for Puget Sound Bluff Property
26 Owners.
27



28 An applicant who wishes to remove entire trees or more than minor amounts of
29 shrub vegetation, or to introduce lawn or landscaped areas, shall complete review as
30 set forth in PCC 18E.40.030, Fish and Wildlife Habitat Conservation Area Review
31 Procedures and Review Waiver Allowances.
32

- 1 9. Existing agricultural activities established prior to February 2, 1992, that after that
2 date do not cause permanent conversion of a critical area through actions such as
3 filling, ditching, draining, clearing, grading, etc., provided that:
 - 4 a. Existing agricultural activities and structures must still comply with the
5 provisions of Chapter 18E.70 PCC, Flood Hazard Areas; and
 - 6 b. Determination of an agricultural exemption status is limited to the specific
7 area(s) upon which lawfully established agricultural activities are being
8 conducted. A determination that an activity is exempt within one portion of a
9 property does not necessarily extend to other portions of the property.
- 10 10. Removal by hand of manmade litter and control of noxious weeds that are included
11 on the State noxious weed list (WAC 16-750) or invasive plant species as identified
12 by Pierce County. Control may be conducted by clipping, pulling, over-shading with
13 native tree and shrub species, or non-mechanized digging. Alternative methods such
14 as mechanical excavation, barrier installation, or herbicide use may be allowed upon
15 approval by the Department and acquisition of any necessary permits.
- 16 11. Activities in artificial channels.
- 17 12. Activities on improved portions of roads, rights-of-way, or easements, provided
18 there is no expansion of ground coverage.
- 19 13. Site investigative work necessary for land use application submittals such as surveys,
20 soil logs, percolation tests, and other related activities. Critical area impacts shall be
21 minimized and disturbed areas shall be immediately restored.
- 22 14. Activities designed for previously approved maintenance and enhancement of
23 critical areas and/or their associated buffers.
- 24 15. Activities undertaken on the site of an existing holding pond where the water flow
25 and/or water table is controlled by a previously approved pump system.
- 26 16. Maintenance of individual cemetery plots in established and approved cemeteries.
- 27 17. Activities in artificial wetlands intentionally created from upland sites including, but
28 not limited to irrigation and drainage ditches, grass-lined swales, canals, detention
29 facilities, wastewater treatment facilities, farm ponds, and landscape amenities; or
30 those wetlands created after July 1, 1990, that were unintentionally created as a
31 result of the construction of a road, street, or highway. Artificial wetlands
32 intentionally created from upland to serve as mitigation are regulated.
- 33 18. Maintenance or reconstruction of existing private roads, driveways, on-site sewage
34 systems, and wells, provided that reconstruction does not involve expansion of
35 facilities, widening, or relocation. Mitigation sequencing is required for temporary
36 impacts associated with reconstruction.
- 37 19. Public and private utility line work (new construction, maintenance, and repair)
38 within improved surfaces (e.g., driveways, parking lots, concrete or asphalt surfaces,
39 gravel roads and road shoulders, and hard surface-earthen rights-of-way, or
40 easements).
- 41 20. Activities in wetland areas managed according to a Special Area Management Plan
42 or other plan adopted by a Pierce County plan or program and specifically designed
43 to protect wetland resources.
- 44 21. Wildfire – Defensible Space Activities in Areas mapped solely as Elk Herd Winter
45 Range. Within existing lots of record located in wildland areas, the following
46 Defensible Space Activities may take place within 30 feet of dwellings, barns, and
47 commercial-use buildings:

- 1 a. Tree limb removal. Where understory shrubs are present below the tree, removal
 2 shall follow the guidelines of PCC 18E.40.070 – Appendix E, Wildfire –
 3 Defensible Space Guidelines. Where understory shrubs are not present, tree
 4 limbs may be removed to a height of 10 feet above the ground;
- 5 b. Interruption of continuous shrub vegetation by selective thinning as defined
 6 within PCC 18E.40.070 – Appendix E, Wildfire – Defensible Space Guidelines;
 7 and
- 8 c. Replacement of evergreen species with less flammable, native species as defined
 9 within PCC 18E.40.070 – Appendix E, Wildfire – Defensible Space Guidelines.
- 10 22. Forest practice activities when conducted in accordance with the requirements of the
 11 Forest Practice Act (Chapter 76.09 RCW) and its rules:
- 12 a. Forest practice activities that meet all of the following:
- 13 (1) Are located outside the urban growth area and located outside any area
 14 designated by Washington Department of Natural Resources (DNR) as
 15 "lands likely to convert" pursuant to RCW 76.09;
- 16 (2) Do not take place on lands platted as of January 1, 1960; and
- 17 (3) Do not result in the conversion of land to a use other than commercial forest
 18 product.
- 19 b. Forest practices that are conducted in accordance with a 10-year forest
 20 management plan approved by the DNR.
- 21 c. Any other forest practice activity that the DNR has determined is exempt from
 22 Pierce County jurisdiction, provided that the DNR has issued a written notice of
 23 this determination to Pierce County.
- 24 23. Maintenance or reconstruction of existing, lawfully established public facilities
 25 provided that reconstruction does not involve expansion of the facility. Mitigation
 26 sequencing is required for temporary impacts associated with reconstruction:
- 27 a. Roads, paths, bicycle ways, trails, bridges, replacement sewer facilities, and
 28 associated storm drainage facilities or other public rights-of-way;
- 29 b. Flood control improvements such as, but not limited to levees, revetments,
 30 floodwalls, regional storm drainage facilities, drainage structures, or channel
 31 capacity projects to protect public infrastructure and/or existing development
 32 when administered by Pierce County Public Works and Utilities, provided that
 33 the work shall:
- 34 (1) Not increase the height of the facility or linear length of the affected stream
 35 edge;
- 36 (2) Not expand the footprint of the facility waterward or into any landward
 37 aquatic habitat; and
- 38 (3) Use approved fish-friendly bioengineering techniques to the extent feasible.
- 39 24. Activities undertaken to comply with a United States Environmental Protection
 40 Agency superfund related order or a Washington Department of Ecology order
 41 pursuant to the Model Toxics Control Act, including the following activities:
- 42 a. Remediation or removal of hazardous or toxic substances;
- 43 b. Source control; and
- 44 c. Natural resource damage restoration.
- 45 **B. Chapter 18E.50 PCC.** The following uses or activities are exempt solely from the
 46 provisions of Chapter 18E.50 PCC, Aquifer Recharge and Wellhead Protection Areas:
 47 1. Sewer lines and appurtenances.

1 2. Biosolids and sludge land application sites provided that these activities comply with
2 the requirements established in WAC 173-200, 173-216, and 173-304.

3 3. Single-family and two-family dwellings and associated accessory structures.

4 ~~The following activities are exempt from the provisions of this Title:~~

5 A. ~~Existing agricultural activities established prior to February 2, 1992; that after that date,~~
6 ~~do not cause permanent conversion of a critical area through actions such as filling,~~
7 ~~ditching, draining, clearing, grading, etc. provided that:~~

8 1. ~~Existing agricultural activities and structures shall comply with the provisions of~~
9 ~~Chapter 18E.070 Flood Hazard Areas; and~~

10 2. ~~Determination of an agricultural exemption status is limited to the specific area(s)~~
11 ~~upon which lawfully established agricultural activities are being conducted. A~~
12 ~~determination that an activity is exempt within one portion of a property does not~~
13 ~~necessarily extend to other portions of the property.~~

14 B. ~~The following forest practice activities shall be exempt from the provisions of this Title~~
15 ~~when conducted in accordance with the requirements of the Forest Practice Act (Chapter~~
16 ~~76.09 RCW) and its rules:~~

17 1. ~~Forest practice activities that meet all of the following:~~

18 a. ~~Are located outside the urban growth area and located outside any area~~
19 ~~designated by Washington Department of Natural Resources as "lands likely to~~
20 ~~convert" pursuant to RCW 76.09;~~

21 b. ~~Do not take place on lands platted as of January 1, 1960; and~~

22 c. ~~Do not result in the conversion of land to a use other than commercial forest~~
23 ~~product.~~

24 2. ~~Forest practices that are conducted in accordance with a ten-year forest management~~
25 ~~plan approved by the Washington State Department of Natural Resources (DNR).~~

26 3. ~~Any other forest practice activity that the DNR has determined is exempt from~~
27 ~~Pierce County jurisdiction, provided that the DNR has issued a written notice of this~~
28 ~~determination to Pierce County.~~

29 C. ~~Maintenance or reconstruction of existing, lawfully established public facilities provided~~
30 ~~that reconstruction does not involve expansion of the facility:~~

31 1. ~~Roads, paths, bicycle ways, trails, bridges, and associated storm drainage facilities or~~
32 ~~other public rights-of-way;~~

33 2. ~~Flood control improvements, such as but not limited to levees, revetments,~~
34 ~~floodwalls, regional storm drainage facilities, drainage structures, or channel~~
35 ~~capacity projects to protect public infrastructure and/or existing development, when~~
36 ~~administered by Pierce County Public Works and Utilities provided that the work~~
37 ~~shall:~~

38 a. ~~Not increase the height of the facility or linear length of the affected stream edge;~~

39 b. ~~Not expand the footprint of the facility waterward or into any landward aquatic~~
40 ~~habitat; and~~

41 c. ~~Use approved fish friendly bioengineering techniques to the extent feasible.~~

42 D. ~~Maintenance or reconstruction of existing private roads, driveways, onsite septic~~
43 ~~systems, and wells, provided that reconstruction does not involve expansion of facilities,~~
44 ~~widening, or relocation.~~

45 E. ~~Public and private utility line work (new construction, maintenance and repair) within~~
46 ~~improved surfaces (e.g., driveways, parking lots, concrete or asphalt surfaces, gravel~~
47 ~~roads and road shoulders, and hard surface earthen rights-of-way or easements).~~

- 1 F. ~~Reconstruction, remodeling, or maintenance of existing single-family residential~~
2 ~~structures and accessory structures that are located outside a flood hazard area and active~~
3 ~~landslide hazard area, provided that a one-time-only expansion of the building footprint~~
4 ~~does not increase by more than 25 percent and that the new construction or related~~
5 ~~activity extends away from the critical area or related buffer. The exemption shall not~~
6 ~~apply to reconstruction which is proposed as a result of structural damage associated~~
7 ~~with a critical area, such as slope failure in a landslide hazard area or flooding in a flood~~
8 ~~hazard area. Expansion up to 25 percent may also occur in a direction parallel to the~~
9 ~~critical area or related buffer if the expansion takes place upon existing impervious~~
10 ~~surfaces.~~
- 11 G. ~~Reconstruction, remodeling, or maintenance of structures, other than single-family~~
12 ~~structures and accessory structures that are located outside a flood hazard area and active~~
13 ~~landslide hazard area, provided that such reconstruction, remodeling, or maintenance~~
14 ~~does not increase the floor area nor extend beyond the existing ground coverage. The~~
15 ~~exemption shall not apply to reconstruction which is proposed as a result of site or~~
16 ~~structural damage associated with a critical area, such as slope failure in a landslide~~
17 ~~hazard area or flooding in a flood hazard area.~~
- 18 H. ~~Site investigative work necessary for land use application submittals such as surveys,~~
19 ~~soil logs, percolation tests, and other related activities. Critical area impacts shall be~~
20 ~~minimized and disturbed areas shall be immediately restored.~~
- 21 I. ~~Emergency action necessary to prevent imminent threat or danger to public health or~~
22 ~~safety, or to public or private property, or serious environmental degradation:~~
- 23 1. ~~The Department shall review all proposed emergency actions to determine the~~
24 ~~existence of the emergency and reasonableness of the proposed actions taken,~~
25 ~~however, post-emergency actions, such as submittal of permits and completion of~~
26 ~~County review shall be required by the Department. Modification or removal of the~~
27 ~~emergency repair work or mitigation may be required by the Department.~~
- 28 2. ~~Shoreline erosion protection measures shall only be allowed as an emergency action~~
29 ~~when the owner can demonstrate that there is an imminent threat to an existing~~
30 ~~residential, commercial, industrial, or agricultural structure or associated utilities.~~
- 31 J. ~~Activities in artificial wetlands intentionally created from upland sites, including but not~~
32 ~~limited to irrigation and drainage ditches, grass-lined swales, canals, detention facilities,~~
33 ~~wastewater treatment facilities, farm ponds, and landscape amenities; or, those wetlands~~
34 ~~created after July 1, 1990, that were unintentionally created as a result of the~~
35 ~~construction of a road, street, or highway. Artificial wetlands intentionally created from~~
36 ~~upland to serve as mitigation are regulated.~~
- 37 K. ~~Activities affecting:~~
- 38 1. ~~Category III wetlands less than 2,500 square feet in size which are not contiguous~~
39 ~~with a freshwater or estuarine system, or part of a mosaic wetland complex, as set~~
40 ~~forth in Section 18E.30.020 D.3.~~
- 41 2. ~~Category IV wetlands less than 10,000 square feet in size which are not contiguous~~
42 ~~with a freshwater or estuarine system, or part of a mosaic wetland complex, as set~~
43 ~~forth in Section 18E.30.020 D.4.~~
- 44 3. ~~Activities within Category III and IV wetlands that are exempt under this Section~~
45 ~~may still be considered regulated under the provisions of Title 17A, Construction~~
46 ~~and Infrastructure Regulations—Site Development and Stormwater Drainage.~~
- 47 L. ~~Placement of access roads, utility lines, and utility poles across a Category IV wetland~~
48 ~~and/or a buffer for a Category IV wetland if there is no reasonable alternative.~~

- 1 ~~M. Activities on improved portions of roads, rights of way, or easements, provided there is~~
2 ~~no expansion of ground coverage.~~
- 3 ~~N. Activities in wetlands in areas managed according to a Special Area Management Plan~~
4 ~~or other plan adopted by Pierce County and specifically designed to protect wetland~~
5 ~~resources.~~
- 6 ~~O. Removal by hand of manmade litter and control of noxious weeds that are included on~~
7 ~~the State noxious weed list (WAC 16 750) or invasive plant species as identified by~~
8 ~~Pierce County. Control may be conducted by clipping, pulling, over shading with native~~
9 ~~tree and shrub species, or non mechanized digging. Alternative methods such as~~
10 ~~mechanical excavation, barrier installation, or herbicide use may be allowed upon~~
11 ~~approval by the Department and acquisition of any necessary permits.~~
- 12 ~~P. Activities undertaken to comply with a United States Environmental Protection Agency~~
13 ~~superfund related order or a Washington Department of Ecology order pursuant to the~~
14 ~~Model Toxics Control Act, including the following activities:~~
- 15 ~~1. Remediation or removal of hazardous or toxic substances;~~
16 ~~2. Source control; and~~
17 ~~3. Natural resource damage restoration.~~
- 18 ~~Q. Maintenance of lawfully established landscaping and gardens within a regulated critical~~
19 ~~area or its buffer, including but not limited to mowing lawns, weeding, removal of~~
20 ~~noxious and invasive species as identified by Pierce County, harvesting, and replanting~~
21 ~~of garden crops, pruning and planting of vegetation to maintain the condition and~~
22 ~~appearance of such areas as they existed on the effective date of this Title and planting~~
23 ~~of indigenous native species.~~
- 24 ~~R. Activities designed for previously approved maintenance and enhancement of critical~~
25 ~~areas and/or their associated buffers.~~
- 26 ~~S. Activities undertaken on the site of an existing holding pond where the water flow~~
27 ~~and/or water table is controlled by a previously approved pump system.~~
- 28 ~~T. A residential building permit for a lot which was created through a land division action~~
29 ~~subject to previous reports and assessments as required under this Title; provided that~~
30 ~~the previous reports and assessments adequately identified the impacts associated with~~
31 ~~the current development proposal as outlined in Section 18E.10.070 D.3.f.~~
- 32 ~~U. Maintenance of individual cemetery plots in established and approved cemeteries.~~
- 33 ~~V. Activities that are within a fish and wildlife habitat area buffer or wetland buffer, but are~~
34 ~~separated from the critical area by an existing permanent substantial improvement, such~~
35 ~~as a paved area, dike, levee, or other permanent structure which serves to eliminate or~~
36 ~~greatly reduce the impact of the proposed activity upon the critical area. The~~
37 ~~Department shall review the proposal to determine the likelihood of associated impacts.~~
- 38 ~~W. Passive recreation such as hunting, hiking, fishing, and wildlife viewing that does not~~
39 ~~involve the construction of trails.~~
- 40 ~~X. Enhancement actions that do not involve clearing, grading, or construction activities~~
41 ~~(e.g., revegetation with native plants and installation of nest boxes). Enhancement~~
42 ~~activity proposals shall be reviewed by the Department.~~
- 43 ~~Y. Repair or replacement of existing shoreline erosion protection measures or structures~~
44 ~~provided that the repair or replacement shall not serve to expand the area protected by~~
45 ~~any existing structures or increase the length of erosion protection structures nor~~
46 ~~increase the impacts of such structures on regulated fish or wildlife habitat.~~

- 1 ~~Z. In addition to the general exemptions listed in this Section, the following uses or~~
2 ~~activities are exempt from the provisions of Chapter 18E.50, Aquifer Recharge and~~
3 ~~Wellhead Protection Areas:~~
- 4 ~~1. Sewer lines and appurtenances;~~
 - 5 ~~2. Biosolids and sludge land application sites provided that these activities comply with~~
6 ~~the requirements established in WAC 173-200, 173-216, and 173-304; and~~
 - 7 ~~3. Single family and two family dwellings and associated accessory structures.~~

8 ~~AB. Activities in artificial channels.~~

9 ~~AC. Trails. Construction of pedestrian trails of 12 foot maximum width may be allowed~~
10 ~~within the buffer of a wetland or a buffer of a riparian area, lake or pond subject to the~~
11 ~~following criteria:~~

- 12 ~~a. The trail is constructed within the outer 10 percent of the standard (i.e. not averaged~~
13 ~~or reduced) wetland buffer or buffers identified in Table 18E.40.060.~~
- 14 ~~b. The trail is constructed of pervious material.~~
- 15 ~~c. The trail results in less than 6,000 square feet of disturbance.~~
- 16 ~~d. The trail requires less than 50 cubic yards of fill.~~
- 17 ~~e. The trail does not cross or alter any regulated drainage features or natural waters.~~
- 18 ~~f. The trail is located outside of any fish and wildlife habitat conservation areas and~~
19 ~~their associated buffers (except as noted in a. above).~~
- 20 ~~g. The trail is a component of a pedestrian only public trail system approved by the~~
21 ~~County Council.~~
- 22 ~~h. Mitigation, pursuant to Section 18E.40.050, for impacts is provided through the~~
23 ~~standard wetland review process.~~

24 ~~AD. Wildfire Defensible Space Activities in Areas mapped solely as Elk Herd Winter~~
25 ~~Range. Within existing lots of record located in wildland areas, the following~~
26 ~~Defensible Space Activities may take place within 30 feet of dwellings, barns, and~~
27 ~~commercial use buildings:~~

- 28 ~~1. Tree limb removal. Where understory shrubs are present below the tree, removal~~
29 ~~shall follow the guidelines of Section 18E.40 Appendix E. Where understory~~
30 ~~shrubs are not present, tree limbs may be removed to a height of 10 feet above the~~
31 ~~ground;~~
- 32 ~~2. Interruption of continuous shrub vegetation by selective thinning as defined within~~
33 ~~Section 18E.40 Appendix E;~~
- 34 ~~3. Replacement of evergreen species with less flammable, native species as defined~~
35 ~~within Section 18E.40 Appendix E.~~

36
37 **18E.20.035 Review Waiver Allowances.**

38 This Section defines the types of projects or situations that may be waived from all or
39 portions of this Title's review requirements. A determination on the appropriateness of a waiver
40 will be made by County staff through discussion with an applicant or review of plans. An
41 applicant waived from the review requirements of this Section may still be required to complete
42 title and land division notification, and critical area boundary identification requirements.

43 **A. Previously Studied Areas.** Projects located in an area that has been the subject of a
44 previously submitted and approved assessment, report, etc., and staff determines that all
45 of the following conditions are met:

- 46 1. The provisions of Title 18E PCC have been previously addressed as part of another
47 approval;

2. There has been no material change in the potential impact to the critical area or required buffer since the prior review;
3. There is no new information available that is applicable to any review of the site or particular critical area; and
4. No more than five years have elapsed since the issuance of the previous permit or approval.

B. Substantial Improvements. Activities that are within a fish and wildlife habitat area buffer or wetland buffer but that are separated from the critical area by an existing permanent substantial improvement which serves to eliminate or greatly reduce the impact of the proposed activity upon the critical area. Examples of features that may serve as a substantial improvement include permanent structures (such as homes and commercial buildings), larger paved areas (such as commercial parking lots and major roadways), dikes, and levees. Smaller structures (such as sheds and outbuildings) and smaller paved areas may not serve as substantial improvements.

C. Category III and IV Wetlands. The mitigation requirements of PCC 18E.30.050, Wetland Mitigation, will not be imposed for activities within:

1. Category III wetlands less than 2,500 square feet in size which are not:
 - a. Contiguous with a freshwater or estuarine system;
 - b. Located within shoreline jurisdiction; or
 - c. Part of a mosaic wetland complex, as set forth in PCC 18E.30.020 E.2.
2. Category IV wetlands less than 10,000 square feet in size which are not:
 - a. Contiguous with a freshwater or estuarine system;
 - b. Located within shoreline jurisdiction; or
 - c. Part of a mosaic wetland complex, as set forth in PCC 18E.30.020 E.2.

D. Shoreline Stabilization.

1. Repair of existing shoreline stabilization measures or structures.
2. Replacement of existing shoreline stabilization measures or structures with a similar structure may be allowed if there is a demonstrated need to protect principal uses or structures from erosion caused by currents, tidal action, or waves. The repair or replacement shall not serve to expand the area protected by any existing structures or increase the length of erosion protection structures and should be designed to decrease the impacts of such structures on regulated fish or wildlife habitat. See also Chapter 18S.30.070 PCC for Shoreline Stabilization and Chapter 18E.110 PCC for Erosion Hazard Area regulations.

E. Public Trails. Construction of a pedestrian trail may be allowed within the buffer of a wetland, riparian area, lake or pond, without the requirement to submit a wetland analysis report, subject to the following criteria:

1. The trail shall be 12 foot maximum width;
2. The trail shall be constructed within the outer 10 percent of the standard (i.e. not averaged or reduced) wetland buffer or buffers identified in PCC 18E.30.060, Table 1;
3. The trail shall be constructed of pervious material;
4. The trail shall disturb less than 6,000 square feet;
5. The trail requires less than 50 cubic yards of fill;
6. The trail does not cross or alter any regulated drainage features or natural waters;
7. The trail shall be located outside of fish and wildlife habitat conservation areas and their associated buffers other than those associated with a riparian area, lake or pond; and

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8. The trail shall be a component of a pedestrian-only public trail system approved by the County Council.

F. **Emergency Action.** Emergency action necessary to prevent imminent threat or danger to public health or safety, or to public or private property, or serious environmental degradation shall be allowed as follows:

1. For a threat to be considered "imminent" there must be a reasonable expectation that the threat will occur prior to the time period necessary to obtain the necessary County reviews;
2. The landowner shall be required to complete applicable County review after the fact and may be required to modify or remove any emergency repair work and provide mitigation for any impacts to regulated areas;
3. This exemption does not apply to shoreline erosion protection measures unless the landowner can demonstrate that there is an imminent threat to an existing residential, commercial, industrial, agricultural structure, or associated utilities;
4. The landowner is encouraged to contact the Department prior to undertaking emergency action to evaluate the emergency and proposed actions.

Chapter 18E.40

**REGULATED FISH AND WILDLIFE SPECIES
AND HABITAT CONSERVATION AREAS**

Sections:

- 18E.40.010 Purpose.**
- 18E.40.020 Fish and Wildlife Species and Habitat Conservation Areas.**
- 18E.40.030 Fish and Wildlife Species and Habitat Conservation Area Review Procedures.**
- 18E.40.040 Fish and Wildlife Habitat Conservation Area Standards.**
- 18E.40.050 Mitigation Requirements.**
- 18E.40.060 Buffer Requirements.**
- 18E.40.070 Appendices.**
 - A. Abbreviated Planting Plan.**
 - BA. Habitat Assessment Letters.**
 - CB. Habitat Assessment Studies.**
 - DC. Habitat Assessment Reports.**
 - ED. Monitoring Requirements.**
 - FE. Wildfire – Defensible Space Guidelines.**

18E.40.020 Fish and Wildlife Species and Habitat Conservation Areas.

- D. **Habitats of Local Importance.** Documented habitat areas or potential habitat areas and point locations for fish and wildlife species. These areas include specific habitat types, which are infrequent in occurrence in Pierce County and may provide specific habitats with which endangered, threatened, sensitive, candidate, or monitor fish and wildlife species have a primary association, such as breeding habitat, winter range, and movement corridors. These areas include the following:
 - 1. Oregon white oak trees and woodlands. Oregon white oak woodlands, stands, and individual trees meeting the following criteria shall be considered priority habitat and shall be subject to protection under the provisions of this Chapter:
 - a. Priority Oregon White Oak Woodlands. Stands of Oregon white oak or oak/conifer associations where the stand is at least one acre in size and the canopy coverage of the oak component of the stand is greater than or equal to 25 percent. (See Figure 18E.40-1 in Chapter 18E.120 PCC.)
 - b. Significant Oaks and Stands. Within the urban growth area, single oaks or stands of oaks smaller than one acre in size when any of the following criteria are met:
 - (1) Individual trees having a diameter at breast height of 20 inches or more; or
 - (2) Oregon white oak stands in which the oak trees have an average diameter at breast height of 15 inches or more regardless of stand size.
 - 2. Prairies.
 - 3. Old growth/mature forests.
 - 4. Caves.
 - 5. Cliffs.
 - 6. Snag-rich areas and downed logs. Priority logs are ≥ 30 cm (12 in) in diameter at the largest end, and ≥ 6 m (20 feet) long. Priority snag and downed log habitat includes individual snags and/or logs, or groups of snags and/or logs of exceptional value to

- wildlife due to their scarcity or location in a particular landscape. Areas with abundant, well-distributed snags and logs are also considered priority snag and log habitat. Examples include large, sturdy snags adjacent to open water, remnant snags in developed or urbanized settings, and areas with a relatively high density of snags.
7. Elk herd winter range.
 8. Talus. Talus areas that support pika or rock rabbit, Van Dyke's salamander, western redback salamander, northern alligator lizard, or western fence lizard.
 9. Commercial and recreational shellfish areas.
 10. Kelp and eelgrass beds.
 11. Herring, smelt, and sandlance spawning areas.
 12. ~~Waters of the state and/or a~~ Natural waters and adjacent riparian-shoreline areas (165 feet landward measured from the ordinary high water mark) including:
 - a. All water bodies classified by the Washington Department of Natural Resources (DNR) water typing classification system as detailed in WAC 222-16-030 and -031.
 - b. All waters that support regulated fish or wildlife species (i.e., areas that have connectivity to fish bearing waters and may potentially provide habitat given no natural barriers to fish passage).
 - c. Ponds and their submerged aquatic beds.
 - d. Side channels and/or off-channel habitat.
 13. Estuaries and tidal marshes.
 14. Connectable relic channels and oxbows. A relic channel or oxbow may be considered connectable when any of the following criteria are met:
 - a. The channel or oxbow is associated with the river during high flow events;
 - b. The depth of the channel or oxbow is at or very near the groundwater elevation;
 - c. The channel or oxbow is likely to be captured by the river during high flow events;
 - d. Excavation between the channel or oxbow and river will not result in adverse impacts to local groundwater levels or adjacent wetlands.
 15. Wetlands (refer to Chapter 18E.30 PCC).
 16. Heron rookeries.
 17. Cavity nesting duck habitat.
 18. Western bluebird non-artificial nesting sites.
 19. Marine Shoreline Critical Salmon Habitat.
 20. Critical saltwater habitats include all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as herring, smelt and sandlance; subsistence, commercial, and recreational shellfish beds; mudflats, intertidal habitats with vascular plants, and areas with which priority species have a primary association.

E. **Potential Fish and Wildlife Habitat Conservation Areas.** Potential regulated fish and wildlife habitat conservation areas, as depicted on the ~~Critical Areas Atlas~~ **County Geographic Information System (GIS)-Critical Fish and Wildlife Habitat Area Maps**, are those areas where the suspected presence of regulated fish or wildlife species is sufficient to require fish or wildlife habitat conservation area review. (See Figure 18E.40-2 in Chapter 18E.120 PCC.) Potential regulated fish and wildlife habitat conservation areas are determined using the following criteria:

1. A habitat area identified on one of the maps listed in PCC 18E.10.140 – Appendix A, G. (includes but is not limited to breeding habitat, winter ranges, movement corridors, kelp and eelgrass beds, commercial and recreational shellfish areas, oak

1 woodlands, rivers, streams, lakes, ponds, etc., as outlined in Section PCC
2 18E.40.020 A.-D. above) plus the adjacent 165 feet surrounding the habitat area.
3 Note: the 165 foot distance around rivers, streams, lakes, and ponds shall be
4 measured from the ordinary high water mark.

- 5 2. A point location identified on one of the maps listed in PCC 18E.10.140 – Appendix
6 A, G. (including, but not limited to nests, dens, rookeries, etc.) plus the adjacent 800
7 feet surrounding the point location.
- 8 3. Bald eagle foraging areas (1/2 mile from the nest in either direction along the
9 shoreline and 250 feet landward measured from the ordinary high water mark).

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11 **18E.40.030 Fish and Wildlife Habitat Conservation Area Review Procedures.**

12 **A. General Requirements.**

- 13 1. With the exception of the Marine Shoreline Critical Salmon Habitat data layer which
14 is designated and will be regulated according to the mapped area, the ~~Pierce County~~
15 ~~Critical Areas Atlas~~ Geographic Information System (GIS)–Critical Fish and
16 Wildlife Habitat Area Maps provide an indication of where potential regulated fish
17 and wildlife habitat areas are located within the County. The presence or location of
18 a potential regulated fish or wildlife species, habitat area, or point location that has
19 not been mapped, but that may be present on or adjacent to a site, shall be
20 determined using the procedures and criteria established in this Chapter.
- 21 2. The Department will complete a review of the ~~Critical Areas Atlas~~ County
22 Geographic Information System (GIS)–Critical Fish and Wildlife Habitat Area Maps
23 and other source documents for any proposed regulated activity to determine
24 whether the site for the regulated activity is located within a potential regulated fish
25 or wildlife habitat. Identification of a potential regulated fish or wildlife habitat area
26 may also occur as a result of field investigation conducted by Department or
27 Washington Department of Fish and Wildlife (WDFW) staff.
- 28 3. Except as allowed in PCC 18E.20.030, Exemptions, or PCC 18E.40.030 B., Review
29 Waiver Allowances, ~~W~~hen the Department's maps, sources, or field investigation
30 indicates that the site for a proposed regulated activity is located within a potential
31 regulated fish or wildlife habitat area, the Department shall require the submittal of a
32 fish and wildlife application and ~~the completion of a habitat assessment to determine~~
33 ~~the presence or absence of regulated fish or wildlife species or habitat.~~ The habitat
34 assessment shall be documented as set forth in subsection PCC 18E.40.030 B.,
35 below. (See Figure 18E.40-3 in Chapter 18E.120 PCC.)
- 36 4. When the Department confirms that the waiver requirements of PCC 18E.40.030 B.
37 have been met, title and land division notification and critical area boundary
38 identification requirements may still be imposed.
- 39 45. Projects undergoing review for regulated fish and wildlife habitat areas shall be
40 routed to tribal agencies with jurisdiction for review. Tribes will have an
41 opportunity to provide specific species or habitat related information on proposed
42 development sites. If necessary, the Department will seek additional assistance from
43 ~~the Washington Department of Fish and Wildlife~~ WDFW and similar appropriate
44 State and Federal agencies.
- 45 56. Approval of a fish and wildlife application shall be granted upon a determination that
46 the habitat assessment and mitigation plan, if applicable, are thorough and accurate
47 and meet all requirements of ~~this Title~~ 18E PCC.

67. If application of the standards contained in this Chapter would deny all reasonable use of a site, the applicant may pursue a Reasonable Use Exception as set forth in Section PCC 18E.20.050 unless in a shoreline jurisdiction where a shoreline variance will be required per Title 18S PCC, Development Policies and Regulations – Shorelines.

78. Unless otherwise stated in this Chapter, the critical area protective measure provisions contained in Section PCC 18E.10.080 shall apply.

B. **Habitat Assessment.** A ~~h~~Habitat ~~a~~Assessment is a site investigation process to evaluate the potential presence or absence of a regulated fish or wildlife species or habitat affecting a subject property and the potential for impacts to such features as a result of a development proposal.

1. The applicant may select a wetland specialist or a fish or wildlife biologist, as allowed by this Section, or Department staff to conduct a ~~h~~Habitat ~~a~~Assessment to determine whether or not a regulated fish or wildlife habitat area, point location, and any associated buffer are located on the site for a proposed development as outlined below:

- a. Applicants for single-family dwellings or agricultural activities may retain Department staff to complete the ~~h~~Habitat ~~a~~Assessment by submitting a fish and wildlife habitat area application, as follows:
- b. Applicants for all other types of activities shall retain a wetland specialist, fishery or wildlife biologist.

(1) ~~Requests for Department staff to conduct a habitat assessment shall be accompanied with a fish and wildlife habitat area application and associated fee(s).~~

2.(2) If Department staff ~~conducts the habitat assessment and~~ determines that no regulated fish or wildlife habitat areas, point locations, or associated buffers are present on the site, ~~the property owner will be informed in writing, and then fish and wildlife habitat area review will be considered complete.~~

3. If Department staff identify regulated fish or wildlife habitat areas, point locations, or associated buffers on the site and all aspects of the project are outside of regulated areas, an Approval document will be provided to the property owner to be recorded on title.

4.(3) If Department staff ~~conducts the habitat assessment and~~ determines that a regulated area (fish or wildlife habitat areas, point locations, or associated buffers) is ~~are~~ present on the site, ~~and all aspects of the project are not located outside of regulated areas, then the Department will offer the applicant has the option of redesigning the project so as to avoid regulated areas, proposing a modification to any required buffer, proposing to use an applicable standard within either complying with standard requirements set forth in PCC Section 18E.40.040, or seeking approval of an alternate approach. If the project is redesigned to avoid regulated areas, no further review is needed. Otherwise, the For alternate approaches, applicant shall be required to submit a h~~Habitat ~~a~~Assessment ~~s~~Study or a ~~h~~Habitat ~~a~~Assessment ~~r~~Report as outlined in subsection PCC 18E.40.030 ~~B.1.b C.5.~~

b. ~~If the regulated fish or wildlife habitat area is a point location or species related habitat area, then a fish or wildlife biologist, as appropriate, shall conduct the habitat assessment. If the regulated fish or wildlife habitat area is solely related to the presence of a natural water, then either a fish or wildlife biologist or~~

1 Wetland Specialist may conduct the habitat assessment. In either instance the
2 following documentation shall be submitted to the Department.

- 3 5. When the Habitat Assessment is completed by a consultant, the following
4 documentation shall be submitted to the Department.
- 5 a.(1) **Letter.** If the field investigation determines that a fish or wildlife habitat
6 conservation area, point location or associated buffer a regulated area is not
7 located on the site, then a Hhabitat Aassessment Lletter shall be submitted for
8 County review. The habitat assessment Lletter shall meet the requirements
9 contained in PCC 18E.40.070 – Appendix BA. (See Figure 18E.40-3 in Chapter
10 18E.120 PCC.)
 - 11 b.(2) **Study.** If the field investigation determines a fish or wildlife habitat
12 conservation area, point location, or associated buffer is located on the site and
13 the proposed regulated activity complies with the standards set forth in Section
14 18E.40.040 and the buffer requirements of Table 18E.40.040-1, Submerged
15 Aquatic Vegetation, and Table 18E.40.060-1, Fish and Wildlife Habitat
16 Conservation Area Buffer Requirements, or the standards of PCC 18E.40.040 as
17 set forth in Section 18E.40.060, then a Hhabitat Aassessment Sstudy shall be
18 submitted for County review. The habitat assessment Sstudy shall meet the
19 requirements contained in PCC 18E.40.070 – Appendix CB. (Also see Figure
20 18E.40-3 in Chapter 18E.120 PCC.)
 - 21 c.(3) **Report.** If the field investigation determines a fish or wildlife habitat
22 conservation area, point location or associated buffer If a regulated area is
23 located on the site but the proposed development activity does not or cannot
24 comply with the requirements of Table 18E.40.040-1, Submerged Aquatic
25 Vegetation, and Table 18E.40.060-1, Fish and Wildlife Habitat Conservation
26 Area Buffer Requirements, or the standards of PCC 18E.40.040 standards set
27 forth in Section 18E.40.040 or the buffer requirements as set forth in Section
28 18E.40.060, then a Hhabitat Aassessment Rreport shall be submitted for County
29 review. The habitat assessment Rreport shall meet the requirements contained in
30 PCC 18E.40.070 – Appendix DC. (Also see Figure 18E.40-3 in Chapter
31 18E.120 PCC.)
 - 32 d.(4) Habitat Aassessments shall be submitted to the Department for review and
33 approval together with a fish and wildlife habitat area application and associated
34 fee(s).
 - 35 e.(5) Habitat Aassessments shall be prepared, signed, and dated by a wetland
36 specialist, fisheries or wildlife biologist, as applicable to the particular species or
37 habitat type.
 - 38 f. A Joint Aquatic Resources Permit Application (JARPA) may be submitted for
39 projects occurring in water, instead of a Habitat Assessment Study or Report, as
40 long as it contains the information required by PCC 18E.40.070 – Appendices C
41 and D.
 - 42 (6) Habitat assessment reports shall address the mitigation requirements set
43 forth in Section 18E.40.050.
- 44 26. All habitat assessments documents submitted under the requirements of this Chapter
45 18E.40 PCC shall, at a minimum, include the following:
- 46 a. The parcel number of the subject property.
 - 47 b. The site address of the subject property, if one has been assigned by the County.

- c. The date and time when the site evaluation for the habitat assessment was conducted and the date when the habitat assessment was prepared.
 - d. The credentials of the fish or wildlife biologist who prepared the habitat assessment.
 - e. The mailing address and phone number of the property owner and the fish or wildlife biologist that prepared the habitat assessment.
 - f. A detailed description of the vegetation on and adjacent to the site.
 - g. Identification and a detailed description of any critical fish or wildlife species or habitats, as set forth in Section PCC 18E.40.020, on or adjacent to the site and the distance of such habitats or species in relation to the site. Describe efforts to determine the status of any critical species in the project area, including information on survey methods, timing, and results of surveys for species or suitable habitat identification.
 - h. Include any information received from biologists with special expertise on the species or habitat type, such as WDFW, Tribal, USFS, or other local, regional, federal, and university fish, wildlife and habitat biologists and plant ecologists. Include any such conversations in the habitat assessment and cite as personal communication.
 - i. A map showing the location of the site, including written directions.
 - j. The Department may also require that the applicant request a separate evaluation of the site by WDFW staff to confirm the findings of the habitat assessment.
37. The Department shall review the habitat assessment and either:
- a. Accept the habitat assessment and approve the critical fish and wildlife application; or
 - b. Reject the habitat assessment and notify the applicant in writing of the reasons why the habitat assessment was rejected.
- C. **Combined Habitat Assessment – Wetland Review Process.** When both wetland review and a habitat assessment are required the Department's maps, sources, or field investigation indicates that the site of a proposed regulated activity is located within both a potential regulated fish and wildlife habitat area and a wetland or buffer, the applicant may be allowed to submit the results of both in one document the habitat assessment, as set forth in subsection 18E.40.040 B., and wetland review, as defined in Section 18E.30.030, as one application along with the associated fee.

18E.40.040 Fish and Wildlife Habitat Conservation Area Standards.

A. General.

- 1. This Section provides Standards to be used for regulated activities that demonstrably cannot be maintained outside of buffers. Discussion of a particular activity in this Section does not mean that an applicant does not need to adhere to the avoidance and minimization requirements of Title 18E PCC. All regulated activities shall be located outside fish and wildlife habitat conservation areas and their associated buffers, as outlined in Section 18E.40.060.
- 2. a. Where avoidance is not possible encroachment into the standard or a averaged buffer, as allowed by Section 18E.40.060 cannot be avoided, the applicant may follow be able to minimize review or mitigation requirements by following the buffer modification allowance of PCC 18E.40.060 and the standards outlined in PCC Section 18E.40.040, subsections B., C., or D.

- 1 3. b. If neither the buffer modification allowances nor standards are applicable or
 2 feasible, ~~If a regulated activity cannot meet the requirements of Section~~
 3 ~~18E.40.040, subsections B., C., or D~~ then an applicant may need to pursue a fish
 4 and wildlife variance or reasonable use exception as outlined in Chapter 18E.20
 5 PCC.
 6 24. ~~When~~ If the Department determines that mitigation is necessary to offset the
 7 identified impacts from a proposed development, the applicant shall comply with the
 8 mitigation requirements set forth in ~~PCC Section 18E.40.050~~.
 9 35. Wetlands shall be regulated pursuant to the requirements contained in Chapter
 10 18E.30 PCC.

11 B. ~~Riparian Areas, Ponds, Marine Waters Designated as Shoreline Critical Salmon~~
 12 ~~Habitat, Lakes, Water Bodies and Associated Buffers.~~ Upon demonstration that
 13 avoidance and minimization are not possible, the following series of activity-specific
 14 standards may be utilized to minimize review and mitigation requirements. The
 15 following specific regulated activities may occur within a water body ~~riparian area,~~
 16 river, stream, pond, marine water designated as Marine Shoreline Critical Salmon
 17 Habitat, lake, or associated buffer subject to the following standards:

- 18 1. **Clearing and Grading.** When clearing and grading is permitted as part of an
 19 authorized regulated activity or as otherwise allowed in these standards, the
 20 following shall apply:
 21 a. Grading is allowed only during the dry season, which is typically regarded as
 22 beginning on May 1st and ending on October 1st of each year, provided that the
 23 Department may extend or shorten the dry season on a case-by-case basis,
 24 determined on actual weather conditions. Clearing and grading may be allowed
 25 during the wet season if all drainage will flow away from any waterbody/
 26 watercourse.
 27 b. Filling or modification of a wetland or wetland buffer is permitted only if it is
 28 conducted as part of an approved wetland permit issued by the Department.
 29 c. The soil duff layer shall remain undisturbed to the maximum extent possible.
 30 Where feasible, any soil disturbed shall be redistributed to other areas of the
 31 project site.
 32 d. The moisture-holding capacity of the topsoil layer shall be maintained by
 33 minimizing soil compaction or reestablishing natural soil structure and
 34 infiltrative capacity on all areas of the site that impervious surfaces do not cover.
 35 e. Erosion and sediment control that meets or exceeds the standards set forth in the
 36 Pierce County Stormwater Drainage Manual shall be provided.
 37 2. ~~Hazard Tree Removal, Vegetation Removal, Disturbance, and Introduction.~~
 38 ~~Vegetation removal shall be allowed subject to the following standards:~~
 39 ~~a. Hazard trees may be cut provided that:~~
 40 a. Hazard trees determined to pose an imminent threat or danger to public health or
 41 safety, or to public or private property, or serious environmental degradation
 42 may be removed or topped by the landowner prior to receiving written approval
 43 from Pierce County provided that within 14 days following such action, the
 44 landowner shall submit the necessary report and replanting schedule
 45 demonstrating compliance with PCC 18E.40.040 B.2.b.(1) through (3) below.
 46 b. Hazard trees not posing an imminent threat or danger may be removed subject to
 47 the following standards:

1 (1) The applicant submits a report from a certified arborist, licensed landscape
2 architect, or professional forester that documents the hazard and provides a
3 replanting schedule for the replacement trees and receives written approval
4 from Pierce County authorizing tree removal;

5 (2) Tree cutting shall be limited to limbing and crown thinning, unless
6 otherwise justified by the landowner's expert. Where limbing or crown
7 thinning is not sufficient to address the hazard, trees should be topped to
8 remove the hazard rather than cut at or near the base of the tree. All
9 vegetation cut (tree stems, branches, tops, etc.) shall be left within the
10 critical area or buffer unless removal is warranted due to the potential for
11 disease transmittal to other healthy vegetation; and

12 (3) The landowner shall replace any trees that are felled or topped with new
13 trees at a ratio of two replacement trees for each tree felled or topped. Tree
14 species that are native and indigenous to the site shall be used;

15 ~~(4) Hazard trees determined to pose an imminent threat or danger to public
16 health or safety, or to public or private property, or serious environmental
17 degradation may be removed or topped by the landowner prior to receiving
18 written approval from Pierce County provided that within 14 days following
19 such action, the landowner shall submit the necessary report and replanting
20 schedule demonstrating compliance with 18E.40.040 B.2.a.(1) through (3)
21 above.~~

22 ~~b. Trimming of vegetation for purposes of providing view corridors will be allowed
23 without a complete mitigation plan provided that trimming shall be limited to
24 view corridors of 20 feet in width or less and that benefits to fish and wildlife
25 habitat are not reduced. Trimming shall be limited to hand pruning of branches
26 and vegetation. Trimming shall not include felling, topping, or removal of trees.
27 An applicant who wishes to remove trees or create a view corridor of larger size
28 must complete review as set forth in Section 18E.40.030.~~

29 ~~c. Vegetation and tree removal subject to the conditions contained in an approval
30 for a regulated activity.~~

31 ~~d. Introduced vegetation shall be limited to species that are native and historically
32 indigenous to the site.~~

33 **3. Fencing.**

34 a. Fencing shall be placed in such a manner as to maintain wildlife movement
35 corridors and not create any fish passage blockages.

36 b. The Department has the authority to approve the location, type, and height of any
37 proposed or required fencing unless superseded by any Federal or State agency
38 approvals.

39 **4. Shoreline Erosion Control Stabilization Measures.** New or replacement shoreline
40 erosion control measures, or replacement structures that either expand the area
41 protected or increase the impacts of such structures on regulated fish or wildlife
42 habitat, shall be subject to the following standards:

43 a. The proposal complies with the provisions set forth in Chapter 18E.110 PCC,
44 Erosion Hazard Areas.

45 b. The applicant has submitted a habitat assessment report, as set forth in PCC
46 Section 18E.40.030.
47

- 1 c. The ~~Habitat~~ ~~Assessment~~ ~~Report~~ demonstrates the following:
- 2 (1) Natural shoreline processes will be maintained. The project will not result
- 3 in increased beach erosion or alterations to, or loss of, shoreline substrate
- 4 within 1/4 mile of the site.
- 5 (2) The shoreline erosion control measure will not adversely impact critical fish
- 6 or wildlife habitat areas or associated wetlands.
- 7 (3) Adequate mitigation measures, as set forth in ~~PCC Section~~ 18E.40.050, are
- 8 provided that ensure no net loss of intertidal or riparian habitat or function
- 9 occurs as a result of the proposed shoreline erosion control measure.
- 10 (4) No alteration of intertidal migration corridors occurs as a result of the
- 11 proposed shoreline erosion control measure.
- 12 5. **Streambank Stabilization.** Streambank stabilization to protect new structures from
- 13 future channel migration is not permitted except when such stabilization is achieved
- 14 through bioengineering or soft armoring techniques or public flood control projects.
- 15 Streambank stabilization shall comply with the provisions set forth in Chapter
- 16 18E.70 ~~PCC~~.
- 17 6. **Launching Ramps – Public or Private.** Launching ramps may be allowed when
- 18 the applicant has submitted a habitat assessment report as set forth in ~~Section~~ ~~PCC~~
- 19 18E.40.030 that has demonstrated the following:
- 20 a. The project will not result in increased beach erosion or alterations to, or loss of,
- 21 shoreline substrate within 1/4 mile of the site.
- 22 b. The ramp will not adversely impact critical fish or wildlife habitat areas or
- 23 associated wetlands.
- 24 c. Adequate mitigation measures, as set forth in ~~Section~~ ~~PCC~~ 18E.40.050, are
- 25 provided that ensure no net loss of intertidal or riparian habitat or function occurs
- 26 as a result of the ramp.
- 27 d. No alteration of intertidal migration corridors as a result of the ramp.
- 28 7. **Docks.** Repair and maintenance of an existing dock or pier or construction of a new
- 29 dock or pier shall be permitted subject to the following:
- 30 a. Repair and maintenance:
- 31 (1) There is no increase in the use of materials creating shade for predator
- 32 species or eelgrass;
- 33 (2) There is no expansion in overwater coverage;
- 34 (3) There is no new spanning of waters between 3 and 13 feet deep;
- 35 (4) There is no increase in the size and number of pilings; and
- 36 (5) There is no use of toxic materials (such as creosote) that come in contact
- 37 with the water.
- 38 b. New docks and piers are subject to compliance with any WDFW HPA or US
- 39 Army Corps of Engineers permit conditions and with any mitigation required by
- 40 the County to ensure no net loss of regulated species or habitat or shoreline
- 41 function.
- 42 8. **Roads, Trails, Bridges, and Rights-of-Way.** Construction of trails, roadways, and
- 43 minor road bridging may be allowed subject to the following standards:
- 44 a. There is either no feasible alternative route with less impact on the environment
- 45 or it has been approved by the County Council as part of a nonmotorized public
- 46 trail system.
- 47 b. The crossing allows for uninterrupted downstream movement of wood and
- 48 gravel.

- c. Mitigation, pursuant to Section PCC 18E.40.050, for impacts is provided.
- d. Road bridges are designed according to the WDFW Habitat and Lands Environmental Division's Fish Passage Design at Road Culverts, March, 1999 and the NMFS Guidelines for Salmonid Passage at Stream Crossings, 2000.
- e. Trails and associated viewing platforms shall be made of pervious materials.

9. **Utility Facilities.**

- a. Installation of a utility is permitted if constructed in an existing, improved roadway, ~~driveable~~ drivable surface or shoulder, in Pierce County rights-of-way subject to compliance to the Pierce County Manual on Accommodating Utilities in the Right-of-Way road.
- b. New utility lines and facilities are permitted to cross regulated streams and bodies of water if they comply with the following standards:
 - (1) Avoid critical fish and wildlife habitat areas to the maximum extent possible.
 - (2) Crossings are contained within the footprint of an existing road or utility crossing where possible.
 - (3) Avoid paralleling the stream or following a down-valley course near the channel.
 - (4) Do not increase or decrease the natural rate of shore migration or channel migration.
 - (5) Bore beneath the scour depth and hyporheic zone of the water body and CMZ where feasible. Whenever boring under the channel is not feasible then any channel crossings shall occur at an angle that is between 60 and 90 degrees from the centerline of the channel.

~~10. **Public Flood Protection Measures.** New public flood protection measures and expansion of existing ones may be approved, subject to the County's review and approval of a habitat assessment report or the approval of a Federal Biological Assessment.~~

10. **In-stream Structures.** A new in-stream structure (e.g., such as but not limited to high flow bypass, sediment ponds, in-stream ponds, retention and detention facilities, tide gates, dams, weirs, engineered wood systems, etc.) shall be allowed only as part of an approved mitigation or restoration project or watershed basin plan approved by the County and upon acquisition of any required State or Federal permits. The structure shall be designed to avoid modifying flows and water quality in ways that may adversely affect critical fish species.

11. **Stormwater Conveyance Facilities.** Conveyance structures whose sole purpose is to convey stormwater already treated for quality, or water bypassed around water quality treatment facilities pursuant to an approved stormwater plan, may be constructed subject to the following standards:

- a. No other feasible alternatives with less impact exist;
- b. Mitigation for impacts is provided;
- c. Stormwater conveyance facilities shall incorporate fish habitat features;
- d. Vegetation shall be maintained and, if necessary, added adjacent to all open channels and ponds in order to retard erosion, filter out sediments, and shade the water.

12. **On-Site Sewage Systems and Wells.**

- ~~a. New on-site sewage systems and individual wells are permitted if accessory to an approved structure.~~

- 1 b. Repairs to failing on-site sewage systems associated with an existing structure
2 shall be accomplished by utilizing one of the following methods that result in the
3 least impact:
- 4 a.(1) Connection to an available public sewer system pursuant to Title 13 PCC;
5 b.(2) Replacement with a new on-site sewage system located in a portion of the site
6 that has already been disturbed by development and is located landward as far as
7 possible, provided the proposed sewage system is in compliance with the
8 provisions in Chapter 18E.70 PCC; or
9 c.(3) Repair to the existing on-site ~~septic~~ sewage system.
- 10 134. **New Agricultural Activities.** New agricultural activities are permitted subject to
11 the following:
- 12 a. Agricultural activities and structures shall comply with the provisions of Chapter
13 18E.70 PCC Flood Hazard Areas.
- 14 b. The agricultural activity is in compliance with the USDA, NRCS farm
15 management standards.
- 16 c. A copy of an approved NRCS or Pierce County Conservation District farm
17 management plan that documents compliance with the USDA, NRCS farm
18 management standards has been submitted to the Department for review and
19 approval.
- 20 15. ~~Structures and Landscaped Areas.~~ New construction, redevelopment, reconstruction,
21 or additions or expansions of single family, two family, multi family,
22 mobile/manufactured homes, commercial, industrial or agricultural building
23 structures and associated landscaped areas and other related appurtenances
24 (driveways, utilities, accessory structures, parking areas, etc.) that exceed the
25 exemption standards set forth in Section 18E.20.030 F. and G. may be permitted
26 subject to the following:
- 27 a. ~~The proposed single family, multi family, commercial, industrial, or agricultural~~
28 ~~building structure, accessory structures, or related appurtenances (e.g., wells,~~
29 ~~septic systems, sheds, driveways, parking areas) is located on a lot that was~~
30 ~~vested (see Chapter 18.160) prior to March 1, 2005, subject to the following~~
31 ~~conditions:~~
- 32 (1) ~~Applicants shall demonstrate there are no other feasible alternatives on the~~
33 ~~lot that would allow the proposed development to occur completely outside~~
34 ~~the fish or wildlife habitat conservation area or the required buffer.~~
- 35 (2) ~~The principle structure, accessory structures or related appurtenances (such~~
36 ~~as landscaped areas, wells, onsite septic systems, etc.) cannot be located~~
37 ~~outside the fish or wildlife habitat conservation area or required buffer due~~
38 ~~to topographic constraints of the parcel, parcel size and/or location of the~~
39 ~~parcel in relation to the limits of the fish or wildlife habitat conservation~~
40 ~~area or required buffer.~~
- 41 (3) ~~If applicable, buffer averaging pursuant to Section 18E.40.060 C.1. or a~~
42 ~~buffer reduction/building setback variance has been reviewed, analyzed, and~~
43 ~~rejected as a feasible alternative to encroachment into the fish or wildlife~~
44 ~~habitat conservation area or associated buffer.~~
- 45 (4) ~~The habitat assessment report includes a buffer enhancement plan as part of~~
46 ~~the mitigation required by Section 18E.40.050. The buffer enhancement~~
47 ~~plan shall use native, non-invasive plant species that are indigenous to the~~
48 ~~underlying soils and plant community types contained within the project~~

1 area and shall substantiate that an enhanced buffer will improve the
2 functional attributes of the buffer to provide additional protection for fish or
3 wildlife habitat values.

- 4 ~~b. The proposed development is not located on a transitory feature such as a~~
5 ~~sandbar, spit, or sand point.~~
- 6 ~~e. Maximum disturbance (including the principal structure, accessory structures,~~
7 ~~and related appurtenances such as landscaped areas, wells, onsite septic systems,~~
8 ~~etc.) within the habitat area and/or associated buffer shall be limited to 50~~
9 ~~percent of the area of the buffer to a maximum of 5,000 square feet, unless~~
10 ~~otherwise specified in Section 18E.40.040 B.15.d. f.~~
- 11 ~~d. Development that exceeds the requirements outlined in 18E.20.040, must be~~
12 ~~located landward to the extent possible and is prohibited within 50 feet of any~~
13 ~~Type S, F1, F2, or N1 water, channel migration zone, side channel, spring, or~~
14 ~~off channel habitat.~~
- 15 ~~e. Development that exceeds the requirements outlined in 18E.20.040, must be~~
16 ~~located landward to the extent possible and is prohibited within 35 feet of any~~
17 ~~Type N2 or N3 water, including connectable relic channels or oxbows.~~
- 18 ~~f. Expansions and redevelopment projects shall be limited to the lesser of 1,000~~
19 ~~additional square feet of disturbance area or the same area and disturbance~~
20 ~~criteria that would have been permitted if the site were undeveloped.~~
- 21 ~~g. The area not disturbed by development shall be managed for native or approved~~
22 ~~vegetation and planted with native or approved vegetation where necessary~~
23 ~~following adopted guidelines to reestablish natural forested conditions (example:~~
24 ~~WDFW's Restoring the Watershed, A Citizen's Guide to Riparian Restoration in~~
25 ~~Western Washington).~~
- 26 ~~h. The proposal complies with the standards set forth in Chapter 18E.70, Flood~~
27 ~~Hazard Areas.~~
- 28 ~~i. To avoid stormwater impacts, impervious surface shall be limited to the~~
29 ~~minimum amount necessary to accommodate the proposed development. Where~~
30 ~~possible, impervious surfaces such as driveways, sport courts, patios, etc. shall~~
31 ~~be made of pervious materials and rooftop runoff shall be dispersed and directed~~
32 ~~into bio-retention facilities.~~
- 33 ~~j. The conversion of lots from single-family to any other land use (e.g., multi-~~
34 ~~family, commercial, industrial, agricultural) permitted in the underlying zone,~~
35 ~~except forest land or natural resource conservation uses, is prohibited.~~

36 **146. Alteration of Watercourses.** Alterations and relocations of watercourses, including
37 stabilization projects, shall not degrade fish habitat and shall be subject to the
38 following provisions:

- 39 a. Structures that cross all watercourse and water bodies shall meet fish habitat
40 requirements of the Washington State Department of Fish and Wildlife
41 (WDFW).
- 42 b. Any culverts that are used on fish-bearing watercourses shall be arch/bottomless
43 culverts or equivalent that provides comparable fish protection, and must meet
44 fish habitat requirements of the latest edition of WDFW's Design Manual for
45 Culverts.
- 46 c. Bridges or other crossings shall allow for uninterrupted downstream movement
47 of wood and gravel, be as close to perpendicular to the watercourse as possible,
48 and be designed to minimize fill and to pass the base flood flows.

- d. Watercourse alterations shall maintain natural meander patterns, channel complexity, and floodplain connectivity. Where feasible, such characteristics shall be restored as part of the watercourse alteration.
- e. The applicant shall identify the channel migration zone for the watercourse at the project site and for a reasonable reach upstream and downstream of the site, and shall not undertake actions as part of the alteration that would in any way inhibit movement of the channel.
- f. Existing culverts that do not meet fish habitat requirements shall be removed or replaced as part of an approved watercourse alteration project.
- g. Watercourse alteration projects shall not result in a fish blockage of side channels. Known fish barriers into side channels shall be removed as part of the approved watercourse alteration project.
- h. For any watercourse alteration of a Type S or F water (pursuant to ~~PCC Section~~ 18E.40.060 B.) whose channel is subject to migration, bioengineered (soft) armoring of streambanks is required to allow for woody debris recruitment, gravels for spawning, and creation of side channels. The bioengineering technique used must be designed in accordance with the latest edition of WDFW's Integrated Streambank Protection Guidelines.

157. Artificial Channels – Type FW.

- a. New activities adjacent to artificial channels – type FW are exempt from the buffering provisions of ~~this Title~~ 18E PCC.
- b. Protection of these channels will be provided through compliance with all of the following:
 - (1) A 15-foot building setback shall be maintained from the ordinary high water mark or top of bank of the channel.
 - (2) Clearing and grading activities within the building setback shall comply with the requirements of ~~Section~~ PCC 18E.40.040 B.1.
 - (3) A silt fence shall be installed along the outer edge of the developed area, which shall be no closer to the channel than the top of bank or ordinary high water mark.
- c. The Department may also require the applicant to do any of the following:
 - (1) Post signs along the channel indicating the presence of the fish and wildlife habitat area. Sign design shall be established by the Department.
 - (2) Construct permanent fencing along the top of bank of the channel.
- d. Any proposed channel alteration will require the submittal of a fish and wildlife application, as set forth in PCC 18E.40.030, and a habitat assessment report as defined within ~~Section~~ PCC 18E.40.070 – Appendix C.

1618. Wildfire Defensible Space Activities. Within existing lots of record located in wildland areas, creation of a defensible space for protection against wildfire may be allowed in buffer areas located within 30 feet of dwellings, barns, and commercial-use buildings. These allowances do not apply to features such as swing sets, fences, dog houses, and other structures that can be easily relocated. The following defensible space activities may be allowed:

- a. Tree limb removal. Where understory shrubs are present below the tree, removal shall follow the guidelines of ~~Chapter~~ Section 18E.40.070 PCC – Appendix E. Where understory shrubs are not present, tree limbs may be removed to a height of 10 feet above the ground;

- b. Interruption of continuous shrub vegetation by selective thinning as defined within ~~Chapter~~ **Section 18E.40.070 PCC** – Appendix E;
- c. Replacement of evergreen species with less flammable, native species as defined within ~~Chapter~~ **Section 18E.40.070 PCC**– Appendix E.

C. Oregon White Oak Trees and Woodlands.

1. **Habitat Protection.** Oak woodlands, stands, and individual trees meeting the criteria set forth in ~~Section~~ **PCC 18E.40.020 D.** shall be protected as follows:

a. **Priority Oregon White Oak Woodlands.**

- (1) Priority Oregon white oak woodlands shall be protected through inclusion within a conservation tract or alternative protective mechanism meeting the requirements set forth in ~~Section~~ **PCC 18E.10.080 D.** The tract shall extend a minimum of 5 feet beyond the outermost dripline of the trees within the woodland.
- (2) A minimum of 80 percent of the Oregon white oak trees on site having a diameter at breast height of six inches or larger shall be preserved within the conservation tract.
- (3) The conservation tract shall be maintained in an undisturbed state except for periodic watering, grass mowing of not more than four times per year, and hand removal of noxious or invasive plants, including conifer seedlings and saplings.
- (4) No clearing, grading, filling, or construction of any kind shall occur within the conservation tract.
- (5) Use of pesticides, herbicides, rodenticides, fungicides, or fertilizers in the conservation tract shall be prohibited.
- (6) All oak snags and broken, diseased and dying oak trees and live oak trees with cavities, heartwood rot, and insect infestations shall be retained within the conservation tract.
- (7) Downed or felled oak trees within the conservation tract shall be retained, provided that such trees may be selectively cut to further enhance habitat value.
- (8) Top-cut (leave main trunk standing) selective oak trees in dense, even-aged oak stands to encourage oak regeneration and create oak snags. Select top-cut, prune, or limb these individual oaks between December and May. Very old or large oaks as defined in **PCC 18E.40.020 D.** shall not be removed.
- (9) Conifers that encroach on oaks within a conservation tract may be removed.
- (10) Plant Oregon white oak acorns and oak seedlings to encourage regeneration as necessary in conservation tracts.

b. **Significant Oaks and Stands.**

- (1) Significant Oaks. Seventy percent of all Oregon white oaks having a diameter at breast height of 20 inches or greater shall be preserved.
- (2) Significant Oak Stands. A minimum of 50 percent of the Oregon white oak trees within the stand shall be preserved.
- (3) Downed or felled oak trees and snags within significant oak stands shall be retained when located within a tract of land separate from individually owned lots.
- (4) The largest of the significant trees on the site shall be preserved within a conservation tract. The remaining trees may be located within individually owned lots or a separate tract(s) at the discretion of the developer.

- 1 2. **Protection of Trees During Construction.** Trees conserved pursuant to this
2 subsection shall be protected before and during site development and construction
3 through adherence to the following requirements:
- 4 a. A tree protection area shall be designed to protect each tree or tree stand during
5 site development and construction. Tree protection areas may vary widely in
6 shape, but must extend a minimum of 5 feet beyond the existing tree canopy area
7 along the outer edge of the dripline of the tree(s), unless otherwise approved by
8 the Department.
 - 9 b. Tree protection areas shall be added and clearly labeled on all applicable site
10 development and construction drawings, submitted to the Department.
 - 11 c. Temporary construction fencing at least 30 inches tall shall be erected around the
12 perimeter of the tree protection areas prior to the initiation of any clearing or
13 grading. The fencing shall be posted with signage clearly identifying the tree
14 protection area. The fencing shall remain in place through site development and
15 construction.
 - 16 d. No clearing, grading, filling, or other development activities shall occur within
17 the tree protection area, except where approved in advance by the Department
18 and shown on the approved plans for the proposal.
 - 19 e. No vehicles, construction materials, fuel, or other materials shall be placed in
20 tree protection areas. Movement of any vehicles within tree protection areas
21 shall be prohibited.
 - 22 f. No nails, rope, cable, signs, or fencing shall be attached to any tree proposed for
23 retention.
 - 24 g. The Department may approve the use of alternate tree protection techniques if an
25 equal or greater level of protection will be provided.

26 **D. Submerged Aquatic Vegetation (SAV).** Eelgrass, kelp, and intertidal vascular plants
27 shall be protected by maintaining an undisturbed area between regulated activities
28 described in Table 18E.40.040-1 and the boundary of the bed. Limited activity may
29 occur within the undisturbed area (i.e., foot traffic and temporary storage of materials
30 associated with permitted activities). Table 18E.40.040-1 indicates the baseline
31 undisturbed area width for each type of regulated activity. These widths may be
32 adjusted by the Department during the review process to reflect site specific conditions,
33 current research, and advances in technology.

NEW Table 18E.40.040-1. Submerged Aquatic Vegetation	
Regulated Activity	Required Undisturbed Area Widths*
Shellfish Harvest	Intertidal Manual Harvest: 25-feet Intertidal Mechanical Harvest: 50-feet Subtidal: 180-feet
Mussel Rafts	50-feet within low-energy shoreline areas including, but not limited to, bays, coves, and estuaries.
Fish Pens	300-feet
Docks and Floats	4-foot vertical separation or 25-foot horizontal separation, whichever is greater.
Other	A minimum separation of 25-feet shall be required for all other activities.
*Required undisturbed area widths do not apply to eelgrass that establishes naturally following commencement of approved aquaculture activities.	

1
2 **E. Forage Fish Spawning and Herring Holding Areas.**

- 3 1. Regulated activities waterward of the ordinary high water mark (OHWM), in areas
4 of confirmed spawning habitat, shall be suspended during spawning periods unless a
5 survey by a qualified professional confirms that spawning is not occurring or
6 approval is obtained from WDFW.
7 2. Regulated activities in areas where a survey demonstrates that no spawning is
8 occurring are still subject to avoidance and minimization requirements of PCC
9 18E.40.050.

10 **FD. Standards for Other Critical Habitat Areas.** Standards for critical habitat areas not
11 listed subsections in PCC 18E.40.030 A. and B. above shall be administratively
12 developed by the Department in consultation with the Washington Department of Fish
13 and Wildlife (WDFW) and shall be based upon the needs of specific species or habitat
14 area of study. The administrative standards shall be on file with the Department prior to
15 implementation and made available to the public upon request. The Department shall
16 utilize the published WDFW PHS management recommendations. An applicant may
17 request that the Department consult directly with the WDFW on a project specific basis
18 at any time prior to the issuance of the fish and wildlife habitat approval for the project.
19 Once issued, the fish and wildlife habitat approval may be appealed following the
20 procedures set forth in Section PCC 18E.10.090.

21
22 **18E.40.050 Mitigation Requirements.**

- 23 A. ~~All regulated development activities in critical fish and/or wildlife habitat areas and~~
24 ~~associated buffers shall be mitigated in the following order:~~ Regulated activities shall
25 occur as defined in Table 18E.40.050-1, Mitigation Sequencing, with avoidance of
26 impacts being the highest priority. Lower priority measures shall be applied only when
27 higher priority measures are determined to be infeasible or inapplicable.
28
29

1 copy of the HPA, BMP specification, or other documentation to support the
2 implementation of the conservation measures should be included with the Report.
3 PCC 18E.40.070 – Appendix D defines the minimum requirements of a Habitat
4 Assessment Report.

5 ~~Specific mitigation elements are to be discussed within a habitat assessment report, as~~
6 ~~defined in Section 18E.40.070 – Appendix C. The habitat assessment report is to~~
7 ~~provide specific recommendations to reduce, eliminate, or mitigate for the adverse~~
8 ~~effects of the proposed activity. Potential measures include timing restrictions for all or~~
9 ~~some of the activities; clearing limitations; avoidance of specific areas; special~~
10 ~~construction techniques; COHP conditions; HPA conditions; planting with native~~
11 ~~vegetation; habitat enhancement (i.e., fish passage barrier removal); best management~~
12 ~~practices; etc. If applicable, append a copy of the HPA, specifications for BMPs, or~~
13 ~~other documentation to support the implementation of the conservation measure.~~

- 14 ~~C. The Department may require an enhancement plan that provides mitigation for the~~
15 ~~impacts associated with any encroachment into the habitat area or associated buffer, in~~
16 ~~conjunction with a request for buffer averaging/reduction as set forth in Section~~
17 ~~18E.40.060 C., or where vegetation is inadequate to provide optimal function as set forth~~
18 ~~in 18E.40.060 D. The enhancement plan shall use native plant species that are~~
19 ~~indigenous to the project area and shall substantiate that an enhanced habitat area and/or~~
20 ~~buffer will improve the functional attributes of the affected area to provide additional~~
21 ~~protection for critical fish or wildlife habitat, wetlands, landslide hazard areas, or~~
22 ~~adjacent properties that may be affected by the proposal. At a minimum, the~~
23 ~~enhancement plan shall include detailed information on the following:~~
24 ~~1. Type of species proposed.~~
25 ~~2. Exact location of proposed enhancement area.~~
26 ~~3. Timing and schedule of planting.~~
27 ~~4. Schedule for monitoring and maintenance and any financial guarantees for these as~~
28 ~~required in Section 18E.10.080.~~
29 ~~5. Name, address, and telephone number of the person(s) responsible for the~~
30 ~~enhancement project.~~
31 ~~6. Any additional information required by the Department.~~

32 ~~DC. Mitigation of alterations to habitat areas shall achieve equivalent or greater biological~~
33 ~~functions and shall address include mitigation for adverse impacts upstream and~~
34 ~~downstream of the development proposal site. Mitigation shall address each functional~~
35 ~~attribute affected by the alteration to achieve functional equivalency or improvement on~~
36 ~~a per function basis. Mitigation elements to be addressed may include, but are not~~
37 ~~limited to: restoration of previously degraded areas and key habitat features, restoration~~
38 ~~of riparian vegetation communities to provide shade and large woody debris, addition of~~
39 ~~large woody debris, and installation of upland habitat features.~~

40 ~~DE. When mitigation is required in cases in which it is determined that aquatic habitat~~
41 ~~mitigation is appropriate, the following shall apply:~~

- 42 1. Mitigation should shall be provided on-site and in-kind unless, except where the
43 applicant can demonstrates that on-site mitigation is not scientifically feasible or
44 practical due to physical features of the site or where it can be demonstrated that
45 greater functional and habitat values can be achieved through off-site or out-of-kind
46 mitigation; and
47 2. When mitigation cannot be provided on-site, it shall be provided in the immediate
48 vicinity of and within the same watershed as the regulated activity.

1 **E. In-lieu Fee Mitigation and Mitigation Banking.**

- 2 1. An applicant may utilize In-lieu Fee (ILF) Mitigation or Mitigation Banking at such
3 time as the County has developed such programs and the programs have been
4 approved by the appropriate State and Federal agencies.
5 2. Applicants proposing ILF or Mitigation Banking are still subject to the mitigation
6 sequencing requirements of Table 18E.40.050-1.
7

8 **18E.40.060 Buffer Requirements.**

9 A. **Buffer Delineation.** Buffers shall be required as set forth for each habitat type. The
10 required buffers shall be delineated, both on a site plan or plat and on the property, prior
11 to approval of any regulated activity.

12 B. **Buffer Widths.**

13 1. **Riparian Areas, Lakes, and Ponds.**

- 14 a. Riparian areas (rivers, streams, and creeks), lakes, and ponds shall be managed
15 through the use of buffers. ~~Buffers shall be based upon the water type~~
16 ~~classification of the water body as established by the Department of Natural~~
17 ~~Resources Stream Typing Classification System. Refer to Table 18E.40.060 for~~
18 ~~the water types and the associated buffer requirements.~~
19 b. The required riparian buffer width is measured from the edge of the channel
20 migration zone (CMZ), where identified, or the ordinary high water mark,
21 whichever is greater. The criteria for determining the locations of the CMZ is
22 provided in Chapter 18E.70 **PCC**.
23 c. The required lake or pond buffer width is measured from the edge of the ordinary
24 high water mark (OHWM).
25 d. The required buffer shall be extended to include any adjacent regulated
26 wetland(s), landslide hazard areas and/or erosion hazard areas and required
27 buffers. (See Figures 18E.40-4 and 18E.40-5 in Chapter 18E.120 **PCC**.)

28 2. **Marine Waters Designated as Marine Shoreline Critical Salmon Habitat.**

- 29 a. Marine shoreline critical salmon habitat shall be managed through the use of
30 buffers. Refer to Table 18E.40.060-1 for the associated buffer requirements.
31 b. The required buffer width is measured from the edge of the ordinary high water
32 mark (OHWM).
33 c. The required buffer shall be extended to include any adjacent regulated
34 wetland(s), landslide hazard areas and/or erosion hazard areas and required
35 buffers. (See Figures 18E.40-4 and 18E.40-5 in Chapter 18E.120 **PCC**.)

36 3. ~~**Buffers for Other Critical Habitat Areas.** Appropriate buffers for critical habitat~~
37 ~~areas not listed in Table 18E.40.060 shall be determined on a case by case basis,~~
38 ~~based upon the needs of specific species or habitat area of study. The Department~~
39 ~~will coordinate with the Washington Department of Fish and Wildlife in these~~
40 ~~instances to determine an appropriate buffer width and when available shall rely~~
41 ~~upon buffer widths specified in WDFW Priority Habitats and Species management~~
42 ~~recommendations.~~
43

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Table 18E.40.060-1.		
Fish and Wildlife Habitat Conservation Area Buffer Requirements		
Water Type (1)	Water Body Criteria	Buffer Width (2)(4)
Type S1	Marine waters designated as Marine Shoreline Critical Salmon Habitat	100 feet landward from the OHWM
Type F1	All segments of natural waters within the bankfull widths of defined channels or within lakes, ponds, or impoundments which provide habitat for or support any portion of the lifecycle of a critical fish species (3). Waters that are diverted for use by federal, state, tribal, or private fish hatcheries shall be considered to be Type F1 waters upstream from the point of diversion for 1,500 feet and tributaries if highly significant for protection of downstream water quality.	150 feet landward from the OHWM
Type F2	Type F1 water adjacent to a landslide hazard area as set forth in Chapter 18E.80 PCC.	150 feet landward from the OHWM or the minimum buffer distance required in Chapter 18E.80 PCC, whichever is greatest
Type N1	Perennial or seasonal non-fish bearing (3) natural waters within the bankfull widths of defined channels that are not Type F1 or F2 waters but are located within ¼ mile of the confluence with a Type F1 or F2 water.	115 feet landward from the OHWM
Type N2	Perennial or seasonal non-fish bearing (3) natural waters within bankfull width of defined channels that are not Type F1 or F2 waters and are either located more than ¼ mile upstream from the confluence with a Type F1 or F2 water or are not connected to a Type F1 or F2 water.	65 feet landward from the OHWM
Type N3	Lakes or ponds that do not support any critical fish species (3)	35 feet landward from the OHWM
<p>(1) Water types are approximately based on the following: Type F1 (Type 1-3, Type 4 if greater than 2 feet and less than 20 percent grade unless documented as non-fish bearing by Federal or State agencies or Tribes), Type N1 (Type 4 if less than 2 feet and greater than 20 percent grade unless documented as fish bearing by Federal or State agencies or Tribes), Type N2 (Type 5 waters and those waters not connected to another water type). The new nomenclature anticipates the new classification system established in WAC 222-16-030 and 031. Water types are mapped in the Pierce County Critical Areas Atlas: Fish and Wildlife Habitat Areas-Stream Typing Maps and Fish and Wildlife Habitat Areas-Critical Fish Presence Maps.</p> <p>(2) There may be regulated wetlands associated with water types that are regulated and which may have a required buffer greater than those listed in Table 18E.40.060-1, e.g., a lake with a 35-foot buffer requirement may have associated wetlands with 25-300 foot buffers.</p> <p>(3) Fish species are those identified in Section PCC 18E.40.020.</p> <p>(4) Lake Tapps and Spanaway Lake are not subject to the buffering requirements shown above in Table 18E.40.060-1 of this Chapter.</p>		

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C. Buffers for Other Critical Habitat Areas. Appropriate buffers for critical habitat areas not listed in Table 18E.40.060-1 shall be determined on a case by case basis, based upon the needs of specific species or habitat area of study. The Department will coordinate with WDFW in these instances to determine an appropriate buffer width and,

1 when available, shall rely upon buffer widths specified in WDFW Priority Habitats and
2 Species management recommendations.

3 **1. Shoreline Master Program Buffers.**

- 4 a. Development on shorelines is subject to the applicable buffer requirements of
5 Table 18E.40.060-1 and Title 18S PCC, Development Policies and Regulations –
6 Shorelines. Where these buffers differ from the applicable requirement of Title
7 18E PCC, the most restrictive buffer width applies.
8 b. Standard shoreline buffers listed in Table 18S.30.030-2 are based on the
9 Shoreline Environment Designation.
10 c. Shoreline buffers are measured from the ordinary high water mark (OHWM),
11 except that for Lake Tapps Reservoir, the setback shall be measured from the full
12 pool elevation of 543 feet (equivalent to water level 543 msl as measured at the
13 USGS Gage 12101000).

14 **DC. Modification to Buffer or Setback Width Requirements.** ~~The standard buffer widths~~
15 ~~of subsection 18E.40.060 B. may be modified by averaging or increasing as follows:~~

16 **1. Setbacks.** An applicant wishing to reduce a setback shall pursue a variance pursuant
17 to PCC 18E.20.060, except that reductions to the standard shoreline buffers of Table
18 18S.30.030-2 shall be reviewed pursuant to Title 18S PCC, Development Policies
19 and Regulations – Shorelines.

20 **2. Buffers.**

- 21 a. Where used in this Section, "developed lot" shall mean a lot with a residential
22 dwelling and a maintained yard.
23 b. Regulated activities are to be kept out of the standard buffer where feasible, as
24 required by the impact avoidance requirements of PCC 18E.40.050, Mitigation
25 Requirements.
26 c. Where it is not feasible to stay out of the standard buffer, with the exception of
27 Forest Practices, the standard buffer widths of PCC 18E.40.060 B. may be
28 decreased through the following buffer averaging or buffer reduction allowances:

- 29 ~~±~~ (1) **Buffer Averaging.** Buffer width averaging may be proposed through
30 submittal of a ~~H~~abitat ~~A~~assessment ~~S~~tudy or ~~R~~eport. Buffer width
31 averaging, which allows certain portions of the buffer to be decreased if
32 other portions are increased, shall be allowed only when the applicant
33 demonstrates all of the following:
34 ~~a-~~ (a) The decrease in buffer width is minimized by limiting the degree or
35 magnitude of the regulated activity.
36 ~~b-~~ (b) Buffer averaging will not adversely impact the water body.
37 ~~e-~~ (c) Buffer averaging is consistent with other buffer requirements set forth
38 under ~~this~~ Title 18E PCC (e.g., wetlands, critical fish and wildlife
39 species and habitats, landslide hazard areas, etc.).
40 ~~d-~~ (d) Buffer averaging will not increase the risk of slope failure or downslope
41 stormwater drainage impacts.
42 ~~e-~~ (e) The total buffer area after averaging is no less than the buffer area prior
43 to the averaging. (Refer to Figure 18E.40-6 in Chapter 18E.120 PCC.)
44 ~~f-~~ (f) ~~The minimum buffer width after averaging will not be less than 50~~
45 ~~percent of the widths established in subsection 18E.40.060 B. The~~
46 ~~buffer meets the vegetation coverage requirements of PCC 18E.40.060~~
47 ~~G.1.a., or the applicant enhances the buffer as allowed in PCC~~
48 ~~18E.40.050 B., Mitigation, in order to meet the coverage requirements.~~

- 1 (g) The averaging is accomplished within the project boundaries or through
2 an off-site conservation easement or tract (or other acceptable
3 protective mechanism) approved by the Department.
- 4 (h) The buffer meets the applicable requirements of PCC 18E.40.060 D.
5 ~~The applicant demonstrates one or more of the following conditions~~
6 ~~The proposed buffer area contains a diversity of native vegetation~~
7 ~~distributed within at least two stratum (i.e., groundcover, shrub, sapling,~~
8 ~~tree); or,~~
- 9 (1) ~~The proposed buffer area contains a diversity of native vegetation~~
10 ~~distributed within at least two stratum (i.e., groundcover, shrub, sapling,~~
11 ~~tree); or~~
- 12 (2) ~~The project includes a buffer enhancement plan as part of the mitigation~~
13 ~~required by Section 18E.40.050. The buffer enhancement plan shall use~~
14 ~~plant species, which are native and non-invasive to the project area. The~~
15 ~~plan must substantiate that the enhanced buffer will improve the functional~~
16 ~~attributes of the buffer to provide additional protection for habitat functional~~
17 ~~values.~~
- 18 2. (2) **Buffer Reduction.** Buffer width reduction, which allows for all or portions
19 of the buffer to be reduced without an equal increase in other areas of the
20 buffer, may be proposed through submittal of a habitat assessment study or
21 report. ~~Buffer width reduction shall be allowed only when the applicant~~
22 ~~demonstrates all of the following:~~
- 23 a. (a) Buffer reduction is unavoidable.
- 24 b. (b) Buffer reduction has been minimized by limiting the degree or
25 magnitude of the regulated activity.
- 26 c. (c) Buffer reduction is consistent with other buffer requirements set forth
27 under ~~this Title 18E PCC~~ (e.g., wetlands, critical fish and wildlife
28 species and habitats, landslide hazard areas, etc.)
- 29 d. (d) Buffer reduction will not adversely impact the water body.
- 30 e. (e) The buffer width will not be reduced more than 25 percent below the
31 provisions of ~~subsection~~ PCC 18E.40.060 B.
- 32 f. (f) The buffer meets the requirements of Section PCC 18E.40.060 DG., or
33 g. ~~A buffer enhancement plan is provided as required by Section 18E.40.050. The~~
34 ~~buffer enhancement plan shall use plant species, which are native and non-~~
35 ~~invasive to the project area. The plan must substantiate that the enhanced buffer~~
36 ~~will improve the functional attributes of the buffer to provide additional~~
37 ~~protection for habitat functional values.~~
- 38 h. (g) The buffer has less than 15 percent slopes.
- 39 3. ~~Buffer Width Increases.~~ The Department may require an increased buffer width
40 ~~when a larger buffer is necessary, based on site conditions, to protect habitat area~~
41 ~~functions and values. This determination shall be reasonably related to protection of~~
42 ~~the functions and values of the regulated habitat area. Such determination shall~~
43 ~~demonstrate any of the following:~~
- 44 a. ~~A larger buffer is necessary to maintain viable populations of existing species or~~
45 ~~protect the existing functions of habitat areas identified in 18E.40.020.~~
- 46 b. ~~The adjacent land has minimal vegetative cover.~~
- 47 c. ~~The adjacent land has slopes greater than 20 percent.~~

- 1 d. ~~The habitat area is in an area of high tree blow down potential. In these cases the~~
2 ~~habitat area may be expanded an additional 50 feet on the windward side.~~
3 4. ~~Where an application for a development permit, other than a site development~~
4 ~~permit, has not been submitted in association with a proposed forest practice activity,~~
5 ~~a deviation from the standard buffer, as set forth in 18E.40.060 C.1. and C.2. shall~~
6 ~~not be allowed.~~

7 **E5. Buffer Modification Recognizing Adjacent Development Reduction Lakes and**
8 **Shorelines.**

9 ~~The standard buffer within a vacant lot along a lake may be reduced as~~
10 ~~follows: Within an undeveloped lot, buffer modifications may be used to reduce a lake,~~
11 ~~marine or freshwater shoreline buffer when a legally established principal residence~~
12 ~~exists within 100 feet of the undeveloped lot on one or both adjacent waterfront lot(s),~~
13 ~~calculated as follows:~~

- 14 1. ~~Modification to the standard buffer shall be calculated by adding the existing~~
15 ~~waterfront setback/buffer of the adjacent lots together and dividing that figure by~~
16 ~~two.~~
17 2. ~~In the case of a corner lot or when one adjacent lot is vacant, the modifications shall~~
18 ~~be calculated by adding the home setback of the adjacent developed lot to the~~
19 ~~standard (unmodified) buffer requirement and dividing that figure by two.~~
20 3. ~~The setback/buffer shall not be reduced to less than 50 feet.~~
21 4. ~~This modification does not apply where the criteria of PCC 18E.40.060 F., Buffer~~
22 ~~Width Increases, apply or when the adjacent residence(s) was built with reduced~~
23 ~~setbacks pursuant to a setback or buffer variance approval.~~

24 a. ~~Where the vacant lot has a common property line with two or more lots which~~
25 ~~abut the ordinary high water line and which are developed with single family~~
26 ~~residences, the standard buffer may be reduced to the greater of 50 feet or the~~
27 ~~average of the standard buffer and the setbacks of the residences on the adjacent~~
28 ~~properties. This reduction does not apply where the criteria of 18E.40.060 C.3.~~
29 ~~apply.~~

30 b. ~~Any water dependent accessory use may be allowed within the reduced buffer~~
31 ~~upon the issuance of a Conditional Use Permit. The issuance of a Conditional~~
32 ~~Use Permit shall be predicated upon a determination that the project will be~~
33 ~~consistent with the Conditional Use criteria in this Section, and the Conditional~~
34 ~~Use criteria listed in WAC 173-14-140, if applicable, and will cause no~~
35 ~~reasonable adverse effects on the environment and other uses. The Conditional~~
36 ~~Use Criteria area:~~

- 37 (1) ~~Views from surrounding properties will not be unduly impaired.~~
38 (2) ~~Adequate separation will be maintained between the structure and adjacent~~
39 ~~properties and structures.~~
40 (3) ~~Screening and/or vegetation will be provided to the extent necessary to~~
41 ~~ensure aesthetic quality.~~
42 (4) ~~Design and construction materials shall be chosen so as to blend with the~~
43 ~~surrounding environment.~~
44 (5) ~~No additional harm to the aquatic environment will result from the project.~~

45 **F. Buffer Width Increases.** ~~The Department may require an increased buffer width when~~
46 ~~a larger buffer is necessary, based on specific site conditions and project features, to~~
47 ~~protect habitat area functions and values. This determination shall be reasonably related~~
48 ~~to protection of the functions and values of the regulated habitat area. A determination~~
49 ~~that a larger buffer is needed shall be based on the following factors:~~

1. A larger buffer is necessary to maintain viable populations of existing species or protect the existing functions of habitat areas identified in PCC 18E.40.020.
2. The adjacent land has minimal vegetative cover. A larger buffer may not be needed when vegetation issues can be addressed through the submittal of a planting plan as defined in PCC 18E.40.050 B.
3. The adjacent land has slopes greater than 20 percent.
4. The habitat area is in an area of high tree blow down potential. In these cases, the habitat area may be expanded an additional 50 feet on the windward side.

DG. Buffer and Setback Functioning Condition.

1. General Buffer Requirements.

- a. In order to ensure no net loss of regulated species, habitat, or shoreline function from new development or the expansion of existing development, ~~b~~ Buffers should be adequately vegetated ~~with native, non-invasive plant and tree species necessary to help provide long term protection of identified habitat areas. The Department may require mitigation and the submittal of a buffer enhancement plan, as outlined in Section 18E.40.050 C., for buffer areas where the vegetation is inadequate to provide this function.~~ For purposes of this Section, "adequately vegetated" generally means that the buffer contains a variety of species and growth forms (e.g., groundcover, shrub, sapling, tree) at a density and variety sufficient to protect the functions and values of the regulated area from impacts associated with the regulated activities.
- b. Buffer vegetation should consist of native species. However, a buffer that contains well established non-native vegetation may also be deemed "well vegetated".
- c. When determining whether a buffer is adequately vegetated, staff shall take into account not only the condition of the buffer at the time of any applicable review, but also its likely future condition once it is protected and succession is allowed to occur.
- d. For purposes of this Section, an undeveloped lot is one lacking a principal residential structure and maintained yard. Existing lawn will not qualify as vegetation for purposes of meeting the required coverage.

EH. Protection of Significant Trees within the Buffer. If buffer width averaging or reduction is utilized or buffers are otherwise reduced through a variance process and significant trees as defined in Table 18J.15.030-1 are identified on the outer edge of the reduced buffer such that their drip line extends beyond the buffer edge, the following tree protection requirements must be followed:

1. A tree protection area shall be designed to protect each tree or tree stand during site development and construction. Tree protection areas may vary widely in shape, but must extend a minimum of 5 feet beyond the existing tree canopy area along the outer edge of the dripline of the tree(s), unless otherwise approved by the Department.
2. Tree protection areas shall be added and clearly labeled on all applicable site development and construction drawings, submitted to the Department.
3. Temporary construction fencing at least 30 inches tall shall be erected around the perimeter of the tree protection areas prior to the initiation of any clearing or grading. The fencing shall be posted with signage clearly identifying the tree protection area. The fencing shall remain in place through site development and construction.

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4. No clearing, grading, filling or other development activities shall occur within the tree protection area, except where approved in advance by the Department and shown on the approved plans for the proposal.
5. No vehicles, construction materials, fuel, or other materials shall be placed in tree protection areas. Movement of any vehicles within tree protection areas shall be prohibited.
6. No nails, rope, cable, signs, or fencing shall be attached to any tree proposed for retention.
7. The Department may approve the use of alternate tree protection techniques if an equal or greater level of protection will be provided.

- 1 **18E.40.070 Appendices.**
- 2 **A. Abbreviated Planting Plan.**
- 3 **BA. Habitat Assessment Letters.**
- 4 **CB. Habitat Assessment Studies.**
- 5 **DC. Habitat Assessment Reports.**
- 6 **ED. Monitoring Requirements.**
- 7 **FE. Wildfire – Defensible Space Guidelines.**

**18E.40.070 – Appendix A
Abbreviated Planting Plan**

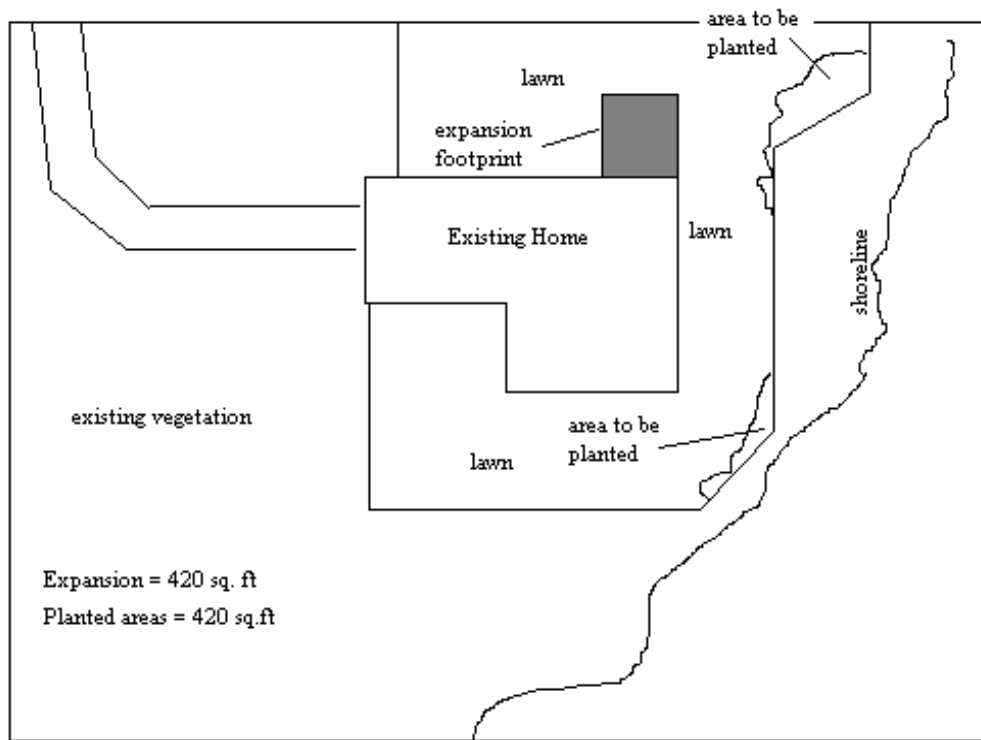
When required, Abbreviated Planting Plans shall be submitted with a site development or building permit application. The Plan shall compensate for the additional impervious area within the buffer by planting native tree, shrub, and groundcover vegetation within an area equal to the area of expansion. Plans shall consist of a site diagram identifying the following (see example on following page):

1. The expansion footprint; where will the expansion occur?
2. The square footage of the expansion; how many square feet of expansion will occur?
3. The location of an equal area, or areas, to be planted.
4. The number of tree, shrub, and groundcover species to be planted. The planting plan shall include no less than one tree species, two shrub species, and two groundcover species. Table 18E.40.070-1 provides a list of native plants that may be suitable for planting.
5. Number of plants to be installed. Use these calculations to determine the total number of plants needed. See example planting plan on following page.

Plant Type	Spacing	Number of Plants = Square Footage divided by:
Trees	12-15 feet on-center	144 – 225 square feet
Shrubs	6 feet on-center	36 square feet
Herb/Groundcover	3 feet on-center	9 square feet

6. Monitoring. The applicant shall provide photos showing the planting area prior to planting and at 6, 12, and 24 months post-planting.

Example: Planting Plan Site Diagram



The proposed expansion = 420 sq.ft.

Trees: 420 sq. ft. / 144 sq. ft. = 2.9 trees (round up to 3 trees)

Shrubs: 420 sq. ft. / 36 sq. ft. = 11.6 shrubs (round up to 12)

Herb/Groundcover: 420 sq. ft. / 9 sq. ft. = 46.6 herb/groundcover (round up to 47)

Summary. To compensate for the additional 420 sq. ft. of encroachment into the buffer, 3 trees (1 or more species), 12 shrubs (2 or more species), and 47 herb/groundcover plants (2 or more species) are to be installed.

NEW Table 18E.40.070-1. Native Plant List

		Approximate Height	Full Sun	Part Sun/ Shade	Full Shade	Drought Tolerant	Wetlands	Buffers
Evergreen Trees								
Douglas fir	<i>Pseudotsuga menziesii</i>	100-250'	X	X		X		X
grand fir	<i>Abies grandis</i>	100-250'	X	X				X
Madrone	<i>Arbutus menziesii</i>	30-50'	X	X		X		X
shore pine	<i>Pinus contorta</i>	15-50'	X	X		X	X	X
Sitka spruce	<i>Picea sitchensis</i>	100-210'	X	X	X		X	
western hemlock	<i>Tsuga heterophylla</i>	225'	X	X	X			X
western red cedar	<i>Thuja plicata</i>	200'	X	X	X	X	X	X
western white pine	<i>Pinus monticola</i>	80-130'	X	X			X	X
western yew	<i>Taxus brevifolia</i>	6-45'		X	X			X
Deciduous Trees								
bigleaf maple	<i>Acer macrophyllum</i>	40-100'	X	X				X
bitter cherry	<i>Prunus emarginata v. mollis</i>	20-50'	X	X		X		X
black cottonwood	<i>Populus balsamifera v. trichocarpa</i>	100-200'	X	X			X	X
choke cherry	<i>Prunus virginiana</i>	20-50'	X	X		X		X
Garry oak (Oregon white oak)	<i>Quercus garryana</i>	75'	X	X		X		X
Oregon ash	<i>Fraxinus latifoia</i>	40-80'	X	X	X		X	
Pacific crabapple	<i>Malus fusca (Pyrus fusca)</i>	40'	X	X			X	
Pacific willow	<i>Salix lucida spp. lasiandra</i>	40-60'	X	X			X	X
Pacific dogwood	<i>Cornus nuttallii</i>	20-30'	X	X	X			X
quaking aspen	<i>Populus tremuloides</i>	75'	X	X			X	X
western red alder	<i>Alnus rubra</i>	30-120'	X	X	X	X	X	X
Evergreen Shrubs								
evergreen huckleberry	<i>Vaccinium ovatum</i>	3-5'	X	X	X	X		X
low Oregon grape	<i>Mahonia nervosa</i>	2'		X	X	X		X
Pacific rhododendron	<i>Rhododendron macrophyllum</i>	24'		X	X	X		X
salal	<i>Gualtheria shallon</i>	3-7'	X	X	X	X		X
tall Oregon grape	<i>Mahonia aquifolium</i>	5-10'	X	X		X		X

NEW Table 18E.40.070-1. Native Plant List

		Approximate Height	Full Sun	Part Sun/ Shade	Full Shade	Drought Tolerant	Wetlands	Buffers
Deciduous Shrubs								
baldhip rose	<i>Rosa gymnocarpa</i>	6'		X		X		X
beaked hazelnut	<i>Corylus cornuta</i>	20'	X	X	X	X		X
black gooseberry	<i>Ribes lacustre</i>	2-7'		X			X	
black hawthorn	<i>Crataegus douglasii v. suksdorfii</i>	20-30'	X	X		X		X
black twinberry	<i>Lonicera involucrata</i>	2-7'		X	X	X	X	X
blue elderberry	<i>Sambucus caerulea</i>	20'	X	X				X
casacara	<i>Rhamnus purshiana</i>	35'	X	X	X		X	X
clustered wild rose	<i>Rosa pisocarpa</i>	8'	X	X		X	X	X
Hookers willow	<i>Salix hookeriana</i>	18'		X			X	
Indian plum	<i>Oemleria cerasiformis</i>	5-16'	X	X	X	X		X
mock orange	<i>Philadelphus lewisii</i>	5-10'		X		X		X
mountain ash	<i>Sorbus sitchensis</i>	3-12'		X	X	X		X
Nootka rose	<i>Rosa nutkana</i>	2-8'	X	X			X	X
oceanspray	<i>Holodiscus discolor</i>	15'	X	X		X		X
orange honeysuckle	<i>Lonicera ciliosa</i>	18'		X	X			X
Pacific ninebark	<i>Physocarpus capitatus</i>	6-13'		X		X	X	
red elderberry	<i>Sambucus racemosa</i>	20'	X	X				X
red-flowering currant	<i>Ribes sanguineum</i>	3-12'		X		X		X
red-osier dogwood	<i>Cornus sericea v. stolonifera</i>	15'		X	X		X	
salmonberry	<i>Rubus spectabilis</i>	3-10'	X	X	X		X	X
Scouler willow	<i>Salix scouleriana</i>	6-40'	X	X		X	X	X
serviceberry	<i>Amelanchier alnifolia</i>	10-12'	X	X		X		X
Sitka willow	<i>Salix sitchensis</i>	3-26'	X	X			X	X
snowberry	<i>Symphoricarpos albus</i>	2-6'	X	X		X		X
stink currant	<i>Ribes bracteosum</i>	9'		X			X	
thimbleberry	<i>Rubus parviflorus</i>	2-10'	X	X				X
vine maple	<i>Acer circinatum</i>	25'	X	X	X			X
Herbs and Groundcovers								
bunchberry	<i>Cornus canadensis</i>	2-10"		X	X		X	X

NEW Table 18E.40.070-1. Native Plant List

		Approximate Height	Full Sun	Part Sun/ Shade	Full Shade	Drought Tolerant	Wetlands	Buffers
camas	<i>Camassia quamash</i>	35"		X		X		X
coastal strawberry	<i>Fragaria chiloensis</i>	13"	X	X		X		X
creeping mahonia	<i>Mahonia repens</i>	5-50"		X	X	X		X
deer fern	<i>Blechnum spicant</i>	1-3'		X	X		X	X
goat's beard	<i>Aruncus sylvester</i>	3-6'		X	X		X	
false lily-of-the-valley	<i>Maianthemum dilatatum</i>	3-12"		X			X	X
false Solomon's seal	<i>Smilacina racemosa</i>	1-3'		X				X
kinnickinnick	<i>Arctostaphylos uva-ursi</i>	12"	X	X		X		X
lady fern	<i>Athyrium filix-femina</i>	2-5'	X	X	X		X	
large leaf avens	<i>Geum macrophyllum</i>	3'	X	X	X		X	X
nodding onion	<i>Allium cernuum</i>	25"		X		X		X
Pacific bleeding heart	<i>Dicentra formosa</i>	6-20"		X	X			X
pearly everlasting	<i>Anaphalis margaritacea</i>	10-50"	X	X		X		X
piggy-back plant	<i>Tolmiea menziesii</i>	20-40"		X	X		X	
seathrift	<i>Armeria maritima</i>	5-20"		X		X		X
sword fern	<i>Polystichum munitum</i>	5'	X	X	X	X		X
twinflower	<i>Linnaea borealis</i>	5"		X				X
western columbine	<i>Aquilegia formosa</i>	2'	X	X	X			X
western trillium	<i>Trillium ovatum</i>	6-18"		X	X	X		X
wild ginger	<i>Asarum caudatum</i>	2-8"		X	X			X
wild strawberry	<i>Fragaria virginiana</i>	13"	X	X		X		X
wood fern	<i>Dryopteris expansa</i>	3'		X	X	X		X

- This is not an inclusive list of all Northwest native plant species. In addition, many of the plant species listed above are commercially available in varieties that are not native to the northwest. It is required that the native varieties (identified by scientific names) be used in wetland and buffer areas. The native varieties may be difficult to find at standard nurseries. In this case, nurseries specializing in native plants should be contacted.
- Native species are adapted to this climate and tend to grow well here. However, as site conditions vary, so will the survival and growth rate of individual species. When feasible, supplemental irrigation of planted material during the first two growing seasons will greatly improve their chances of survival, especially those in full sun. Once established, these species do not require irrigation, but will grow faster when not stressed for water. Other factors influencing plant growth include proper planting, availability of sun and/or shade, soil condition, and availability of nutrients.
- Please do not remove plants from a wetland or buffer, or transplant them without prior approval from Pierce County Planning and Land Services.

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18E.40.070 – Appendix AB
Habitat Assessment Letters

- A. The habitat assessment letter shall, at a minimum, include the following:
1. The information required in ~~Section~~ PCC 18E.40.030 B.2.
 2. Documentation that the potential regulated habitat is not present. Discuss the habitat features or types that are available as compared to the habitat features that define the potential habitat. Describe why potential restoration measures would not be feasible.
 3. Documentation that potential species are not present. Note: A finding that a species is lacking based upon limited field investigation, occurring at an inappropriate time of the year for the species of study will not be acceptable. In such cases, the County will require separate confirmation of absence provided by the Washington Department of Fish and Wildlife.



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18E.40.070 – Appendix CB
Habitat Assessment Studies

- A. The habitat assessment study shall, at a minimum, include the following:
1. The information required in ~~Section~~ PCC 18E.40.030 B.2.
 2. Identify the presence of the habitat area or species on the site.
 3. Identify and discuss how the project complies with the standards set forth in ~~Section~~ PCC 18E.40.040.
 4. Provide a detailed description of the proposed project. At a minimum, the following items should be included:
 - a. A legal description (Section, Township, Range) and vicinity map that clearly show the site and project area in relation to nearby waterbodies, sensitive habitats, etc.
 - b. A site plan of the habitat area and associated buffer in relation to the proposed project area. If the applicant proposes to reduce a standard buffer, the site plan shall identify all significant trees adjacent to the reduced buffer.
 - c. Photographs, especially color copies, are useful to orient the reviewer to the project area. A combination of aerial or orthophotos and snapshots are ideal.
 5. Describe the environmental baseline (current or pre-project) condition of the habitat and the project area. The baseline description should address all pertinent habitat parameters for the species.
 6. Describe in detail the type and scope of development activity proposed:
 - a. Describe the overall purpose of the project and a brief summary of project objectives.
 - b. List all proposed project related construction activities and types of equipment. Provide a chronology of activities, timing of construction, hours of operation, phasing.
 - c. Provide to-scale plans that show where work is proposed relative to habitat areas and buffers.
 - d. Quantify areas of vegetation removal, include clearing and grubbing, vegetation type.
 - e. Describe proposed grading and filling or other earthwork, include specific BMPs for erosion, sedimentation, stormwater, and spill control. If appropriate, append the TESC Plan, Spill Control Plan, BMP specifications, etc.
 - f. Provide stormwater treatment information including:
 - (1) Amount of new impervious surface;
 - (2) Percent of surface and type of treatment for new and existing impervious surface;
 - (3) Specify BMPs to treat for quality and quantity; and
 - (4) Identify the receiving area /waterbody for each BMP, including overflow channels.
 - g. If buffer averaging or reduction is proposed for use, and significant trees are identified on the outer edge of the reduced buffer such that their drip line extends beyond the buffer edge, the tree protection measures described in ~~Section~~ PCC 18E.40.060 are to be implemented.



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B. Mitigation Elements. When vegetative enhancement is required as an element of a Habitat Assessment Study, the following information shall be provided:

1. Type of species proposed.
2. Exact location of proposed enhancement area.
3. Timing and schedule of planting.
4. Schedule for monitoring and maintenance and any financial guarantees for these as required in PCC 18E.10.080.
5. Name, address, and telephone number of the person(s) responsible for the enhancement project.
6. Additional site specific information may be required by the Department.



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18E.40.070 – Appendix DC
Habitat Assessment Reports

B. The following information must be included in every habitat assessment report:

4. **Analysis of Effects on Listed and Proposed Species and Designated and Proposed Habitat.** The HAR should provide a thorough analysis of (and a separate Section addressing) the potential direct, indirect, interrelated and interdependent, and cumulative effects of the action on the regulated species and its habitat within the project area. The following items should be addressed:

h. If species specific recovery plans or management plans have been established by the U.S. Fish and Wildlife Service, Washington State Department of Fish and Wildlife, or National Marine Fisheries Service, address the project in terms of compliance and recommendations.



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**18E.40.070 – Appendix ED
Monitoring Requirements**

**18E.40.070 – Appendix FE
Wildfire – Defensible Space Guidelines**



Chapter 18E.110

EROSION HAZARD AREAS

18E.110.030 Erosion Hazard Area Review Procedures.

- B. **Geological Assessment.** A geological assessment is a site investigation process to evaluate the on-site geology affecting a subject property and proposed development.
1. Geological assessments shall be submitted to the Department for review and approval together with a shoreline erosion hazard area application.
 2. ~~The All geological assessments shall include a field investigation and may also include review of public records and documentation, analysis of historical air photos, published data and references~~ address the minimum requirements specified in Appendix A, B, or C, as applicable. The applicable assessment shall also include all supportive documentation for review including, but not limited to: 10-year and 120-year regression calculation data, historical mapping/air photos, published data and references, etc.
 3. ~~The geological assessment shall include the following information and analysis:~~
 - a. ~~An analysis of the shoreline erosion processes on and in the vicinity of the site including an evaluation of erosion and bluff retreat that has occurred over the past decade and an estimated probable rate of erosion based upon the historic rate of erosion that has occurred on the site.~~
 - b. ~~An evaluation of which areas on the site meet the criteria for an active shoreline erosion hazard area as set forth in Section 18E.110.020 B.2.~~
 - c. ~~An evaluation of the area on the site or in the vicinity of the site that will experience regression in the next 120 years given natural processes.~~
 4. Geological assessments shall be prepared, signed, and dated by a geotechnical professional (as defined in Section PCC 18E.10.060 and established in this Chapter) and the format shall be pre-approved by the Department.
 5. A geotechnical professional shall complete a field investigation and geological assessment to evaluate whether or not an active shoreline erosion hazard area exists within 200 feet of the site. (See Figure 18E.110-2 in Chapter 18E.120 PCC.)
 - a. The geological assessment shall be submitted in the form of a geotechnical letter when the geotechnical professional finds that no active shoreline erosion hazard area exists within 200 feet of the site. The geotechnical letter shall meet the requirements contained in PCC 18E.110.060 – Appendix A.
 - b. The geological assessment shall be submitted in the form of geotechnical evaluation when the geotechnical professional finds that an active shoreline erosion hazard area exists but is located more than 200 feet away from the proposed project area, and in their opinion, will not impact the subject site. The geotechnical evaluation shall meet the requirements contained in PCC 18E.110.060 – Appendix B.
 - c. The geological assessment shall be submitted in the form of a geotechnical report when the geotechnical professional finds that an active shoreline erosion hazard area exists within 200 feet of the proposed project area or when a geotechnical professional determines that mitigation measures, such as a bulkhead, structural shoreline modifications are necessary in order to construct or develop within an



1 potential active shoreline erosion hazard area. The geotechnical report shall meet
2 the requirements contained in PCC 18E.110.060 – Appendix C.

- 3 56. The Department shall review the geological assessment and either:
4 a. Accept the geological assessment and approve the application; or
5 b. Reject the geological assessment and require revisions or additional information.

6 67. A geological assessment for a specific site may be valid for a period of up to five
7 years when the proposed land use activity and site conditions are unchanged.
8 However, if surface and/or subsurface conditions associated with the site change
9 during that five-year period, the applicant may be required to submit an amendment
10 to the geological assessment.

11 C. **Riverine Erosion Hazard Area (Channel Migration Zones) Review.** Riverine
12 erosion hazard areas shall be reviewed pursuant to the requirements set forth in Chapter
13 18E.70 PCC, Flood Hazard Areas.

14 D. **Soil Erosion Hazard Area Review.** Soil erosion hazard areas shall be reviewed
15 pursuant to the requirements set forth in Title 17A PCC, Construction and Infrastructure
16 Regulations – Site Development and Stormwater Drainage.

17
18 **18E.110.040 Erosion Hazard Area Standards.**

19 A. **Active Shoreline Erosion Hazard Areas.** Any development, encroachment, filling,
20 clearing, or grading, timber harvest, building structures, impervious surfaces, and
21 vegetation removal shall be prohibited within active shoreline erosion hazard areas and
22 associated buffers except as specified in the following standards:

23 1. **Shoreline Stabilization.** See PCC 18S.30.070 for additional shoreline stabilization
24 policies and regulations.

25 2. **Shoreline Stabilization Standards Erosion Protection Measures.** Shoreline
26 stabilization erosion protection measures located within or adjacent to freshwater or
27 marine shorelines shall be allowed is subject to the following:

- 28 a. The proposed shoreline protection measure shall comply with the standards set
29 forth in Section PCC 18E.40.040.
30 b. A geological assessment-shoreline erosion geotechnical report has been shall be
31 conducted in accordance with the provisions set forth in Section PCC
32 18E.110.030 B. that indicates that the shoreline is currently experiencing active
33 erosion (i.e., land retreat or regression).
34 c. A geological assessment-landslide hazard area letter, evaluation, or report shall
35 be required if the shoreline protection measures(s) will be located within a
36 potential landslide hazard area set forth in Chapter 18E.80 PCC.
37 d. The use of the shoreline erosion protection measure will shall not cause a
38 significant adverse impact on adjacent properties (i.e., increase erosion on
39 adjacent properties).
40 d. ~~The use of the shoreline erosion protection measure will not cause a significant~~
41 ~~adverse impact on critical fish and wildlife species and their associated habitat~~
42 ~~(i.e., eliminate or reduce sediment supply from feeder bluffs).~~
43 e. ~~If relocation of development is not feasible, The use of soft armoring techniques~~
44 ~~(soil bioengineering erosion control measures as identified in the State~~
45 ~~Department of Ecology and the Department of Fish and Wildlife guidance) is the~~
46 preferred method for shoreline protection.



- 1 f. Hard armoring shoreline erosion control measures ~~may~~ shall be allowed
 2 approved only when a geological assessment-shoreline erosion geotechnical
 3 report, as set forth in Section PCC 18E.110.030 B., has been completed and
 4 indicates the following:
- 5 (1) The use of beach nourishment alone or in combination with soft armoring
 6 techniques is not adequate to protect the property from shoreline erosion
 7 processes; ~~and~~
 - 8 (2) The property contains an existing structure(s) that will be threatened within
 9 the next 10 years; ~~and or the buildability of an undeveloped site will be~~
 10 ~~threatened within the next 10 years if a hard armoring method of shoreline~~
 11 ~~erosion protection is not provided.~~
 - 12 ~~g.~~ (3) Hard armoring shoreline protection measures shall not be allowed for
 13 protection of proposed structures when it is determined that the proposed
 14 structures can be located landward of the 120-year regression area.

15 **23. Stormwater Conveyance.** Surface drainage into an active shoreline erosion hazard
 16 area should be avoided. If there are no other alternatives for discharge, then
 17 drainage must be collected upland of the top of the active shoreline erosion hazard
 18 area and directed downhill in a high density polyethylene stormwater pipe with fuse
 19 welded joints that includes an energy dissipating device at the base of the active
 20 shoreline erosion area. The pipe shall be located on the surface of the ground and be
 21 properly anchored so that it will continue to function under shoreline erosion
 22 conditions. The number of these pipes should be minimized along the slope
 23 frontage.

24 **34. Utility Lines.** Utility lines will be permitted when no other conveyance alternative
 25 is available. The line shall be located above ground and properly anchored and/or
 26 designed so that it will continue to function under shoreline erosion conditions.

27 **45. Roads, Bridges, and Trails.** Roads, bridges, and trails shall be allowed when all of
 28 the following conditions have been met:

- 29 a. Mitigation measures are provided that ensure the roadway prism and/or bridge
 30 structure will not be susceptible to damage from active erosion.
- 31 b. The road is not a sole access for a development.

32 **6. Flood Hazard Reduction.** Shoreline stabilization activities that are part of flood
 33 hazard reduction measures that are identified in the Applicability statement for Flood
 34 Hazard Management in PCC 18S.40.060, and that are also included in an applicable
 35 comprehensive flood control management plan recognized by Pierce County, shall
 36 not be subject to review under this Section but shall be reviewed under the Flood
 37 Hazard Management Section of Title 18S PCC.

38 **B. Shoreline Erosion Hazard Management Area.** All regulated activities such as, but
 39 not limited to building structures, impervious surfaces, vegetation removal, timber
 40 harvest, and clearing or grading activities may be allowed in areas located within 200
 41 feet of an active shoreline erosion hazard area subject to the following standards:

- 42 1. The Department reviews and approves a geological assessment-shoreline erosion
 43 hazard geotechnical report and concurs that the proposed project area is located
 44 outside an active shoreline hazard area and the required buffer, as set forth in PCC
 45 18E.110.050.



2. The proposed recommendations and mitigation measures contained within the geotechnical report are adequate to reduce or mitigate risks to the natural environment, health, and safety.
 3. Surface drainage from the proposed project area, including downspouts, landscape irrigation systems, and runoff from paved or unpaved surfaces upland of the shoreline, shall not be directed through an active shoreline erosion hazard area or its associated buffer unless it is conveyed in conformance with the provisions in PCC 18E.110.040 A.2. above.
 4. Stormwater retention and detention systems, such as dry wells and infiltration systems utilizing buried pipe or french drains, shall not be permitted unless such systems are designed by a professional engineer and the geotechnical report indicates that such a system will not affect the stability of the shoreline.
 5. Proposed developments, with the exception of shoreline erosion protection measures, shall be sited far enough from regressing shorelines to provide 120 years of useful life for any proposed structures or infrastructure.
- C. **Riverine Erosion Hazard Area (Channel Migration Zones) Review.** Riverine erosion hazard areas shall be reviewed pursuant to the requirements set forth in Chapter 18E.70 PCC, Flood Hazard Areas.
- D. **Soil Erosion Hazard Area Review.** Soil erosion hazard areas shall be reviewed pursuant to the requirements set forth in Title 17A PCC, Construction and Infrastructure Regulations – Site Development and Stormwater Drainage.

18E.110.050 Buffer Requirements.

A. **Determining Buffer Widths.**

1. The buffer width shall be measured on a horizontal plane from a perpendicular line established at the edge of the active shoreline erosion hazard area limits. (See Figure 18E.110-3 in Chapter 18E.120 PCC.)
2. An undisturbed buffer of existing vegetation shall be required for an active shoreline erosion hazard area. The required standard buffer width is the greatest amount of the following distances:
 - a. Fifty feet from all edges of the active shoreline erosion hazard area limits;
 - b. A distance of one-third the height of the slope if the regulated activity is at the top of the slope and a distance of one-half the height if the regulated activity is at the bottom of the slope; or
 - c. The minimum distance recommended by the geotechnical professional measured from the edge of the active shoreline erosion hazard area.

B. **Modification of Buffer Widths.** The Department may require a larger buffer width than the standard buffer distance, as determined in A. above, if any of the following are identified through the geological assessment process:

1. The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse impacts.
2. The area has a severe risk of slope failure or downslope stormwater drainage impacts.

