Appendix B

Critical Areas

B-1. Definitions

For the purposes of this subsection, the following definitions shall apply:

1. “Aquifer recharge area” means the surface area of any geological formation sufficiently pervious to provide fresh water to an aquifer through the process of infiltration and percolation.

2. “Base flood” means a general and temporary condition of partial or complete inundation of normally dry land areas having a one percent chance of being equaled or exceeded in any given year. Base flood elevation data is commonly displayed as an elevation line on flood insurance maps, showing the location of the expected whole-foot water-surface elevation of the base (100-year) flood.

3. “Best management practices” (BMPs) means conservation practices or systems of practices and management measures that:
   a. Control soil loss and protect water quality from degradation caused by nutrients, animal waste, toxins, and sediment; and
   b. Minimize adverse impacts to surface water and groundwater flow, and to the chemical, physical, and biological characteristics of critical areas.

BMPs are defined by the United States Department of Agriculture, the State of Washington Department of Agriculture, the Washington State Department of Ecology, Washington State Department of Health, Kitsap Conservation District, and other professional organizations.

4. “Buffer” means an area adjoining to and a part of a critical area that is required for the continued maintenance, functioning, and/or structural stability of that critical area, or an area adjacent to a stream or wetland that (a) surrounds and protects the functions and values of the stream or wetland from adverse impacts, (b) is an integral part of a stream or wetland ecosystem, and (c) provides shading, input of organic debris and coarse sediments, room for variation in stream or wetland edge, habitat for wildlife, and protection from harmful intrusion, to protect the public from losses suffered when the functions and values of the wetland or stream are degraded.

5. “Category I, II, III, IV wetlands”: see “Wetland category”. 
6. “Critical areas” means aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands.

7. “Critical habitat” means a habitat identified by US Fish and Wildlife Service or the National Marine Fisheries Service as habitat necessary for survival of endangered or threatened species.

8. “Educational or scientific activities” means controlled and/or supervised scientific activities or educational activities that are associated with an educational program that is approved through a conditional use permit.

9. “Engineering geologist” means a practicing engineering geologist who has at least four years of professional employment as an engineering geologist with experience in landslide evaluation, and a Washington State specialty license in engineering geology as specified in Chapter 18.220 RCW.

10. “Erosion hazard area” means a landform or soil type subject to being worn away by the action of water, wind, freeze-thaw, or ice, and which are:

   a. Rated in the Soil Survey of Kitsap County Area, Washington, USDA (1980), as having severe hazard of water erosion, including:
      i. Indianola-Kitsap Complex, 45 to 70 percent slope;
      ii. Kitsap Silt Loam, 15 to 30 percent slope, 30 to 45 percent slope;
      iii. Ragnar Fine Sandy Loam, 15 to 30 percent slope; and
      iv. Schneider very gravelly loam, 45 to 70 percent slope;

   b. Classified in the Department of Ecology Coast Zone Atlas as:
      i. Class 3, class U (unstable) includes severe erosion hazards and rapid surface runoff areas;
      ii. Class 4, class UOS (unstable old slides) includes areas having severe limitations due to slope; and
      iii. Class 5, class URS (unstable recent slides); and

   c. Identified by the USGS Surface Geology Map of Bainbridge Island (Haugerud, 2001) as rilled slopes/scarps.

11. “Existing development” means a development that was lawfully constructed, approved or established prior to the effective date of the ordinance codified in this chapter.
12. “Fish” means species of the vertebrate taxonomic groups Cephalospidomorphi and Osteichthyes.

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

14. “Fisheries biologist” means a person with experience and training in fisheries who is able to submit substantially correct reports on fish population surveys, stream surveys and other related data analyses of fisheries resources. “Substantially correct” means that technical or scientific errors, if any, are minor and do not delay or affect the site plan review process. Qualifications of a fisheries biologist include:

   a. Either:
      i. Certification by the American Fisheries Society, or;
      ii. Bachelor of Science degree in fisheries or the biological sciences from an accredited institution and five years of professional fisheries experience; and
   
   b. The prior successful completion of at least three habitat management plans; and

   c. The biologist is listed on a roster of qualified professionals prepared by the Director.

15. “Frequently flooded areas” means lands subject to a one percent or greater chance of flooding in any given year, as determined by the Federal Emergency Management Agency. These areas include, but are not limited to, floodplains adjacent to streams, lakes, coastal areas, and wetlands. (Also see Chapter 15.16 BIMC, Flood Damage Prevention.)

16. “Functions” means the beneficial roles served by critical areas including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, wave attenuation, aesthetic value protection, and recreation. These roles are not listed in order of priority.

17. “Geologically hazardous areas” means areas susceptible to significant erosion, sliding, or other geological events. They pose a threat to the health and safety of citizens when used as sites for incompatible commercial, residential or industrial development. Geologically hazardous areas include erosion hazard areas, landslide hazard areas, and seismic hazard areas.
18. “Geotechnical engineer” means a practicing geotechnical/civil engineer who has a valid Washington engineering license and a valid certificate of registration in civil engineering, at least four years of professional employment as a geotechnical engineer with experience in landslide evaluation, and appropriate training and experience as specified in Chapter 18.43 RCW.

19. “Habitat Management Plan” (HMP) means a report prepared by a professional wildlife biologist or fisheries biologist which discusses and evaluates critical fish and wildlife habitat functions and identifies and evaluates measures necessary to enhance and improve habitat conservation on a proposed development site.

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

21. “Hazard tree” means a tree with structural defects likely to cause failure of all or part of the tree, which could strike a “target.” A target can be a building or a place where people gather such as a park bench, picnic table, street, or backyard. In the case of steep slopes, a hazard tree can also be a tree that is a hazard to stability of the slope, as determined by a geotechnical engineer.

22. “Hazardous substances” means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the characteristics or criteria of hazardous waste as specified in RCW 70.105.010. (Also see BIMC 18.06.450 through 18.06.510).

23. “Hydric soil” means soil which is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

24. “Hydrogeologist” means a practicing hydrogeologist who has at least four years of professional employment as a hydrogeologist with experience in the specific subject area in which they are providing a report, and a Washington specialty license in hydrogeology as specified in RCW Chapter 18.220.

25. “Hydrophyte or hydrophytic vegetation” means plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The presence of hydrophytic vegetation shall be determined following the methods described in the “Within the Federal delineation manual and Regional supplement or its successor.
26. “Impact of land use” means the relative measure of the intensity of land use used to determine the appropriate buffer widths for wetlands and streams which is categorized as follows:

a. High impact land use includes commercial development, industrial development, institutional development, residential (more than one unit per acre) development, new agriculture (high-intensity such as dairies, nurseries, greenhouses, raising and harvesting crops requiring annual tilling, raising and maintaining animals), and high-intensity recreation such as golf courses and ballfields.

b. Moderate impact land use includes residential development (1 unit/acre or less), new agriculture (moderate-intensity such as orchard and hay fields), paved trails, and building of logging roads.

c. Low impact land use includes low-intensity open space such as passive recreation, natural resources preservation, and unpaved trails.

27. “Invasive/exotic species” means plants and animals that are not native to the Puget Sound lowlands and are recognized by wetland professionals or biologists to be highly competitive with native vegetation and animals. Invasive/exotic plant species include those listed on the noxious weed list developed by the Washington State Noxious Weed Board, nonnative blackberries and English ivy. Invasive/exotic animal species include any species, such as rats, bullfrogs, zebra mussels and green crabs, considered by resource professionals to be damaging to the native animal populations.

28. “Landslide hazard areas” means areas which are potentially subject to risk of mass movement due to a combination of factors, including historic failures, geologic, topographic, and hydrologic features. Some of these areas are identified in the Department of Ecology Coastal Zone Atlas and USGS Surface Geology Map of Bainbridge Island (Haugerud, 2001). The presence of these factors shall be determined through assessment, by the least intrusive means, by the City Engineer or at the City Engineer’s request by a third party geoengineer or geotechnical expert, prior to issuance of any permit. Landslide hazard areas include the following:

a. Areas characterized by slopes greater than 15 percent having springs or groundwater seepage and having impermeable soils (typically silt and clay) overlain or frequently interbedded with permeable granular soils (predominantly sand and gravel);

b. Any area potentially unstable due to rapid stream incision or stream bank erosion;

c. Any area located on an alluvial fan, debris flow deposit, or in a debris flowpath, presently or potentially subject to impacts or inundation by debris flows or deposition of stream-transported sediments;
d. Any area with a slope of 40 percent or greater and with a vertical relief of 10 or more feet except areas composed of competent consolidated rock;

e. Any area designated or mapped as class U, UOS, or URS by the Department of Ecology Coastal Zone Atlas and/or mapped as a landslide or scarp on the USGS Surface Geology Map of Bainbridge Island (Haugerud, 2001); or

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

30. “Mitigation categories” means

a. The following specific categories: (need for mitigation ratios)

   i. Mitigation, Compensatory: replacing project-induced critical area losses or impacts, including, but not limited to, establishment, re-establishment, rehabilitation or enhancement.

   ii. Mitigation, Establishment: Mitigation performed to intentionally establish a critical area (e.g., wetland) at a site where it does not currently exist.

   iii. Mitigation, Re-Establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former critical area.

   iv. Mitigation, Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes to a degraded critical area.

   v. Mitigation, Enhancement: The manipulation of the physical, chemical, or biological characteristics of a biological wetland to heighten, intensify or improve specific function(s) or to change for specific purposes such as water quality improvement, flood water retention, or wildlife habitat.

31. “Normal maintenance” means those usual acts to prevent a decline, lapse or cessation from a lawfully established condition. Normal maintenance includes removing debris from and cutting or manual removal of vegetation in crossing and bridge areas. Normal maintenance does not include:

   a. Use of fertilizer or pesticide application in wetlands, Fish and Wildlife Habitat Conservation Areas, or their buffers;

   b. Re-digging ditches in wetlands or their buffers to expand the depth and width beyond the original ditch dimensions;
c. Re-digging existing drainage ditches in order to drain wetlands on lands not classified as existing and ongoing agriculture under Section B-2(C) (Exemptions).

32. “Open space” means undeveloped areas of varied size. Open space often contains distinctive geologic, botanic, zoologic, historic, scenic or other critical area, or natural resource land features.

33. “Ravine” means a V-shaped landform generally having little to no floodplain and normally containing steep slopes, which is deeper than 10 vertical feet as measured from the centerline of the ravine to the top of the slope. Ravines are typically created by the wearing action of streams. The top of the slope is determined where there is a significant change in the slope to generally less that a 15 percent slope.

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

35. “Repair” means activities that restore the character, size, or scope of a project only to the previously authorized condition.

36. “Seismic hazard areas” means areas subject to severe risk of damage as a result of seismic induced ground shaking, or surface faulting. While ground shaking is the principal risk because the entire island will shake significantly, severe damage will occur where slope failure, liquefaction, and settlement are induced by the shaking and surface rupture is created by fault movement. The following areas are considered seismic hazard areas:

   a. Seismic Landslide Hazard Areas - Slopes which are stable in non-earthquake periods, but fail and slide during ground shaking;

   b. Liquefaction Hazard Areas - Areas of cohesionless, loose or soft, saturated soils of low density in association with a shallow groundwater table that are subject to settlement and/or liquefaction from ground shaking, or;

   c. Fault Hazard Areas - Areas of known surface rupture or significant surface deformation as a result of an active fault movement, including 50 feet on either side.

37. “Site” means the entire lot, series of lots, or parcels on which a development is located or proposed to be located, including all contiguous undeveloped lots or parcels under common ownership.

38. “Streams” means those areas in the City of Bainbridge Island where the surface water flows are sufficient to produce a defined channel or bed. A defined channel or bed is an area which demonstrates clear evidence of the passage of water and includes but is not
limited to bedrock channels, gravel beds, sand and silt beds, and defined-channel swales. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches, canals, storm or surface water runoff devices, or other artificial watercourses unless they are used by fish or used to convey streams naturally occurring prior to construction of the water course.

39. “Stream Types” means a streams classification system based on fish usage and perennial or seasonal water regime as found in WAC 222-16-030 and meeting the standards listed below.

a. “Type F Stream” means a stream that has suitable fish habitat. If fish usage has not been determined, water having the following characteristics are presumed to have fish use: Streams segments having a defined channel of 2 feet or greater within the bankfull width and having a gradient of 16 percent or less. Determination of fish usage shall use the methodology found in Washington Department of Natural Resource’s Forest Practice Board Manual, Section 13.

b. “Type Np” means all segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are waters that do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Type Np Waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.

c. “Type Ns” means all segments of natural waters within the bankfull width of the defined channels that are not Type S, F, or Np Waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np Water. Ns Waters must be physically connected by an above-ground channel system to marine waters, Type F, or Np Waters.

40. “Wetland or wetlands” means areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, estuaries, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as result of the construction of a road, street, or highway. Wetland may include those artificial wetland intentionally created from nonwetland areas to mitigate the conversion of wetlands.
41. “Wetland boundary” means the boundary or edge of a wetland as delineated using the methodology found in Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Cost Region (Version 2.0). (Per WAC173-22-035, or its successor.)

42. “Wetland category” means category as defined in “Washington State Wetland Rating System for Western Washington, Revised,” Department of Ecology publication #04-06-025, or as revised and adopted by the department.


44. Wetland Mitigation.

   a. In-kind: To replace wetlands with substitute wetlands whose characteristics closely approximate those destroyed or degraded by a regulated activity. It does not mean replacement “in-category.”

   b. Off-site: To replace wetlands away from the site on which a wetland has been impacted by a regulated activity.

   c. On-site: To replace wetlands at or adjacent to the site on which a wetland has been impacted by a regulated activity.

   d. Out-of-kind: To replace wetlands with substitute wetlands whose characteristics do not closely approximate those destroyed or degraded by a regulated activity. It does not refer to replacement “out-of-category.”

45. Wetlands, Regulated.

   a. “Regulated wetlands” means:

      i. All Category I and II wetlands;

      ii. All Category III and Category IV wetlands

   b. Category I, II, III and IV wetlands include:

      i. Lands defined as wetlands shall be those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

      ii. Wetlands created as mitigation and wetlands modified for approved land use activities.
c. Regulated wetlands do not include artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990 that were unintentionally created as a result of the construction of a road, street, or highway.

46. “Wetlands specialist” means a person with experience and training in wetland issues who is able to submit substantially correct reports on wetland delineations, classifications, functional assessments and mitigation plans. “Substantially correct” means that errors, if any, are minor and do not delay or affect the site plan review process. Qualifications of a wetlands specialist include:

   a. Either:
      i. Certification as a Professional Wetland Scientist (PWS) or Wetland Professional in Training (WPIT) through the Society of Wetland Scientists, or;
      ii. Bachelor of science degree in the biological sciences from an accredited institution and five years of professional field experience; and

   b. The prior successful completion of at least three wetland reports; and

   c. The specialist is listed on a roster of qualified professionals prepared by the Director.

47. “Wildlife biologist” means a person with experience and training in the principles of wildlife management and with practical knowledge in the habits, distribution and environmental management of wildlife. Qualifications include:

   a. Either:
      i. Certification as a professional wildlife biologist through The Wildlife Society, or;
      ii. Bachelor of science or bachelor of arts degree in wildlife management, wildlife biology, ecology, zoology, or a related field, from an accredited institution and five years of professional field experience; and

   b. The prior successful completion of at least three habitat management plans; and

   c. The biologist is listed on a roster of qualified professionals prepared by the Director.

46. “Zone of Influence” means an area, usually upslope from a geologically hazardous area, where changes in land use and hydrology can affect the stability of the geologically hazardous area. The zone of influence is defined as 300 feet upslope from slopes greater than 40 percent, and 200 feet upslope from slopes greater than 15 percent but less than 40 percent that are determined to be geologically hazardous areas.
B-2. Applicability, exemptions, and prior development activity.

A. Applicability. This appendix establishes regulations for the protection of sites which contain critical areas or are adjacent to sites which contain critical areas in the shoreline jurisdiction. Development and land use activities proposed on critical area sites shall comply with the provisions of this Appendix. No action shall be taken by any person, company, agency, governmental body (including the City), or applicant, which results in any alteration of a critical area except as consistent with the purposes, requirements, objectives, and goals of this chapter.

B. Inventory of Critical Areas. This appendix shall apply to all critical areas located within the shoreline jurisdiction of the city. The approximate location and extent of these areas on Bainbridge Island is displayed on various inventory maps available at the city’s Department of Planning and Community Development. Maps and inventory lists are guides to the general location and extent of critical areas. Critical areas not shown are presumed to exist on Bainbridge Island and are protected under all the provisions of this chapter. In the event that any of the designations shown on the maps or inventory lists conflict with the site-specific conditions, site-specific conditions shall control.

C. Exemptions. The following activities are exempt from the requirements of this chapter.

1. Emergencies that threaten the public health, safety and welfare. An "emergency" is an unanticipated and immediate threat to public health, safety, or the environment which requires action within a time too short to allow compliance with this chapter, further definition of “emergency” is in Section 8.0 of the Shoreline Master Program. Restoration or mitigation of critical areas and buffers impacted by emergency action shall be required in a timely matter.

2. Normal and routine maintenance of structures, landscaping and vegetation that will not further impact or alter critical areas or buffers.

3. Normal and routine maintenance and operation of pre-existing retention/detention facilities, biofilters and other stormwater management facilities, irrigation and drainage ditches, and fish ponds; provided, that such activities shall not involve conversion of any wetland not currently being used for such activity. Any maintenance of ponds located in stream habitat areas shall require appropriate approval from the Washington Department of Fish and Wildlife.

4. Structural alterations to buildings that do not increase the structural footprint or introduce new adverse impacts to an adjacent critical area, except for structures located on geologically hazardous areas which are not exempt.
5. Normal and routine maintenance or repair of existing utility structures within a right-of-way or existing utility corridor or easements, including the cutting, removal and/or mowing of vegetation.

6. Forest practices conducted pursuant to Chapter 76.09 RCW, except Class IV (general conversions) and Conversion Option Harvest Plans (COHP).

7. Activities within a portion of a wetland buffer or fish and wildlife habitat area buffer located landward of an existing, substantially developed area, such as a paved area, or permanent structure, which eliminates or greatly reduces the impact of the proposed activities on the wetland or fish and wildlife habitat area. The Director shall review the proposal to determine the likelihood of associated impacts.

8. Hazard Tree Removal. Where a threat to human life, property, or slope stability is demonstrated, the Director may allow removal of danger or hazard trees subject to the following criteria:

   a. Tree removal is the minimum necessary to balance protection of the critical area and its buffer with protection of life and property; and

   b. The critical area or its buffer shall be replanted as determined by the Director.

      The Director may require the applicant to consult with a professional forester or a certified arborist prior to tree removal. Hazard tree abatement can sometimes be achieved by felling the tree or trimming the tree. Habitat needs may require leaving the fallen tree in the riparian corridor or maintaining a high stump for wildlife habitat.

9. Aquifer recharge areas. A person, or property, shall be exempt from the provisions of this chapter unless either of the following is true:

   a. The property is located in a fish and wildlife habitat conservation area, frequently flooded area, geologically hazardous area, and/or wetland; or

   b. One of more of the uses identified in Section B-E are proposed.

D. Standards for existing development.

1. Existing structures and related improvements. Structures and related improvements that were legally built or vested prior to the effective date of Ordinance No. 2012-4 that do not meet the setback or buffer requirements of this appendix may continue to exist in their present form, and may be altered, including remodeled, reconstructed, or expanded, if such alteration complies with the provisions of this Section and will result in no net loss of ecological function.
2. Existing structures, not located in a geologically hazardous area, that were legally built or vested prior to the effective date of Ordinance No. 2012-4 may be altered if:
   a. There is no change in the footprint of the building;
   b. The remodel is entirely inside the existing building;
   c. There is no further encroachment into the buffers required pursuant to this chapter unless a Variance is first approved.

3. Existing property improvements other than structures, including driveways, parking areas, yards, play areas, storage areas, and similar improvements that were legally established or vested prior to the effective date of Ordinance No. 2012-4 may be altered if:
   a. There is no change in the location of the improvement;
   b. Any alteration of the improvement is entirely inside of the existing boundaries of the improvement;
   c. There is no further encroachment into the buffers unless a Variance is first approved.

4. Alterations permitted by this Section shall not be exempt from applicable City review or permit requirements or other applicable City codes.

B-3. Prescriptive buffers variations.

A. Intent. The City recognizes that in some cases it may not be possible to provide a critical area buffer that meets the dimensions prescribed by this ordinance, due to land area or other constraints. The City further recognizes that in some cases the desired or better critical area protection can be achieved through alternative approaches.

This section provides alternatives that can be pursued in lieu of the prescribed buffers when warranted by site-specific conditions. In considering an application for any of these alternatives, it shall always be the primary intent of the City to protect the functions and values of the critical areas. It is further the intent of the City to ensure that the application of the provisions of this chapter does not deprive an owner from reasonable use of their property.

Any proposed use of the following alternatives shall be supported by analysis utilizing appropriate science, to determine and minimize the impacts of the alternative:

B. Buffer Averaging. If characteristics of the property do not allow reasonable use with prescribed buffers, the Director may allow wetland and/or fish and wildlife conservation
area buffer widths to be averaged. It is intended that the process for reviewing a buffer averaging proposal be as simple as possible, while ensuring that the following criteria are met:

1. The total area contained within the buffer after averaging shall be no less than that contained within the standard buffer prior to averaging;

2. The applicant demonstrates that such averaging will clearly provide greater protection of the functions and values of critical areas than would be provided by the prescribed habitat buffers.

3. The averaging will not result in reduced buffers next to highly sensitive habitat areas; and

4. The applicant demonstrates one or more of the following:
   a. That the wetland contains variations in sensitivity due to existing physical characteristics;
   b. That only low intensity uses would be located within 200 feet of areas where the buffer width is reduced, and that such low intensity uses restrictions are guaranteed in perpetuity by covenant, deed restriction, easement, or other legally binding mechanism; or
   c. That buffer averaging is necessary to avoid an extraordinary hardship to the applicant caused by circumstances peculiar to the property.

C. Habitat Management Plan. A Habitat Management Plan may be prepared pursuant to subsection B-4 when it can clearly be demonstrated that greater protection of the functions and values of critical areas can be achieved through the HMP than could be achieved through providing the prescribed habitat buffers. A Habitat Management Plan may be used as a means to protect wetland and/or fish and wildlife habitat conservation area buffers. Habitat Management Plans may not be used to reduce the water quality buffers for wetlands and/or fish and wildlife habitat conservation areas.

D. Public notice. Appropriate notice of, and opportunity to comment on, the proposed use of any of the foregoing alternatives shall be given to surrounding property owners and the general public, in a manner to be established by the Director.

B-4. Habitat management plan.

A. General. A Habitat Management Plan shall comply with the requirements of this Section, and shall clearly demonstrate that greater protection of the functions and values of critical areas can be achieved through the HMP than could be achieved through providing the prescribed habitat buffers. The Director shall prepare performance standards and monitoring guidelines for Habitat Management Plans, including a program for City oversight of such plans. Once the standards and guidelines are in place, an applicant may
propose to implement an HMP as a means to protect habitat buffers associated with wetlands and/or fish and wildlife conservation areas.

B. Intent. HMPs are primarily intended as a means to restore or improve buffers that have been degraded by past activity, and should preserve, and not reduce, existing high quality habitat buffers. While not primarily intended as a means to reduce buffers, the HMP may propose a reduction of the habitat buffer width where it is shown that the HMP will comply with the other requirements of this Section. An HMP shall not reduce the prescribed water quality buffer width as listed in B-8 and B-10 under any circumstance.

C. Effect of buffers. An HMP shall provide habitat functions and values that are greater than would be provided by the prescribed habitat buffers. When habitat buffers are a component of an HMP, they shall be at least the minimum size necessary to accomplish the objectives of the HMP. The HMP may propose, but the City shall not require, a habitat buffer containing a greater area than is required by the prescribed habitat buffer.

D. Impact mitigation - general. The HMP shall encompass an area large enough to provide mitigation for buffer reduction below the standard required buffers, and shall identify how the development impacts resulting from the proposed project will be mitigated. The developer of the plan shall use the best available science in all facets of the analyses. The Washington Department of Fish and Wildlife Priority Habitat and Species Management Recommendations, dated May 1991, and/or bald eagle protection rules outlined in WAC 232-12-292, as now or hereafter amended, may serve as guidance for this report. For Habitat Management Plans addressing wetland buffers, Method for Assessing Wetland Functions, Ecology Publication #99-116 shall be used for guidance in determining function equivalency. All Habitat Management Plans shall be reviewed by a qualified third party selected by the City. The applicant will be responsible for the cost of the review.

F. Map. The Habitat Management Plan shall contain a map prepared at an easily readable scale, showing:

1. The location of the proposed development site;
2. Property boundaries;
3. The relationship of the site to surrounding topographic, water features, and cultural features;
4. Proposed building locations and arrangements;
5. A legend which includes a complete legal description, acreage of the parcel, scale, north arrow, and date of map revision.
G. Report. The Habitat Management Plan shall also contain a report which contains:

1. A description of the nature and intensity of the proposed development;

2. An analysis of the effect of the proposed development, activity or land use change upon the wildlife species and habitat identified for protection. If the Habitat Management Plan is addressing wetland habitat, the analysis shall compare an assessment of wildlife habitat suitability of the wetland applying standard buffers with an assessment of habitat suitability as proposed using Method for Assessing Wetland Functions, Washington State Department of Ecology (if available for the specific Hydrogeomorphic classification); and

3. A plan which identifies how the applicant proposes to mitigate any adverse impacts to wildlife habitats created by the proposed development. For wetland or other habitats protected by this chapter, the application shall show, using the appropriate function assessment methodology, that habitat functions and values are greater after the development than would occur had the prescribed buffers been provided (see Mitigation Plan requirements, Section 16.20.110).

4. All review comments received from outside reviewers. If the HMP recommends mitigation involving federally listed threatened or endangered species, migratory waterfowl or wetlands, the U.S. Fish and Wildlife Service shall receive a copy of the draft HMP.

5. The HMP shall specifically address, as appropriate, the following:
   a. Enhancement of existing degraded buffer area and replanting of the disturbed buffer area with native or equivalent vegetation;
   b. The use of alternative on-site wastewater systems in order to minimize site clearing;
   c. Infiltration of stormwater where soils permit;
   d. Retention of existing native or equivalent vegetation on other portions of the site in order to offset habitat loss from buffer reduction; and
   e. The need for fencing and signage along the buffer edge.

H. Mitigation measures. Possible mitigation measures to be included in the report, or required by the Director, could include, but are not limited to:

1. Establishment of buffer zones;
2. Preservation of critically important plants and trees;
3. Limitation of access to habitat areas;
4. Seasonal restriction of construction activities;
5. Establishing phased development requirements; and
6. Monitoring plan for a period necessary to establish that performance standards have been meet. Generally this will be for a period of seven to ten years.

I. HMP adequacy. The HMP shall demonstrate to the satisfaction of the Director that the habitat functions and values are improved by implementation of the HMP. If there is a disagreement between the Director and the applicant as to the adequacy of the HMP, the issue of plan adequacy shall be resolved by consulting with the Washington Department of Fish and Wildlife for HMPs relating to streams or the Washington Department of Ecology for HMPs relating to wetlands. If the State agencies are not available in a timely manner, the applicant may choose to have the City refer the HMPs to a third party consultant at the expense of the applicant. After consultation with such State departments or third party consultant, the Director shall make a final decision on the adequacy of the HMP.

J. Timing. An HMP must be developed and approved either prior to preliminary plat approval or issuance of the building permit, as applicable, and must be implemented before the City grants either final plat approval or an occupancy permit, as applicable.

K. Performance Surety. The Director may require that the applicant provide a performance surety to ensure conformance with mitigation requirements of the habitat management plan pursuant to Section B-4.

B-5. Application requirements.

A. Submittal Requirements. In addition to the general submittal requirements for all applications in the Administration Handbook applications for land use or development proposals within critical areas or their buffers shall be filed with the information requested on the application forms available from the Department of Planning and Community Development. The applicant shall not be granted any approval or permission to conduct development or land use in a critical area and/or its buffer prior to fulfilling the requirements of this chapter.

B. Support Information Requirements. When support information is required by the Director it shall contain the following and be prepared by one or more of the experts listed in Subsection B.4 of this section:

1. A description of the critical areas on or adjoining the site and how the proposed development will or will not impact critical areas, their buffers, and adjoining properties, including:
a. Drainage, surface and subsurface hydrology, and water quality;
b. Existing vegetation as it relates to wetlands, steep slopes, soil stability, and fish and wildlife habitat value; and
c. Other critical area characteristics and functions.

2. Recommended methods for mitigating impacts and a description of how these methods may impact adjacent properties;

3. Any additional information determined as relevant by the Director;

4. Such studies shall be prepared by experts in the area of concern, who shall be selected from a list of approved consultants prepared by the Director, as follows:

a. Aquifer recharge study: Hydrogeologist;
b. Flood hazard area study: Professional civil engineer; hydro-geologist;
c. Geologically hazardous area study: Engineering geologist; geotechnical engineer, provided that:
   i. An engineering geologist may provide a study, including interpretation, evaluation, analysis, and application of geological information and data and may predict potential or likely changes in types and rates of surficial geologic processes due to proposed changes to a location, provided it does not contain recommended methods for mitigating identified impacts, other than avoidance, structural impacts to, or suitability of civil works; and
   ii. Engineering geologists may not provide engineering recommendations or design recommendations, but may contribute to a complete geotechnical report that is co-sealed by a geotechnical engineer.
d. Stream, riparian area, drainage corridor study: Biologist with stream ecology expertise; fish or wildlife biologist; a civil engineer may provide studies for drainage, surface and subsurface hydrology, and water quality;
e. Wetland study: Wetlands specialist.
f. Habitat Management Plans: Wildlife biologist and/or fisheries biologist.

5. The Director may in some cases retain experts at the applicant’s expense to assist in the review of studies; and

6. Such studies shall be prepared in accordance with procedures established by the Director or City Engineer as specified.
B-6. Mitigation plan requirements.

A. All critical area restoration, creation and/or enhancement projects required pursuant to this appendix either as a permit condition or as a result of an enforcement action shall follow a mitigation plan prepared by an expert approved by the Director. The applicant or violator shall receive written approval of the mitigation plan by the Director prior to commencement. Compensatory mitigation is not required for allowed activities which utilize best management practices to protect the functions and values of regulated critical areas.

B. Purpose of Mitigation Plan. The mitigation plan shall provide information on land acquisition, construction, maintenance and monitoring of the replaced critical area. The mitigation plan shall recreate as nearly as possible the original critical area in terms of its acreage, function, geographic location and setting.

C. Mitigation Plan Submittal Requirements. A complete mitigation plan shall consist of plot plans, a written report, and performance bonds, as required below. The plot plans and written report shall be prepared by qualified professionals approved by the Director.

1. Plot Plan Requirements. The following information shall be submitted on one or more plot plans (as determined by the Director):

   a. A legal description and a survey (boundary and topography) prepared by a licensed surveyor of the proposed development site, compensation site, and location of existing critical area(s) on each. This shall include wetland delineation and existing wetland acreage.

   b. Scaled plot plan(s) indicating:
      
      i. Proposed construction;
      
      ii. Zoning setback and critical area buffer requirements;
      
      iii. Construction phasing and sequence of construction;
      
      iv. Site cross-sections, percent slope, existing and finished grade elevations;
      
      v. Soil and substrate conditions;
      
      vi. Grading and excavation plan, including erosion and sediment control plans needed for construction and long-term survival; substrate stockpiling locations and techniques, and source controls needed for critical area construction and maintenance;
      
      vii. Landscape plans indicating species, types, quantities, locations, size, spacing or density of planting; planting season or timing; planting instructions, watering schedule and
nutrient requirements; source of plant materials or seeds; and, where appropriate, measures to protect plants from destruction or predation; and

viii. Water control structures and water-level maintenance practices needed to achieve the necessary hydrocycle/hydroperiod characteristics, etc.

2. Written Report Requirements. A written report shall accompany the plot plan(s) and shall provide the additional information required below. In addition, the report should be used as needed to clarify or explain elements of the plot plan(s).

a. Baseline Information.

i. Wetland delineation and existing wetland acreage;

ii. Vegetative, faunal and hydrologic characteristics;

iii. Soil and substrate conditions;

iv. Relationship within watershed and to existing streams, wetlands, ponds, or saltwater;

v. Existing and proposed adjacent site conditions; and

vi. Existing and proposed ownership.

b. Environmental Goals and Objectives. The report shall contain a description of the environmental goals and objectives to be met by the compensation plan. The goals and objectives shall be related to the functions and values of the original critical area or, if out-of-kind wetland mitigation, the type of wetland to be emulated. This analysis shall include, but is not limited to the following:

i. Site selection criteria;

ii. Identification of compensation goals;

iii. Identification of functions and values;

iv. Dates for beginning and completion of the project and compensation plan;

v. A complete description of the relationship between and among structures and functions sought;

vi. Review of available literature and/or known like-projects to date in restoring or creating the type of critical area proposed;

vii. Likelihood of success of the proposed compensation project at duplicating the original critical area. This shall be based on experiences of comparable projects identified in the literature review or existing projects, if any; and

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viii. Likelihood of the ability of the created or restored critical area to provide the functions and values of the original critical area. This shall be based on such factors as surface water and groundwater supply and flow patterns; dynamics of the ecosystem; sediment or pollutant influx and/or erosion, periodic flooding and drought, etc.; presence of invasive flora or fauna; potential human or animal disturbance; and previous comparable projects, if any.

c. Performance Standards. Specific criteria shall be provided for evaluating whether or not the goals and objectives of the project are met and for beginning remedial action or contingency measures. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance, and diversity targets, habitat diversity indices, or other ecological, geological or hydrological criteria.

d. Detailed Specifications. Written specifications and descriptions of compensation techniques shall be provided. These shall include, but not be limited to, items in Subsection C.2 of this Section.

e. Monitoring Program. A program outlining the approach for monitoring construction of the compensation project and for assessing a completed project shall be provided. Monitoring may include, but is not limited to:

i. Establishing vegetation plots to track changes in plant species composition and density over time;

ii. Using photo stations to evaluate vegetation community response;

iii. Sampling surface and subsurface waters to determine pollutant loading, and changes from the natural variability of background conditions (pH, nutrients, heavy metals);

iv. Measuring base flow rates and storm water runoff to model and evaluate water quality predictions, if appropriate;

v. Measuring sedimentation rates, if applicable; and

vi. Sampling fish and wildlife populations to determine habitat utilization, species abundance and diversity.

f. A protocol shall be included outlining how the monitoring data will be evaluated by agencies that are tracking the progress of the compensation project. A monitoring report shall be submitted annually, at a minimum, documenting milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than seven years.
g. Contingency Plan. Identification of potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.

D. Performance and Maintenance Surety and Demonstration of Competence. A demonstration of financial resources, administrative, supervisory, and technical competence and scientific expertise to successfully execute the compensation project shall be provided. A compensation project manager shall be named and the qualifications of each team member involved in preparing the mitigation plan and implementing and supervising the project shall be provided, including educational background and areas of expertise, training and experience with comparable projects. In addition, a surety ensuring fulfillment of the compensation project, monitoring program, and any contingency measure shall be posted.

E. City Consultation. The City may consult with and solicit comments from any federal, state, regional, or local agency, including tribes, having any special expertise with respect to any environmental impact prior to approving a mitigation proposal which includes critical areas compensation. The compensation project proponents should provide sufficient information on plan design and implementation in order for such agencies to comment on the overall adequacy of the mitigation proposal.

F. Permit Conditions. Any compensation project prepared pursuant to this section and approved by the Director shall become part of the application for the permit.

**B-7. Aquifer recharge areas.**

A. Classification. The entirety of Bainbridge Island is the recharge area for the island aquifers. Certain uses must be carefully evaluated before being approved, and others must be prohibited, in order to protect the city’s aquifers, due to the following:

1. Bainbridge Island is dependent upon its aquifers as the sole and essential source for drinking water. Critical recharge areas have the potential to affect potable water where an essential source of drinking water is vulnerable to contamination.

2. The island aquifers are vulnerable to pollution that has the potential to create a significant public health hazard. High vulnerability is indicative of land uses which produce contaminants that may degrade groundwater and low vulnerability is indicative of land uses which will not.

3. Susceptibility to pollution is a function of depth of groundwater, permeability of soils, soil types, presence of potential sources of contamination and any other relevant factors.

4. Soil types that transfer water to the aquifer are rated in terms of infiltration rate. Soil types with the high infiltration rates are associated with areas of high aquifer recharge. The
rates and soil types are defined by the U.S. Department of Agriculture, Soil Conservation Service, in the Soil Survey of Kitsap County.

5. The island aquifers are vulnerable to a reduction in recharge from activities that reduce the infiltration rate on a site.

B. Hydrogeologic Assessment. The following proposed activities will require the preparation of a hydrogeologic assessment:

1. The use of hazardous substances, other than household chemicals used according to the directions specified on the packaging for domestic applications;

2. The use of injection wells, including on-site septic systems, except those domestic septic systems releasing less than 14,500 gallons of effluent per day; or

3. Any other activity determined by the Director likely to have an adverse impact on ground water quality or quantity or on the recharge of the aquifer.

C. Hydrogeologic Assessment Requirements. A hydrogeologic assessment shall include, at a minimum, the following site and proposal-related information:

1. Available information regarding geologic and hydrogeologic characteristics of the site including the surface location of all critical aquifer recharge areas located on site or immediately adjacent to the site, and permeability of the unsaturated zone;

2. Ground water depth, flow direction, and gradient based on available information;

3. Currently available data on wells and springs within 1,300 feet of the project area;

4. Location of other critical areas, including surface waters, within 1,300 feet of the project area;

5. Available historic water quality data for the area to be affected by the proposed activity;

6. Best management practices proposed to be utilized to protect groundwater quality; and

7. Low impact development practices designed to maintain infiltration rates to the underlying aquifers.

D. Performance Standards – Specific Uses.

1. Storage Tanks. All storage tanks proposed in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:

a. Underground Tanks. All new underground storage facilities proposed for the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
i. Prevent releases due to corrosion or structural failure for the operational life of the tank;

ii. Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and

iii. Use material in the construction or lining of the tank that is compatible with the substance to be stored.

b. Aboveground Tanks. All new aboveground storage facilities proposed for the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

i. Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;

ii. Have a primary containment area enclosing or underlying the tank or part thereof; and

iii. A secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.

2. Vehicle Repair and Servicing

a. Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.

b. No dry wells shall be allowed on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the state Department of Ecology prior to commencement of the proposed activity.

3. Residential Use of Pesticides and Nutrients. Application of household pesticides, herbicides, and fertilizers shall not exceed times and rates specified on the packaging.

4. Use of Reclaimed Water for Surface Percolation or Direct Recharge. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the state departments of Ecology and Health.

a. Use of reclaimed water for surface percolation must meet the ground water recharge criteria given in Chapter 90.46.080(1) and Chapter 90.46.010(10) RCW. The state Department of Ecology may establish additional discharge limits in accordance with Chapter 90.46.080(2) RCW.
b. Direct injection must be in accordance with the standards developed by authority of Chapter 90.46.042 RCW.

5. State and Federal Regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

Table 1: Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Statute – Regulation – Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Ground Storage Tanks</td>
<td>Chapter 173-303-640 WAC</td>
</tr>
<tr>
<td>Animal Feedlots</td>
<td>Chapter 173-216 WAC, Chapter 173-220 WAC</td>
</tr>
<tr>
<td>Below Ground Storage Tanks</td>
<td>Chapter 173-360 WAC</td>
</tr>
<tr>
<td>Chemical Treatment Storage and Disposal Facilities</td>
<td>Chapter 173-303-182 WAC</td>
</tr>
<tr>
<td>Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)</td>
<td>Chapter 173-303 WAC</td>
</tr>
<tr>
<td>Injection Wells</td>
<td>Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC</td>
</tr>
<tr>
<td>Activity</td>
<td>Statute – Regulation – Guidance</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Oil and Gas Drilling</td>
<td>Chapter 332-12-450 WAC, Chapter 173-218 WAC</td>
</tr>
<tr>
<td>On-Site Sewage Systems (Large Scale)</td>
<td>Chapter 173-240 WAC</td>
</tr>
<tr>
<td>On-Site Sewage Systems (&lt; 14,500 gal/day)</td>
<td>Chapter 246-272 WAC, Local Health Ordinances</td>
</tr>
<tr>
<td>Pesticide Storage and Use</td>
<td>Chapter 15.54 RCW, Chapter 17.21 RCW</td>
</tr>
<tr>
<td>Solid Waste Handling and Recycling Facilities</td>
<td>Chapter 173-304 WAC</td>
</tr>
<tr>
<td>Surface Mining</td>
<td>Chapter 332-18-015 WAC</td>
</tr>
</tbody>
</table>

E. Prohibited Uses. Uses Prohibited In Aquifer Recharge Areas. The following activities and uses are prohibited in Aquifer Recharge Areas:

1. Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste landfills;

2. Underground Injection Wells. Class I, III, and IV wells and subclasses of Class V wells;

3. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
4. Storage, Processing, or Disposal of Radioactive Substances. Facilities that store (other than minor sources such as medicinal uses or industrial testing devices) process, or dispose of radioactive substances; and

5. Other Prohibited Uses or Activities:

a. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source; and

b. Activities that would significantly reduce the recharge to aquifers that are a source of significant baseflow to a regulated stream.

**B-8. Fish and wildlife habitat conservation areas.**

**A. Purpose.** This section applies to all Fish and Wildlife Habitat Conservation Areas, as categorized in Subsection B-8 (B) below. The intent of this Section is to:

1. Preserve natural flood control, stormwater storage, and drainage or stream flow patterns;

2. Control siltation, protect nutrient reserves, and maintain stream flows and stream quality for fish and marine shellfish;

3. Prevent turbidity and pollution of streams and fish or shellfish bearing waters;

4. Preserve and protect habitat adequate to support viable populations of native wildlife and fish on Bainbridge Island; and,

5. Encourage non-regulatory methods of habitat retention whenever practical, through education and the Open Space Tax Program.

**B. Fish and Wildlife Habitat Conservation Areas Categories.**

1. **Classification.** The following categories shall be used in classifying Fish and Wildlife Habitat Conservation Areas:

   a. **Marine Critical Areas.** Commercial and recreational shellfish areas; kelp and eelgrass beds; marine and estuarine waters of the state and herring, sand lance and smelt spawning areas.

   b. **Streams:** All streams which meet the criteria for Type F, Np and Ns waters as set forth in WAC 222-16-030 of the Department of Natural Resources Water Typing System and as further modified by the definitions in this appendix. Once a stream has been classified, the City must document the reasons for changes in the classification.

   c. **Fish and Wildlife Conservation Areas:**
i. Class I Fish and Wildlife Conservation Areas: Habitats recognized by federal or state agencies for federal and/or state listed endangered, threatened, and sensitive species documented in maps or data bases available to the City of Bainbridge Island and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.

ii. Class II Fish and Wildlife Conservation Areas. Habitats for State listed candidate, monitor, or priority species documented in maps or data bases available to City of Bainbridge Island and its citizens, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.

d. Habitats and Species of Local Importance. This section provides for the designation and protection of habitats and species of local importance.

i. Designation of species of habitat of local importance can be based on any of the following circumstances:

(a) Local populations of native species are in danger of extirpation based on existing trends.

(b) Local populations of native species are likely to become threatened or endangered under state of federal law.

(c) Local populations of native species are vulnerable or declining.

(d) The species or habitat has recreation, commercial, game, tribal, or other special value.

(e) Long-term persistence of a species is dependent on the protection, maintenance, and/or restoration of the nominated habitat.

(f) Protection by other county, state, or federal policies, laws, regulations, or non-regulatory tools is not adequate to prevent degradation of the species or habitat in the city.

(g) Without protection, there is likelihood that the species or habitat will be diminished over the long term.

ii. Nomination.

(a) Any person may nominate habitats and species for designation.

(b) The nomination should indicate whether specific habitat features are to be protected (for example, nest sites, breeding areas, and nurseries), or whether the habitat or ecosystem is being nominated in its entirety.

(c) Where the nomination is a specific habitat site, the nomination shall include the name and address of all property owners of record of all assessor parcels within the area potentially affected by the management recommendations. The list shall at a minimum
include all properties within 300 feet from the edge of all property identified for special
designation.

(d) The nomination shall include recommended management strategies for the species or
habitats. Management strategies must be supported by the best available science, and
where restoration of habitat is proposed, a specific plan for restoration must be provided
prior to nomination.

iii. Nomination processing and approval. The decision whether to designate a nominated
species or habitat as one of local importance shall be made by the City Council. If
approved, the City Council shall pass an ordinance establishing the designation.

iv. Establishment of specific rules for protection. Within 120 days of the effective date of an
ordinance designating a species or habitat of local importance, the Director shall develop
an administrative rule addressing protection in compliance with this section.

C. Development Standards. Regulated uses in designated Fish and Wildlife Habitat
Conservation Areas and/or buffers shall comply with the performance standards outlined
in this Section.

1. Development standards – streams:

a. Water quality buffers – An applicant shall provide the prescribed water quality buffers in
Table 2 unless relief is granted through SMP Section 4.2.1.7 nonconforming lot or
through a shoreline variance.

b. Habitat buffers – An applicant shall provide either:

i. The prescribed habitat buffers in Table 2; or

ii. An approved Habitat Management Plan, pursuant to Section B-4, that clearly provides
greater habitat functions and values in perpetuity than the prescribed habitat buffers in
Table 2.

c. Buffer distances shall be measured from the ordinary high water mark (OHM) or from the
top of the bank where the OHM cannot be identified. Buffers shall be retained in their
natural condition. It is acceptable, however, to enhance the buffer by planting native or
equivalent vegetation as approved by the Director.

d. The buffer width shall be increased to include streamside wetlands which provide
overflow storage for stormwater, feed water back to the stream during low flow, or
provide shelter and food for fish. In braided channels, the ordinary high water mark or
top of bank shall be defined so as to include the entire stream feature.
e. Refuse and landscaping debris shall not be placed in buffers.

f. Streams in Ravines - Buffers. For streams in ravines outside the Mixed Use Town Center with ravine sides 10 feet or greater in height, the buffer width shall be the greater of:

i. The buffer width required for the stream type; or

ii. A buffer width which extends 25 feet beyond the top of the ravine.

h. Building Setback Line. A building surface setback line of 15 feet is required from the edge of any fish and wildlife habitat conservation area buffer except as provided for in Section B-11. Minor structures such as decks or impervious surfaces such as driveways may be permitted if the Director determines that such intrusions will not adversely impact the fish and wildlife habitat conservation area. The setback shall be identified on the site plan and filed as an attachment to the notice on title.

<table>
<thead>
<tr>
<th>Stream Category</th>
<th>Water Quality Buffer</th>
<th>Habitat Buffer</th>
<th>Total Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish Bearing (F)</td>
<td>100 ft</td>
<td>50 ft</td>
<td>150 ft</td>
</tr>
<tr>
<td>Non-Fish Perennial (Np)</td>
<td>40 ft</td>
<td>10 ft</td>
<td>50 ft</td>
</tr>
<tr>
<td>Non-Fish Seasonal (Ns)</td>
<td>40 ft</td>
<td>10 ft</td>
<td>50 ft</td>
</tr>
</tbody>
</table>

3. Class I Fish and Wildlife Conservation Areas Development Standards. All development as described within this chapter or within 200 feet of designated Class I Wildlife Conservation Areas shall adhere to the following standards:

a. The applicant shall submit a Habitat Management Plan as specified in Section B-4 for approval by the Director. If a wildlife conservation area designation is based on the presence of bald eagles, a Bald Eagle Management Plan, approved by the Washington State Department of Fish and Wildlife and meeting the requirements and guidelines of the bald eagle protection rules, WAC 232-12-292(or its successor), as now or hereafter amended, shall satisfy the requirements for a Habitat Management Plan (HMP).

b. All new development within ranges and habitat elements with which Class I Fish and Wildlife have a significant relationship may require the submittal of a Habitat Management Plan (HMP) as specified in Section B-4. The requirement for an HMP shall be determined during the SEPA/Critical Areas review on the project.
c. An HMP required pursuant to this section shall consider measures to retain and protect the wildlife habitat and shall consider effects of land use intensity, buffers, setbacks, impervious surfaces, erosion control and retention of native or equivalent vegetation.

d. Increased Buffer Provisions. The Director may increase buffer widths, up to 50% greater than the applicable buffer set in this chapter for critical areas with known locations of endangered, threatened, or state monitor or priority species for which a habitat management plan indicates a larger buffer is necessary to protect habitat values for such species. Such determination shall be based on site-specific and project-related conditions.

4. Class II Fish and Wildlife Conservation Area Development Standards. All development within designated Class II Wildlife Conservation Areas shall adhere to the following standards:

a. An HMP may be required for any proposed development within designated Class II Fish and Wildlife Conservation Areas. The HMP shall consider measures to retain and protect the wildlife habitat and shall consider effects of land use intensity, buffers, setbacks, impervious surfaces, erosion control and retention of native or equivalent vegetation. The requirement for an HMP shall be determined during the SEPA/Critical Areas review on the project.

b. Increased Buffer Provisions. The Director may increase buffer widths, up to 50% greater than the applicable buffer set in this chapter for critical areas with known locations of endangered, threatened, or state monitor or priority species for which a habitat management plan indicates a larger buffer is necessary to protect habitat values for such species. Such determination shall be based on site-specific and project-related conditions.

5. Stream Crossings. Any private or public road expansion or construction which is allowed and must cross streams classified within this chapter, shall comply with the following minimum development standards:

a. Bridges or bottomless culverts shall be required for all streams which have Salmonid breeding habitat. Other alternatives may be allowed upon submittal of a Habitat Management Plan which demonstrates that other alternatives would not result in significant impacts to the Fish and Wildlife Conservation Area, as determined appropriate through the Washington State Department of Fish and Wildlife, Hydraulics Project Approval process. The plan must demonstrate that salmon habitat will be replaced on a 1:1 ratio.

b. Crossings shall not occur in Salmonid spawning areas unless no other feasible crossing site exists. For new development proposals, if existing crossings are determined to
adversely impact salmon spawning or passage areas, new or upgraded crossings shall be located as determined necessary through coordination with the Washington State Department of Fish and Wildlife;

c. Bridge piers or abutments shall not be placed in either the floodway or between the ordinary, high water marks unless no other feasible alternative placement exists;

d. Crossings shall not diminish flood carrying capacity;

e. Crossings shall serve multiple properties whenever possible;

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

6. Stream Relocations. Stream relocations for the purpose of flood protection and/or fisheries restoration shall only be permitted when adhering to the following minimum performance standards and when consistent with Washington State Department of Fish and Wildlife Hydraulic Project Approval:

a. The channel, bank, and buffer areas should be replanted with native or equivalent vegetation that replicates a natural, undisturbed riparian condition;

b. For those shorelands and waters designated as Frequently Flooded Areas pursuant to Section B-1, a professional engineer licensed in the State of Washington shall provide information demonstrating that the equivalent base flood storage volume and function will be maintained; and

c. Relocated stream channels shall be designed to meet or exceed the functions and values of the stream to be relocated.

7. Pesticides, Fertilizers and Herbicides. Use of pesticides, fertilizers, herbicides are regulated by Section 4.1.7 of the Shoreline Master Program

8. Land Divisions and Land Use Permits. All land divisions and land uses proposed on a site that includes Fish and Wildlife Habitat Conservation Areas shall comply with the following procedures and development standards:

a. The open water area of lakes, streams, and tidal lands shall not be permitted for use in calculating minimum lot area.

b. Land division approvals shall be conditioned so that all required buffers are designated as an easement or covenant encumbering the buffer. Such easement or covenant shall be recorded together with the land division and represented on the final plat, short plat or binding site plan.
c. In order to avoid the creation of nonconforming lots, each new lot shall contain at least one building site that meets the requirements of this chapter, including buffer requirements for habitat conservation areas. Each lot must also have access and a sewage disposal system location that are suitable for development which do not adversely impact the Fish and Wildlife Conservation Area.

d. After preliminary approval and prior to final land division approval, the Director may require that the common boundary between a required buffer and the adjacent lands be identified using permanent signs. In lieu of signs, alternative methods of buffer identification may be approved when such methods are determined by the Director to provide adequate protection to the aquatic buffer.

10. Trails and Trail-Related Facilities. Construction of public and private trails and trail-related facilities, such as benches, interpretive centers, and viewing platforms, may be allowed in Fish and Wildlife Habitat Conservation Areas or their buffers pursuant to the following standards:

a. Trails and related facilities shall, to the extent feasible, be placed on existing road grades, utility corridors, or other such previously disturbed areas which do not provide ecological functions.;

b. Trails and related facilities shall be planned to minimize removal of trees, shrubs, snags and important wildlife habitat;

c. Viewing platforms, interpretive centers, benches and access to them, shall be designed and located to minimize disturbance of wildlife habitat and/or critical characteristics of the affected conservation area;

d. Trails, in general, shall be set back from streams so that there will be no or minimal impact to the stream from trail use or maintenance. Elevated trails which protect or enhance ecological functions shall be used to the maximum extent feasible. Trails shall be constructed with pervious surfaces when feasible.


a. A stream channel and bank may be stabilized when naturally occurring earth movement threatens existing structures (defined as requiring a Building Permit pursuant to the applicable building code), public improvements, unique natural resources, public health, safety or welfare, or the only feasible access to property, and, in the case of streams, when such stabilization results in maintenance of Fish and Wildlife Habitat, flood control, and improved water quality.
b. Where bank stabilization is determined to be necessary, bioengineering or other non-structural methods should be the first option for protection. Bulkheads and retaining walls may only be utilized as an engineering solution where it can be demonstrated that an existing residential structure cannot be safely maintained without such measures, and that the resulting retaining wall is the minimum length necessary to provide a stable building area for the structure. The Director may require that bank stabilization be designed by a professional engineer licensed in the State of Washington with demonstrated expertise in hydraulic actions of shorelines. Bank stabilization projects may also require a City of Bainbridge Island clearing or grading permit and Hydraulic Project Approval from the Washington Department of Fish and Wildlife.

c. Nonstructural streambank protective techniques are preferred to bulkheads or other types of streambank armoring. Nonstructural techniques include but are not limited to vegetation plantings and bioengineering.

13. Fencing and Signs. Prior to approval or issuance of permits for land divisions or other new development, the Director may require that the common boundary between a required buffer and the adjacent lands be identified using fencing or permanent signs. In lieu of fencing or signs, alternative methods of buffer identification may be approved when such methods are determined by the Director to provide adequate protection to the buffer.
B-9. Geologically hazardous areas.

A. General. Geologically hazardous areas include erosion hazard areas, landslide hazard areas, and seismic hazard areas. Zone of influence areas are not considered geologically hazardous areas.

B. Purpose. The intent of this section is to prevent the potential for personal injury or loss of life or property due to flooding, erosion, landslides, seismic events, or soil subsidence. Development must not increase slope instability, and must avoid on-site and off-site impacts, as well as potential risk to structures. Preserving the existing vegetation may be an important part of minimizing those risks.

C. Classification. Geologically hazardous areas shall be classified based upon landslide history and the presence of unstable soils, steepness of slopes, erosion potential, and seismic hazards. Areas in this category are a potential threat to public health, safety, and welfare when construction is allowed. While some potential risk due to construction can be reduced through structural engineering design, construction in these areas should be avoided when the potential risk cannot be reduced to a level comparable to the risk if the site were initially stable prior to construction. Classification and rating shall be based upon the risk to the environment and to development in geologically hazardous areas.

D. Minimum Submittal Requirements.

1. All geologically hazardous areas and buffers.

   a. Indemnification. An indemnification or hold harmless agreement shall be required for all projects in geologically hazardous areas and buffers. The form of the agreement shall be approved by the City and executed prior to the commencement of construction or site alteration.

   b. Notice A notice of intent to construct on a landslide hazard area or reduce the minimum buffer in a landslide hazard area shall be given pursuant to BIMC 2.16.20. The notice of intent shall be issued within 14 days of a completed application pursuant to BIMC 2.16.020(5). The notice shall include a 21-day comment period and no permits or approval of reduced buffers shall be issued before the end of the comment period.

   c. All reports or analyses required or prepared pursuant to this Section shall be prepared pursuant to Section B-5, B-9 and/or any other applicable provisions of this appendix, and shall meet the satisfaction of, and be approved by, the City Engineer prior to the commencement of any development activity.

   d. To protect public health, safety and welfare, the City Engineer may call for a third party review of any geotechnical report in cases where there may be potential for substantial
damage to life, property or the environment should the proposed engineering solution fail. When a third party review is required, costs incurred for a qualified third party geotechnical engineer to perform the review shall be borne by the applicant.

e. Geological Hazards Assessment. A Critical Area report is required for all projects in geologically hazardous areas and buffers and shall contain an assessment of geological hazards including the following site- and proposal-related information at a minimum:

i. Site and Construction Plans. The report shall include a copy of the site plans for the proposal showing:

A. The type and extent of geologic hazard areas, any other Critical Areas, and buffers on, adjacent to, or within a zone or distance of potential significant influence as determined by a professional engineer/ geologist;

B. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain, if available;

C. The topography, as determined by a professional engineer or geologist, of the project area and all hazard areas addressed in the report; and

D. Clearing limits.

ii. Assessment of Geological Characteristics. The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region. The assessment shall include, but not be limited to:

A. A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;

B. A detailed overview of the field investigations, published data, and references; data and conclusions from past assessments of the site; and site specific measurements, test, investigations, or studies that support the identification of geologically hazardous areas; and

C. A description of the vulnerability of the site to seismic and other geologic events.

iii. Analysis of Proposal. The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties.
iv. Minimum Buffer and Building Setback. The report shall make a recommendation for the
minimum no-disturbance buffer and minimum building setback from any geologic hazard
based upon the geotechnical analysis. Where the recommended buffers are less than the
standard buffers set forth in section Section B-9(E)(2)(a) the rationale and basis for the
reduced buffer shall be clearly articulated and demonstrate that the protection standard set
forth in that section has been met.

f. Incorporation of Previous Study. Where a valid Critical Areas report has been prepared for
a specific site, and where the proposed land use activity and surrounding site conditions
are unchanged, said report may be incorporated into the required Critical Area report, if
deemed still valid and appropriate by a professional engineer or geologist. The applicant
shall submit a hazards assessment detailing any changed environmental conditions
associated with the site based on best professional judgment of the engineer/ geologist.

g. Mitigation of Long-Term Impacts. When hazard mitigation is required, the mitigation plan
shall specifically address how the activity maintains or reduces the pre-existing level of
risk to the site and adjacent properties on a long-term basis (equal to or exceeding the
projected life span of the activity or occupation). Proposed mitigation techniques shall be
considered to provide long-term hazard reduction only if they do not require regular
maintenance or other actions to maintain their function. Mitigation may also be required
to avoid any increase in risk above the pre-existing conditions following abandonment of
the activity.

h. In addition to the general Critical Area report requirements of section B-9(D) Critical Area
reports for geologically hazardous areas must meet requirements of this section. Critical
Area reports for two or more types of Critical Areas must meet the report requirements
for each relevant type of Critical Area.

2 Landslide Hazard and Erosion Hazard Areas. In addition to the basic Critical Areas report,
a Critical Area report for an erosion hazard or landslide hazard area shall include the
following information at a minimum:

a. Erosion Control. An erosion control plan prepared by a civil engineer shall be submitted
to the City prior to the issuance of a clearing or grading permit, in accordance with BIMC
15.20.

b. The applicant shall provide a geotechnical analysis containing the following information:

i. Site Plan. The Critical Area report shall include a copy of the site plan for the proposal
showing:

A. The height of slope, slope gradient, and cross-section of the project area;
B. The location of springs, seeps, or other surface expressions of ground water on or a zone
or distance of potential significant influence as determined by a professional engineer/
geologist; and

C. The location and description of surface water run-off features.

ii. Hazards Analysis. The hazards analysis component of the Critical Areas report shall
specifically include:

A. A description of the extent and type of vegetative cover;

B. A description of subsurface conditions based on data from site-specific explorations;

C. Descriptions of surface and ground water conditions, public and private sewage disposal
systems, fills and excavations, and all structural improvements;

D. An estimate of slope stability and the effect construction and placement of structures will
have on the slope over the estimated life of the structure;

E. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic
events such as seismic activity or a one hundred-year storm event;

F. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-
out on down slope properties;

G. A study of slope stability including an analysis of proposed cuts, fills, and other site
grading;

H. Recommendations for building siting limitations; and

I. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site
to erosion.

iii. Geotechnical Engineering Report. The technical information for a project within a
landslide hazard area shall include a geotechnical engineering report prepared by a
licensed engineer that presents engineering recommendations for the following:

A. Parameters for design of site improvements including appropriate foundations and
retaining structures. These should include allowable load and resistance capacities for
bearing and lateral loads, installation considerations, and estimates of settlement
performance;

B. Recommendations for drainage and subdrainage improvements;
C. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and

D. Mitigation of adverse site conditions including slope stabilization measures for seismically unstable soils, surface water management, location and methods of erosion control, a vegetation management and/or replanting plan, and/or other means for maintaining long-term soil stability if appropriate.

3. Seismic Hazards Areas. In addition to the basic report requirements, a Critical Area report for a seismic hazard area shall also meet the following requirements:

a. Fault Hazard. The applicant shall provide a geologic/geotechnical analysis containing information specified by the City Engineer that documents the presence or absence of any surface deformation on the site in areas mapped by the City. If deformation is located, the applicant shall provide a geotechnical analysis containing information specified by the City Engineer, which concludes that the development proposal as mitigated meets the standards of this section.

b. Liquefaction Hazard. The applicant shall provide a geotechnical analysis containing information specified by the City Engineer that meets the standards of this section (as mitigated).

c. Seismic Landslide Hazard. The applicant shall provide the same analysis and plan as required for landslide hazard areas, pursuant to Section B-9(D).

4. Tsunami Hazards. The City shall provide applicants for development in low lying shoreline areas and other areas where flood elevation is controlled by tide level with information on tsunami hazards.(may need revision)

5. Zone of Influence Areas beyond the established buffer. The applicant shall have the surface and storm water management plan (See BIMC 15.20)for the project reviewed by a geotechnical engineer to determine if there is any potentially adverse impacts to the landslide hazardous area. If the geotechnical engineer or the City Engineer determines that there are potential adverse impacts, the applicant shall provide a geotechnical analysis containing information specified by the City Engineer which analyzes the potential impacts to the geological hazard from the proposed development in the zone of influence and meets the standards of this section. The report shall contain recommendations to avoid adverse impacts to the geologically hazardous area. Concentrated discharge of stormwater shall only be allowed where specially recommended in the report and authorized by the City Engineer.”

E. Development Standards.
1. General Requirements. The City Engineer shall establish administrative procedures to implement this section. The applicant shall meet the following standards for all new activities permitted in geologically hazardous areas or associated buffers:

   a. The proposed activity shall not create a net increase in geological instability, either on- or off-site, which is defined as follows:

      i. The subject parcel shall not be less stable after the planned development than before; and

      ii. The adjacent parcels shall not have greater risk or be less stable after the planned development than before.

   b. The proposed activity shall not increase the risk of life safety due to geological hazards above professionally acceptable levels.

   c. The proposed activity shall not increase the risk due to geological hazards above professionally acceptable levels for:

      i. Property loss of any habitable structures or their necessary supporting infrastructure on-site or;

      ii. Risk to any off-site structures or property of any kind; and

   d. Proposed buildings shall be constructed using appropriate engineering methods that respond to the geologic characteristics specific to the site in order to achieve the highest standard of safety feasible.

   e. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.0 for dynamic conditions. Analysis of dynamic conditions shall be based on the minimum horizontal acceleration for the probabilistic maximum considered earthquake as established by the currently adopted version of the International Building Code.

   f. The proposed activity shall not further degrade the values and functions of the associated critical areas.

2. Redevelopment of existing structures

   a. If an existing structure is damaged or is intentionally demolished the new structure must meet all the provisions of a new structure.

   b. Structural alteration to an existing legally constructed structure that does not increase the structural footprint and are determined by the City Engineer as having a minimal
potential for increasing landslide hazard and meets the minimum buffer dimensions in B-9(E)(3)(i);

3. Development Design and Location. The following requirements shall apply to any land or vegetation modification or construction within a landslide hazard area and/or its buffer as described herein:

   a. Buffer Requirement: A buffer equal to the height of the slope or fifty (50) feet, whichever is greater, shall be established from all edges of a landslide hazard area except where no other reasonable alternative exists, reduction may be allowed as follows:

   i. Buffer Reduction.

      A. Buffer reductions may be allowed provided a critical areas report, pursuant to Section B-9(D)(1)(2) and any other related section of Appendix B, demonstrates to the Director that the buffer reduction will not reduce the level of protection to the proposed development, adjacent properties, and other associated critical areas as required by Section B-9(E)(1).

      B. For slopes forty (40) percent or greater the buffer may in no case be reduced to less than ten (10) feet. A decision by the Director to reduce buffer shall be based on a critical areas report pursuant Section B-9(D)(1)(2) that may includes a third-party independent review by a qualified geotechnical engineer pursuant to BIMC Section B-9(D)(1)(d);

   ii. Increased Buffer. The buffer may be increased beyond that specified in subsection (a) above if the Director determines a larger buffer is necessary to prevent risk of damage to proposed development, adjacent development, and uses and the associated critical areas;

   iii. Building Setback. All building and structures shall have a minimum setback of (15) feet from the outer edge of the buffer around landslide hazard areas to allow for construction activity; and

   iv. Vegetation Retention. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited.

b. All development proposals shall be designed to avoid impacts to the geologically hazardous areas. The development shall be designed to minimize the footprint of building in other disturbed areas, minimize removal of vegetation, minimize topographic change, and retain open space to the maximum extent practicable;

c. Development design shall utilize clustering, under-structure parking, multi-level construction, and tiered foundations to the extent feasible to minimize impervious lot coverage, slope disturbance, and changes to the natural topography;
d. Access shall be in the least sensitive part of the site, and common access drives and utility corridors are required to the extent feasible;

e. Roads, walkways and parking areas shall be designed to parallel the natural contours to the extent feasible;

f. All proposed clearing and tree removal shall be marked in the field for inspection and approval prior to alteration of the site;

g. Cut and fill slopes shall be prepared and maintained to control against erosion and instability;

h. Drainage and stormwater designs in zones of influence shall incorporate elements of low impact design, to the extent feasible, and shall be designed in such a manner that stormwater outlet discharges do not create additional impacts. The proposed activities shall not increase surface water discharge or sedimentation to adjacent properties beyond the pre-development condition; and

F. Exemptions. The following activities are permitted in geologically hazardous areas or associated buffers; provided, that the applicant can demonstrate that applicable standards in Subsection B-9(E)(1) can be met, or where the applicant has demonstrated through a Critical Areas report prepared by a geotechnical engineer in accordance with the specifications of the City Engineer that no adverse impact will result from the proposal and where approved surface water drainage will result in minimum slope and vegetation disturbance:

1. Surface Water Management: Slopes or buffers may be used for approved surface water conveyance if no other reasonable alternative route is available. Installation techniques shall minimize disturbance to the slope and vegetation.

2. The construction of approved public or private trails; provided, they are constructed of material, for example cable lift access, which will not contribute to surface water runoff;

3. The construction of public or private utility corridors or streets; provided, it has been demonstrated that such alterations will not increase landslide or erosion risks through required analysis pursuant to section B-9(D)(1) and the City determines that no other feasible alternative exists;

4. Select Vegetation Removal Activities. The following vegetation removal activities are allowed, provided that no vegetation shall be removed from a geologically hazardous area or its buffer without approval from the Director;

   a. Removal of noxious weeds using non-motorized equipment or light equipment if approved by the Director. Provision for the use of herbicides are in Section 4.1.7 of the Shoreline
Master Program. Bare areas remaining after weed removal shall be re-vegetated with native plant species pursuant to an enhancement plan approved by the City.

b. Removal and pruning of hazard trees as defined ISA (International Society of Arboriculture) standards by provided that a ISA certified arborist documents the hazard and provides a report to the Director for review and approval. Replacement shall be based on the recommendations of the arborist and geotechnical engineer and approved by the Director. The Director may require a second opinion from a certified ISA arborist in cases of removal of hazard trees. Mitigation for tree removal shall follow Section 4.1.2 of the Shoreline Master Program and the following

i. Size of trees shall be approved by the Director. and

ii. The landowner shall ensure 100% survival of replacement trees.

5. The trimming and limbing of vegetation for the creation and maintenance of view corridors in accordance with the pruning standards of the International Society of Arboriculture; provided, that the soils are not disturbed and activity will not increase the risk of landslide or erosion. All vegetation removal must be based on a bluff management plan (SMP Section 4.1.5) developed by a certified arborist and reviewed by a geotechnical engineer to determine if it will impact slope stability. A clearing permit will be required prior to the any vegetation removal.

6. Limited Exemption - For landslide areas 40% or greater with a vertical elevation change of up to twenty (20) feet may be exempted from section B-9(E)(2)(i) based on the City review and acceptance of a Critical Areas report from a geologist or licensed geotechnical engineer in accordance with section B-9(D) when no adverse impact will result from the exemption.

**B-10. Wetlands.**

A. Purpose. This section applies to all regulated uses within or adjacent to areas designated as wetlands, as categorized in section B-10(B) below. The intent of this Section is listed in no specific priority, as follows:

1. Preserve, protect, restore, and improve wetland functions and values. Achieve no net loss and increase the quality of wetland acreage, functions, and values within the city. Mitigation measures, as conditions of permits, must have a reasonable expectation of success. Under the conditions of this Section, the Director may deny development proposals that would irreparably impact regulated wetlands; and

2. Protect the public's health, safety, and welfare, while preventing public expenditures that could arise from improper wetland uses and activities; and
3. Plan wetland uses and activities in a manner that protects and enhances the natural systems and environmental quality of Bainbridge Island and allows property holders to benefit from wetland property ownership wherever allowable under the conditions of this chapter; and

4. Preserve ecological functions and values of wetlands which provide water quality protection, natural flood control, stormwater storage, contributes to groundwater and stream flow, shoreline stabilization, and wildlife and fish habitat; and

5. Prevent turbidity and pollution of wetlands and fish or shellfish bearing waters, and maintain healthy wildlife habitat; and

6. Encourage land use development patterns that maintain, enhance, or restore natural wetland systems and protect disturbance-sensitive and wetland-dependent wildlife, fish resources, and open space; and

7. Protect and preserve wetlands values as natural areas providing aesthetic, recreational, and educational opportunities that need to be preserved for future generations; and

8. Enhance the connectivity between wetland landscapes.

B. Wetland Delineation and Categories. Identification of wetlands and delineation of their boundaries pursuant to this Chapter shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements. All areas within the City of Bainbridge Island meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this Chapter.

The City uses the Department of Ecology's (DOE’s) Washington State Wetland Rating System for Western Washington, 2004, or as amended hereafter and adopted by the Director to categorize wetlands for the purposes of establishing wetland buffer widths, wetland uses and replacement ratios for wetlands. Once a wetland has been classified using the current DOE rating system, the City shall not reclassify the wetland without clearly documenting the reason for the change. If the wetland has a rating in the City GIS system, this rating can be used for regulatory purposes. This system consists of four wetland categories generally described as follows:

1. Category I wetlands are those that:
   a. Represent unique or rare wetland type; or
   b. Are more sensitive to disturbance than most wetlands; or
   c. Are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or
d. Provide a high level of function.

Category I wetlands include estuarine wetlands larger than one acre, bogs, mature and old-growth wetlands over one acre, wetlands in coastal lagoons, and wetlands that perform many functions very well as demonstrated by a score of over 70 points using the DOE rating system.

2. Category II wetlands are difficult, though not impossible, to replace, and provide a high level of function. Category II wetlands include estuarine wetlands smaller than one acre or disturbed and larger than one acre and wetlands that perform functions well as demonstrated by a score of 51-69 using the DOE rating system.

3. Category III wetlands are wetlands with a moderate level of function as demonstrated by a score of 30-50 points using the DOE rating system.

4. Category IV wetlands have the lowest level of function as demonstrated by a score less than 30 points using the DOE rating system and are often heavily disturbed.

C. Regulated and Non-Regulated Wetlands Classification.

1. Regulated Wetlands:

a. All natural wetlands that meet the criteria in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Cost Region (Version 2.0)

b. Unintentionally created wetlands that meet the criteria in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Cost Region (Version 2.0) except as listed in subsection (C)(2)(b) of this section.

c. Wetlands intentionally created from non-wetland areas to mitigate conversion of other wetlands.

2. Non-Regulated Wetlands:

a. Created Wetlands. Wetlands created intentionally from a non-wetland site that was not required to be constructed as mitigation for adverse wetland impacts. These may include, but are not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment ponds, farm ponds not contiguous, as defined in this chapter, and landscape amenities. The applicant shall bear the burden of proving that the wetland was intentionally created from a non-wetland site. Where enhancements or restorations are made to wetlands for purposes other than mitigation, the original rating shall be maintained even if the changes would otherwise result in a higher classification.
b. Recent, Road Construction Related Wetlands. Wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. The applicant shall bear the burden of proving that the wetland meets these criteria.

D. Development Standards.

1. Water quality buffers – An applicant shall provide the prescribed water quality buffers in this section (Tables 3-6) unless relief is granted through SMP Section 4.2.1.7 nonconforming lot or through a shoreline variance.

2. Habitat buffers – An applicant shall provide either:
   a. The prescribed habitat buffers specified in this section (Tables 3, 4, 5, and 6); or
   b. An approved Habitat Management Plan, pursuant to section B-4, that clearly provides greater habitat functions and values in perpetuity than the prescribed habitat buffers in this section (Tables 3, 4, 5, and 6).

3. Buffers. Buffers shall remain undisturbed natural vegetation areas except where the buffer can be enhanced to improve its functional attributes. Any buffer enhancement and/or limited view clearing activity must be reviewed and approved by the Director. No refuse shall be placed in the buffer. Alteration of habitat buffer areas may be allowed for water-dependent and water-related activities and for development authorized by Section B-2 (C ) (Exemptions), or Section B-2(D)(Standards for Existing Development), or Section B-3(3) (Buffer Averaging), or through SMP Section 4.2.1.7 nonconforming lot or through a shoreline variance.

4. If a wetland meets more than one of the criteria listed in each table, the buffer needed to protect the wetland is the widest one.

Table 3: Category I Wetlands - Buffers

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Impact of Land Use (See Definitions)</th>
<th>Water Quality Buffer</th>
<th>Habitat Buffer</th>
<th>Total Buffer</th>
<th>Other Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Heritage Wetlands</td>
<td>Low</td>
<td>50 ft</td>
<td>75 ft</td>
<td>125 ft</td>
<td>No additional discharge of surface water. No septic systems within 300 ft. Restore degraded parts of the buffer</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>115 ft</td>
<td>190 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>150 ft</td>
<td>250 ft</td>
<td></td>
</tr>
<tr>
<td>Bogs</td>
<td>Low</td>
<td>50 ft</td>
<td>75 ft</td>
<td>125 ft</td>
<td>No additional surface</td>
</tr>
<tr>
<td>Wetland Characteristics</td>
<td>Impact of Land Use (See Definitions)</td>
<td>Water Quality Buffer</td>
<td>Habitat Buffer</td>
<td>Total Buffer</td>
<td>Other Protection</td>
</tr>
<tr>
<td>-------------------------</td>
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<td>----------------------</td>
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<td>--------------</td>
<td>-----------------</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>115 ft</td>
<td>190 ft</td>
<td>discharges.</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>150 ft</td>
<td>250 ft</td>
<td>Restore degraded parts of the buffer.</td>
</tr>
<tr>
<td>Forested</td>
<td>Low</td>
<td>50 ft</td>
<td>75 ft</td>
<td>125 ft</td>
<td>If forested wetland scores high for habitat, maintain connectivity to other natural areas.</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>115 ft</td>
<td>190 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>150 ft</td>
<td>250 ft</td>
<td></td>
</tr>
<tr>
<td>Estuarine</td>
<td>Low</td>
<td>50 ft</td>
<td>50 ft</td>
<td>100 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>75 ft</td>
<td>150 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>100 ft</td>
<td>200 ft</td>
<td></td>
</tr>
<tr>
<td>Wetlands in Coastal Lagoon</td>
<td>Low</td>
<td>50 ft</td>
<td>50 ft</td>
<td>100 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>75 ft</td>
<td>150 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>100 ft</td>
<td>200 ft</td>
<td></td>
</tr>
<tr>
<td>High level of function for habitat (score for habitat is 29-36 pts.)</td>
<td>Low</td>
<td>50 ft</td>
<td>100 ft</td>
<td>150 ft</td>
<td>Maintain connectivity to other natural areas. Restore degraded parts of the buffer.</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>150 ft</td>
<td>225 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>200 ft</td>
<td>300 ft</td>
<td></td>
</tr>
<tr>
<td>Moderate level of function for habitat (score for habitat is 20-28 pts.)</td>
<td>Low</td>
<td>50 ft</td>
<td>25 ft</td>
<td>75 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>35 ft</td>
<td>110 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>50 ft</td>
<td>150 ft</td>
<td></td>
</tr>
<tr>
<td>High level of function for water quality improvement and low for habitat (score for water quality 24-32 pts.; habitat</td>
<td>Low</td>
<td>50 ft</td>
<td>0 ft</td>
<td>50 ft</td>
<td>No additional discharges of untreated runoff.</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>0 ft</td>
<td>75 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>0 ft</td>
<td>100 ft</td>
<td></td>
</tr>
<tr>
<td>Wetland Characteristics</td>
<td>Impact of Land Use (See Definitions)</td>
<td>Water Quality Buffer</td>
<td>Habitat Buffer</td>
<td>Total Buffer</td>
<td>Other Protection</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>less than 20 pts.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not meeting any of the above criteria.</td>
<td>Low</td>
<td>50 ft</td>
<td>0 ft</td>
<td>50 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>0 ft</td>
<td>75 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>0 ft</td>
<td>100 ft</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Category II Wetlands - Buffers

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Impact of Land Use (See Definitions)</th>
<th>Water Quality Buffer</th>
<th>Habitat Buffer</th>
<th>Total Buffer</th>
<th>Other Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level of function for habitat (score for habitat is 29-36 pts.)</td>
<td>Low</td>
<td>50 ft</td>
<td>100 ft</td>
<td>150 ft</td>
<td>Maintain connectivity to other natural areas.</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>150 ft</td>
<td>225 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>200 ft</td>
<td>300 ft</td>
<td></td>
</tr>
<tr>
<td>Moderate level of function for habitat (score for habitat is 20-28 pts.)</td>
<td>Low</td>
<td>50 ft</td>
<td>25 ft</td>
<td>75 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>35 ft</td>
<td>110 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>50 ft</td>
<td>150 ft</td>
<td></td>
</tr>
<tr>
<td>Estuarine</td>
<td>Low</td>
<td>50 ft</td>
<td>25 ft</td>
<td>75 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>35 ft</td>
<td>110 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>15 ft</td>
<td>115 ft</td>
<td></td>
</tr>
<tr>
<td>Not meeting any of the above criteria</td>
<td>Low</td>
<td>50 ft</td>
<td>0 ft</td>
<td>50 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>75 ft</td>
<td>0 ft</td>
<td>75 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>100 ft</td>
<td>0 ft</td>
<td>100 ft</td>
<td></td>
</tr>
</tbody>
</table>
### Table 5: Category III Wetlands - Buffers

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Impact of Land Use (See Definitions)</th>
<th>Water Quality Buffer</th>
<th>Habitat Buffer</th>
<th>Total Buffer</th>
<th>Other Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate level of function for habitat (score for habitat is 20-28 pts.)</td>
<td>Low</td>
<td>40 ft</td>
<td>35 ft</td>
<td>75 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate High</td>
<td>60 ft</td>
<td>50 ft</td>
<td>110 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>80 ft</td>
<td>70 ft</td>
<td>150 ft</td>
<td></td>
</tr>
<tr>
<td>Not meeting above criterion</td>
<td>Low</td>
<td>60 ft</td>
<td>0 ft</td>
<td>60 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate High</td>
<td>60 ft</td>
<td>0 ft</td>
<td>60 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>80 ft</td>
<td>0 ft</td>
<td>80 ft</td>
<td></td>
</tr>
</tbody>
</table>

### Table 6: Category IV Wetlands - Buffers

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Impact of Land Use (See Definitions)</th>
<th>Water Quality Buffer</th>
<th>Habitat Buffer</th>
<th>Total Buffer</th>
<th>Other Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larger than 10,000 square feet</td>
<td>Low</td>
<td>40 ft</td>
<td>0 ft</td>
<td>40 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate High</td>
<td>40 ft</td>
<td>0 ft</td>
<td>40 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>50 ft</td>
<td>0 ft</td>
<td>50 ft</td>
<td></td>
</tr>
<tr>
<td>Smaller than 10,000 square feet</td>
<td>Low</td>
<td>40 ft</td>
<td>0 ft</td>
<td>40 ft</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Moderate High</td>
<td>40 ft</td>
<td>0 ft</td>
<td>40 ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>40 ft</td>
<td>0 ft</td>
<td>40 ft</td>
<td></td>
</tr>
</tbody>
</table>

### Notes

a. For Category II or III wetlands smaller than 10,000 square feet with a habitat score of less than 20 points, the buffer may be reduced by 50 percent.

b. For the purpose of determining the impact of land use, unless the Director determines a lesser level of impact is appropriate based on information provided by the applicant, the intensity of impact of the adjacent land use is determined based on the “impact of land use” definition.
5. If an applicant elects to propose an HMP, and that HMP proposes habitat buffer widths less than those prescribed in Tables 3 – 6, the HMP shall be prepared pursuant to Section B-4 and fulfill all requirements specified therein.

6. Table 7 provides examples of measures that might be provided in an HMP or when prescribed buffers are otherwise altered to minimize impacts of certain activities. Other measures may also be effective in minimizing impacts depending on site-specific circumstances and the nature of proposed activity.

Table 7: Examples of measures to minimize impacts to wetlands from different types of activities.

<table>
<thead>
<tr>
<th>Examples of Disturbance</th>
<th>Examples of Measures to Minimize Impacts</th>
<th>Activities that Cause the Disturbance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lights</td>
<td>Direct lights away from wetland.</td>
<td>Parking lots, warehouses, manufacturing, residential</td>
</tr>
<tr>
<td>Noise</td>
<td>Locate activity that generates noise away from wetland.</td>
<td>Manufacturing, residential</td>
</tr>
<tr>
<td>Toxic runoff*</td>
<td>Route all new runoff away from wetland. Establish covenants limiting use of pesticides within 150 ft of wetland. Apply integrated pest management.</td>
<td>Parking lots, roads, manufacturing, residential areas, application of agricultural pesticides, landscaping</td>
</tr>
<tr>
<td>Change in water regime</td>
<td>Infiltrate or treat, detain, and disperse new runoff into buffer.</td>
<td>Impermeable surfaces, lawns, tilling</td>
</tr>
<tr>
<td>Pets</td>
<td>Plant dense vegetation around buffer, such as rose, hawthorn, etc.</td>
<td>Residential areas</td>
</tr>
<tr>
<td>Human disturbance</td>
<td>Plant buffer with impenetrable natural vegetation appropriate for region.</td>
<td>Residential areas</td>
</tr>
<tr>
<td>Dust</td>
<td>Utilize best management practices to control dust.</td>
<td>Tilled fields</td>
</tr>
</tbody>
</table>

* These examples are not necessarily adequate to meet the rules for minimizing toxic runoff if threatened or endangered species are present at the site.
7. Buffer Measurement. All buffers shall be measured on a horizontal plane from the regulated wetland edge as marked in the field.

8. Fencing and Signs. This section applies to those wetlands and their buffers that are within 200 feet of regulated development activities.

a. Wetland buffers shall be temporarily fenced or otherwise suitably marked, as required by the Director, between the area where the construction activity occurs and the buffer. Fences shall be made of a durable protective barrier and shall be highly visible. Silt fences and plastic construction fences may be used to prevent encroachment on wetlands or their buffers by construction. Temporary fencing shall be removed after the site work has been completed and the site is fully stabilized per City approval.

b. The Director may require that permanent signs and/or fencing be placed on the common boundary between a wetland buffer and the adjacent land. Such signs will identify the wetland buffer. The Director may approve an alternate method of wetland and buffer identification, if it provides adequate protection to the wetland and buffer.

9. Building or Impervious Surface Setback Lines. A building or impervious surface setback line of 15 feet is required from the edge of any wetland buffer. Minor structural or impervious surface intrusions into the areas of the setback may be permitted if the Director determines that such intrusions will not adversely impact the wetland. The setback shall be identified on a site plan and filed as an attachment to a notice on title.

E. Regulated Uses And Activities. New development activities on properties containing regulated wetlands and buffers are subject to the development standards in this section, as permitted in the underlying zoning designation. Requirements for additional activities are specified in Table 8. The City may grant exceptions to these uses and activities according to the intent and specifications of this chapter. All authorized uses and activities in a regulated wetland or its buffer shall be subject to conditions established by the Director and may be subject to mitigation as required by this chapter.

Development shall be classified as “allowed,” “permitted,” “special use” or “prohibited” according to this Section. Any regulated uses not specifically listed in Table 8 and Table 4 of the Shoreline Master Program shall be considered unclassified and may be allowed if granted a special use review in accordance with this chapter and the Shoreline Master Program. For the purpose of Table 8, “W” and “B” refer to the terms “wetland” and “buffer.”
Table 8: Regulated Uses and Activities in Regulated Wetlands and Buffers

<table>
<thead>
<tr>
<th>Category</th>
<th>Category I</th>
<th>Category II</th>
<th>Category III</th>
<th>Category IV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W  B</td>
<td>W  B</td>
<td>W  B</td>
<td>W  B</td>
</tr>
<tr>
<td>1. Draining Wetlands (associated with no other permitted use, except as allowed under Section 120.C)</td>
<td>X  N/A</td>
<td>X  N/A</td>
<td>X  N/A</td>
<td>X  N/A</td>
</tr>
<tr>
<td>Driving of Piles</td>
<td>X  X</td>
<td>S  S</td>
<td>S  S</td>
<td>P  P</td>
</tr>
<tr>
<td>2. Educational or Scientific Activities</td>
<td>P  P</td>
<td>P  P</td>
<td>P  P</td>
<td>P  P</td>
</tr>
<tr>
<td>3. Enhancement</td>
<td>S  S</td>
<td>P  P</td>
<td>P  P</td>
<td>P  P</td>
</tr>
<tr>
<td>4. Excavation (not associated with enhancement)</td>
<td>X  X</td>
<td>S  S</td>
<td>S  S</td>
<td>S  S</td>
</tr>
<tr>
<td>5. Fill (associated with no other use)</td>
<td>X  X</td>
<td>X  X</td>
<td>X  X</td>
<td>X  X</td>
</tr>
<tr>
<td>6. Fish Hatchery</td>
<td>X  X</td>
<td>S  S</td>
<td>S  S</td>
<td>S  S</td>
</tr>
<tr>
<td>7. Flooding (associated with no other use)</td>
<td>X  X</td>
<td>S  S</td>
<td>S  S</td>
<td>S  S</td>
</tr>
<tr>
<td>8. Forest Practice-Class IV General or COHP</td>
<td>X  X</td>
<td>X  X</td>
<td>X  X</td>
<td>X  X</td>
</tr>
<tr>
<td>9. Golf Course</td>
<td>X  X</td>
<td>X  X</td>
<td>S  S</td>
<td>S  S</td>
</tr>
<tr>
<td>Category I</td>
<td>Category II</td>
<td>Category III</td>
<td>Category IV</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>--------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td><strong>10. Land Division</strong></td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td><strong>11. Parks Development-Public &amp; Private</strong></td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td><strong>12. Placing of Obstruction</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>13. Public Facility</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>S</td>
</tr>
<tr>
<td><strong>14. Public Project of Significant Importance</strong></td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td><strong>15. Radio/TV Towers</strong></td>
<td>X</td>
<td>X</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td><strong>16. Restoration/Revegetation of Site</strong></td>
<td>S</td>
<td>S</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td><strong>17. Road/Street-Public/Private Access</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) Expand within existing ROW</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>B) New Facilities</td>
<td>X</td>
<td>X</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>Category</td>
<td>Category I</td>
<td>Category II</td>
<td>Category III</td>
<td>Category IV</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------</td>
<td>-------------</td>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>W</td>
<td>B</td>
<td>W</td>
<td>B</td>
</tr>
<tr>
<td>19. Site Investigation (non-mechanized)</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Site Investigation (mechanized)</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>20. Trails and Trail Related Facilities</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>21. Utility Facility</td>
<td>X</td>
<td>X</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>22. Utility-On-Site Sewage Facility</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>S</td>
</tr>
<tr>
<td>23. Utility Line-Overhead</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
</tbody>
</table>

Key:  
A = Allowed Outright  
P = Permitted Subject to Development Standards and Underlying Permit  
S = Special Use Review Required  
X = Prohibited

F. Additional development standards for regulated uses. In addition to meeting the Development Standards in section D, above, those regulated uses identified below shall also comply with the standards of this section and other applicable state, federal and local ordinances.

1. Forest Practice, Class IV General, and Conversion Option Harvest Plans (COHPs). All timber harvesting and associated development activity, such as construction of roads,
shall comply with the provisions of this chapter, including the maintenance of buffers around regulated wetlands.

a. Density Calculation.
   i. The actual density that will allowed to be built upon a parcel containing a wetland shall ultimately be determined during the site specific review of the parcel’s planned development.
   ii. In determining the actual density of a parcel based on a specific site plan, the site plan shall locate all buildings outside of the wetland buffers;
   iii. The number of development rights allowed for any residentially-zoned parcel shall be its size in square feet divided by the number of square feet per home that is required by its zoning;
   iv. If the land can be subdivided such that all setbacks, buffers, and other zoning requirements can be observed, and no variances are requested, the density from the wetland can be transferred within the property;
   v. To the extent that the number of allowable development rights cannot be used on-site, they may be sold, traded, or transferred by the property owner through the transfer of development rights program pursuant to Chapter 18.37 BIMC;
   vi. Property owners may voluntarily extinguish development rights that are provided by the underlying zoning, but the City shall not extinguish any of these rights outside the aforementioned transactions.

b. Land division approvals shall be conditioned to require that regulated wetlands and regulated wetland buffers be designated as an easement or covenant encumbering the wetland and wetland buffer. Such easement or covenant shall be recorded together with the land division and represented on the final plat or binding site plan, and title.

c. In order to implement the goals and policies of this chapter, to accommodate innovation, creativity, and design flexibility, and to achieve a level of environmental protection that would not be possible by typical lot-by-lot development, the use of the clustered development or similar innovative site planning is strongly encouraged for projects with regulated wetlands on the site.

2. Surface Water Management. The following stormwater management activities may be allowed within wetland or buffer areas only if they meet the following requirements, in addition to the development standards in this section and in conformance with the Stormwater Management Ordinance, Chapter 15.20 BIMC:
a. Surface water discharges from stormwater facilities or structures; provided, that the new surface water discharges to regulated wetlands from retention/detention facilities;

b. Pre-settlement ponds or other surface water management structures; provided, that the discharge does not significantly increase or decrease the rate of flow and/or hydro-period, nor decrease the water quality of the wetland. Water quality treatment best management practices will be required prior to discharge. Pre-treatment of surface water discharge through biofiltration or other means shall be required.

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

a. Trails and related facilities shall, to the extent feasible, be placed on existing road grades, utility corridors, or any other previously disturbed areas which do not provide ecological functions.

b. Trails and related facilities shall be planned to minimize removal of trees, soil disturbance, and existing hydrological characteristics, shrubs, snags, and important wildlife habitat.

c. Viewing platforms and benches, and access to them, shall be designed and located to minimize disturbance of wildlife habitat and/or critical characteristics of the affected wetland.

d. Trails and related facilities shall generally be located outside required buffers. Where trails are permitted within buffers they shall be located in the outer portion of the buffer and a minimum of 25 feet from the wetland edge, except where wetland crossings or viewing areas have been approved by the Director. Trail locations close to the wetland may be allowed if the primary purpose of the trail is wetland viewing or enjoyment. Elevated trails which protect or enhance ecological functions shall be used to the maximum extent feasible.

e. Trails shall generally be limited to pedestrian use unless other more intensive uses, such as bike or horse trails, have been specifically allowed and mitigation has been provided. Trail width shall not exceed five feet unless there is a demonstrated need, subject to review and approval by the Director. Trails shall be constructed with pervious materials unless otherwise approved by the Director.

4. Parks. Development of public park and recreation facilities may be permitted; provided, that no alteration of wetlands or wetland buffers is allowed except for uses allowed in Table 8. For example, enhancement of wetlands and development of trails may be
allowed in wetlands and wetland buffers subject to special use requirements and approval of a Wetland Mitigation Plan.

5. Educational or scientific activities. These activities shall only be permitted if they are directly related to the affected wetland and related buffers, and may include the viewing and sampling of natural systems. They may also include the installation of physical structures, including pervious trails, benches, permanent wildlife watching blinds, boardwalks, viewing platforms, or similar structures, or minor modifications to wetlands and their buffers. Any physical structures or minor modifications are subject to City approval to minimize the impacts of human intrusion on the functions and values of critical areas and their buffers according to the following criteria:

a. Minimize the footprint of structures and the number of access points to any particular critical area;

b. Minimize the amount of clearing and grading;

c. Elevate structures where possible;

d. Avoid impacting the flow of water;

e. Use appropriate building materials; and

f. Minimize the impacts of construction.

G. Special Use Review. Development identified as a Special Use Review in Table 8 of this section may be approved, with conditions, or denied according to the procedures and criteria outlined in this subsection. Special Use Review is an administrative process unless the underlying permit requires a public hearing.

1. The Director is authorized to take action on permits as required by this chapter.

2. The Director may approve a permit after review of the application and a Wetland Mitigation Plan submitted in accordance with this chapter. The Director shall determine whether the use or activity cannot be avoided because no reasonable or practicable alternative exists, the proposed use is consistent with the spirit and intent of this chapter and it will not cause adverse impacts to the wetland or the wetland buffer which cannot be mitigated. In taking action to approve a Special Use Review, the Director may attach reasonable conditions as necessary to minimize impacts, rectify impacts or compensate for impacts to the wetland or wetland buffer.

3. The Director shall deny a Special Use Review request if the proposed use or activity is inconsistent with this chapter and/or will cause adverse impacts to the wetland or wetland buffer, which cannot be adequately mitigated and/or avoided.
4. Special use review requests for agricultural conversions shall include a farm plan developed by the Kitsap Conservation District. The plan shall identify the best management practices for the proposed agricultural activity.

5. Special Use Review determinations are appealable to the hearings examiner pursuant to BIMC 2.16.020(P).

H. Wetlands and Streams Restoration, Creation, Mitigation, or Enhancement.

1. Any person who alters regulated wetlands or streams or their standard buffers as required by this chapter shall restore, create or enhance equivalent areas or greater areas than those altered in order to compensate for losses. In the alternative, conservation easements or mitigation banking may be considered as appropriate mitigation provided that areas equivalent to those altered are achieved.

2. Where feasible, restored or created wetlands and streams shall be a higher category than the altered wetland or stream.

3. Compensation areas shall be determined according to function, acreage, type, location, time factors, ability to be self-sustaining and projected success. Multiple compensation projects may be proposed for one project in order to best achieve the goal of no net loss.

4. Given the need for expertise and monitoring, voluntary restoration, creation or enhancement projects or compensatory projects may be permitted only when the Director finds that the proposed project is associated with an activity or development otherwise permitted. Additionally, the applicant shall:
   a. Demonstrate sufficient scientific expertise, supervisory capability, and financial resources to carry out the project;
   b. Demonstrate the capability for monitoring the site and to make corrections during this period if the project fails to meet projected goals and plans; and
   c. Provide for the long-term protection and management of the compensation area to avoid further development or degradation.

5. Acreage Replacement Ratio. Any applicant proposing to alter wetlands may propose to reestablish, create, rehabilitate, or enhance wetlands in order to compensate for the wetland losses.
   a. Replacement Ratios for Wetlands. Table 9 provides the required replacement ratios for the reestablishment or creation, rehabilitation, or enhancement of a wetland. The first number specifies the replacement acreage of wetlands and the second specifies the acreage of wetlands altered.
<table>
<thead>
<tr>
<th>Category and Type</th>
<th>Re-establishment or Creation</th>
<th>Rehabilitation</th>
<th>1:1 Re-establishment or Creation (R/C) or Enhancement (E)</th>
<th>Enhancement Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - Forested</td>
<td>6:1</td>
<td>12:1</td>
<td>1:1 R/C 10:1 E</td>
<td>24:1</td>
</tr>
<tr>
<td>I – Highly functioning</td>
<td>4:1</td>
<td>8:1</td>
<td>1:1 R/C 6:1 E</td>
<td>16:1</td>
</tr>
<tr>
<td>I - Bog</td>
<td>Not possible</td>
<td>6:1 of a Bog</td>
<td>Case by Case</td>
<td>Case by Case</td>
</tr>
<tr>
<td>I - Estuarine</td>
<td>Case by Case</td>
<td>6:1 - Estuarine</td>
<td>Case by Case</td>
<td>Case by Case</td>
</tr>
<tr>
<td>II - Estuarine</td>
<td>Case by Case</td>
<td>4:1 - Estuarine</td>
<td>Case by Case</td>
<td>Case by Case</td>
</tr>
<tr>
<td>II - Others</td>
<td>3:1</td>
<td>8:1</td>
<td>1:1 R/C 4:1 E</td>
<td>12:1</td>
</tr>
<tr>
<td>III</td>
<td>2:1</td>
<td>4:1</td>
<td>1:1 R/C 2:1 E</td>
<td>8:1</td>
</tr>
<tr>
<td>IV</td>
<td>1.5:1</td>
<td>3:1</td>
<td>1:1 R/C 2:1 E</td>
<td>6:1</td>
</tr>
</tbody>
</table>

b. Replacement ratios for buffers shall be 1:1.

c. Increased Replacement Ratio. The Director may increase the ratios under the following circumstances:

i. Uncertainty as to the probable success of the proposed rehabilitation or creation;

ii. Significant period of time between destruction and replication of wetland functions; or

iii. Projected losses in functional value.

d. Decreased Replacement Ratio. The Director may decrease these ratios when there are findings of special studies coordinated with agencies with expertise which demonstrate that no net loss of wetland function or value is attained under the decreased ratio.

e. In all cases, a minimum acreage replacement ratio of 1:1 shall be required.

6. Wetland Type. In-kind compensation shall be provided except where the applicant can demonstrate that:
a. The wetland system is already significantly degraded and out-of-kind replacement will result in a wetland with greater functions and values;

b. Scientific problems such as invasive/exotic vegetation and changes in watershed hydrology make implementation of in-kind compensation impossible;

c. Out-of-kind replacement will best meet identified regional goals (e.g., replacement of historically diminished wetland types); and

d. Where out-of-kind replacement is accepted, greater acreage replacement ratios may be required to compensate for lost functions and values.

7. Location. On-site compensation shall be provided except where the applicant can demonstrate that:

a. The hydrology and ecosystem of the original wetland and those who benefit from the hydrology and ecosystem will not be substantially damaged by the on-site loss;

b. On-site compensation is not scientifically feasible due to problems with hydrology, soils, or other factors;

c. Compensation is not practical due to potentially adverse impacts from surrounding land uses;

d. Existing functions and values at the site of the proposed restoration are significantly greater than lost wetland functional values;

e. That established regional goals for flood storage, flood conveyance, habitat or other wetland functions have been established and strongly justify location of compensatory measures at another site;

f. There is no feasible location for on-site mitigation;

g. Off-site compensation shall occur within the same watershed, if feasible, as the wetland loss occurred; provided, that Category IV wetlands may be replaced outside of the watershed when there is no reasonable alternative; and

h. In selecting compensation sites, an applicant shall pursue siting in the following order of preference:

i. Upland sites which were formerly wetlands;

ii. Idled upland sites generally having bare ground or vegetative cover consisting primarily of invasive introduced species, weeds, or emergent vegetation; or

iii. Other disturbed upland.
8. Timing. Wherever feasible, compensatory projects shall be completed prior to activities that will disturb wetlands, and immediately after activities that will temporarily disturb wetlands. In all other cases, except for Category I wetlands, compensatory projects should be completed prior to use or occupancy of the activity or development which was conditioned upon such compensation. Construction of compensation projects shall be timed to reduce impacts to existing wildlife and flora.

9. Cooperative Restoration, Creation or Enhancement Projects. The Director may encourage, facilitate, and approve cooperative projects wherein a single applicant or other organization with demonstrated capability may undertake a compensation project with funding from other applicants under the following circumstances:

a. Restoration, creation or enhancement at a particular site may be scientifically difficult or impossible; or

b. Creation of one or several larger wetlands may be preferable to many small wetlands;

c. Persons proposing cooperative compensation projects shall:

i. Submit a joint permit application;

ii. Demonstrate compliance with all standards;

iii. Demonstrate the organizational and fiscal capability to act cooperatively; and

iv. Demonstrate that long-term management can and will be provided.

10. Mitigation Banking.

a. The City may consider and approve replacement or enhancement of wetlands to address unavoidable adverse impacts caused by development activities through an approved wetland mitigation bank. Compensatory mitigation in advance of authorized impacts must be provided through an approved mitigation bank if a bank is used.

b. When off-site mitigation is authorized, the Director shall give priority to locations within the same drainage basin as the development proposal site that meet the following:

i. Mitigation banking sites and resource mitigation reserves as authorized by this chapter;

ii. Private mitigation sites that are established in compliance with the requirements of this chapter and approved by the Director; and

iii. Public mitigation sites that have been ranked in a process that has been supported by ecological assessments.
c. The Director may require documentation that the mitigation site has been permanently preserved from future development or alteration that would be inconsistent with the functions of the mitigation. The documentation may include, but need not be limited to, a conservation easement, transfer of clearing credits or other agreement between the applicant and owner of the mitigation site. The City may enter into agreements or become a party to any easement or other agreement necessary to ensure that the site continues to exist in its mitigated condition.

d. The Director shall maintain a list of sites available for use for off-site mitigation projects.

e. The Director may develop a program to allow the payment of a fee in lieu of providing mitigation on a development site. The program should address:

i. When the payment of a fee is allowed, considering the availability of a site in geographic proximity with comparable hydrologic and biological functions and potential for future habitat fragmentation and degradation; and

ii. The use of the fees for mitigation on public or private sites that have been ranked according to ecological criteria through one or more programs that have included a public process.

B-11. Frequently Flooded Areas

A. Classification. Classification for frequently flooded areas shall be consistent with the 100-year floodplain designation of the Federal Emergency Management Agency and the National Flood Insurance Program. In addition, the following criteria shall be considered when designating and classifying these areas:

1. Flooding impact to human health, safety, and welfare and to public facilities and services;

2. Available documentation including federal, state, and local laws, regulations and programs, local maps, and federally subsidized flood insurance programs;

3. The future floodplain defined as a channel of the stream and that portion of the adjoining floodplain which is necessary to contain and discharge the base flood flow at build-out without any measurable increase in flood heights; and

4. The effect of high tides with strong winds, and greater surface runoff caused by increasing impervious surfaces.

B. Standards.

1. Development shall not reduce the effective base flood storage volume. Effective storage capacity shall be maintained.
2. Grading or other regulated activities which would reduce the flood water storage volume shall be mitigated by creating compensatory storage on- or off-site. Applicants must provide mitigation plans pursuant to this chapter.

3. Base flood data and flood hazard notes shall be on the face of any recorded plat or site plan including, but not limited to, base flood elevations, flood protection elevation, boundary of floodplain, and zero rise floodway.

4. Applicants for development in low lying shoreline areas and other areas where flood elevation is controlled by tide level shall be provided with information on sea level rise. (Ord. 2005-03 § 2, 2005)

B-12 The Winslow Ravine – Special Rules in Mixed Use Town Center.

A stream commonly known as the “Winslow Ravine Stream” is located in a ravine commonly known as, and identified on department maps as, the “Winslow Ravine”. Both the stream and the ravine are partially located in the Mixed Use Town Center (MUTC). In order to accommodate more dense development within the MUTC, and recognizing the significant distance from the top of the ravine to the stream and its adjacent wetlands, in lieu of the buffer and setback rules provided for Fish and Wildlife Conservation Areas (Section B-8) and Wetlands (Section B-10), the applicant may select the prescriptive option or the mitigated option with respect to the Winslow Ravine Stream and the Winslow Ravine within the MUTC as described below:

A. “Option A” - Prescriptive Standards.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>BUFFER WIDTH STANDARD</th>
<th>MINIMUM BUILDING SETBACK</th>
<th>OTHER DEVELOPMENT STANDARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streams, Wetlands and Wildlife Conservation Areas associated with the Winslow Ravine or Winslow Ravine Stream within the MUTC.</td>
<td>50 feet beyond the top of the Winslow Ravine.</td>
<td>15 feet beyond the buffer.</td>
<td></td>
</tr>
</tbody>
</table>

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B. “Option B” - Mitigated Standards. The applicant shall demonstrate by submittal of necessary studies and proposed mitigation, that measures can and will be taken to ensure that the functions and values provided by the buffers prescribed under “Option A” are retained or improved.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>BUFFER WIDTH STANDARD</th>
<th>MINIMUM BUILDING SETBACK</th>
<th>OTHER DEVELOPMENT STANDARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streams, Wetlands and Wildlife Conservation Areas associated with the Winslow Ravine or Winslow Ravine Stream within the MUTC.</td>
<td>25 feet beyond the top of the Winslow Ravine.</td>
<td>10 feet beyond the buffer.</td>
<td>The buffer area shall be landscaped to facilitate filtration and infiltration of storm water. If such landscaping is installed, the buffer area may be used for recreational purposes. Fences, sitting areas and walking paths are allowed within the buffer area. There is no requirement that the buffer be dedicated as permanent open space tracts or otherwise.</td>
</tr>
</tbody>
</table>

Table I – Shoreline Study Requirements

<table>
<thead>
<tr>
<th>Use</th>
<th>Analyses Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Activities below Mean Higher High Water</td>
<td>Dive Survey and/or Biological Evaluation or Biological Assessment¹</td>
</tr>
<tr>
<td>Pier and Docks</td>
<td>Dive Survey and/or Biological Evaluation or Biological Assessment¹</td>
</tr>
<tr>
<td>Shoreline Armoring (bulkhead and revetments)</td>
<td>Sediment analyses Biological Evaluation or Biological Assessment¹</td>
</tr>
<tr>
<td>Development Activities Disturbing Native Vegetation Zone (Single Family Residences or Commercial)</td>
<td>Re-vegetation Plan</td>
</tr>
</tbody>
</table>

Footnotes:
Only as required by Washington Department of Fish and Wildlife, US Army Corp of Engineers, NOAA Fisheries or US Fish and Wildlife.

Additional Studies may be required by the Director as necessary to determine whether the application meets the decision criteria for Shoreline Substantial Development Permit, Shoreline Substantial Development Exemption, Shoreline Conditional Use Permit or Shoreline Variance.