

Chapter 16.20

CRITICAL AREAS

- 16.20.010 Purpose and intent
 - 16.20.020 Applicability
 - 16.20.030 Protection of critical areas
 - 16.20.040 Exemptions
 - 16.20.050 Standards for existing development
 - 16.20.060 Administration
 - 16.20.070 Review procedures
 - 16.20.080 Reasonable use exceptions
 - 16.20.090 Trees and vegetation
 - 16.20.100 Aquifer recharge areas
 - 16.20.110 Fish and wildlife habitat conservation areas
 - 16.20.120 Frequently flooded areas
 - 16.20.130 Geologically hazardous areas
 - 16.20.140 Wetlands
 - 16.20.150 The Winslow Ravine
 - 16.20.160 Performance and maintenance surety
 - 16.20.170 Compliance and enforcement
 - 16.20.180 Critical area reports
 - 16.20.190 Definitions
-

Notes:

1. **Yellow** highlighted changes are previously proposed revisions based on public comments received through November January 14, 2018 or staff input that Council requested additional time to consider.
2. **Blue** highlighted changes are new, and based on Council direction from the January 30, 2018 study session. Text that is only moved, not new or revised, is not highlighted. The proposed change in name of the NVPA to ARPA is highlighted only the first time it appears in the text.

16.20.010 Purpose and intent.

A. The purpose of this chapter is to designate and classify ecologically sensitive and hazardous areas as critical areas and to protect, maintain and restore these areas and achieve no net loss of their functions and values and allow for reasonable use of public and private property.

B. This chapter is intended to implement the goals, policies, guidelines, and requirements of the city comprehensive plan and the Growth Management Act (Chapter 36.70A RCW).

C. Critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the city and its residents. Critical areas may also pose a threat to human safety or to public and private property. The beneficial functions and values provided by critical areas include, but are not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation of flood waters, ground water recharge and discharge, erosion control, wave attenuation, and protection from hazards and the impacts of climate change. Groundwater recharge is of particular concern for the city because the Island's drinking water is supplied solely by groundwater.

D. By limiting adverse impacts to and alteration of critical areas, this chapter seeks to accomplish the following goals:

1. To conserve the biodiversity of plant and animal species, protect, maintain and restore healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including, but not limited to, ground and surface waters, wetlands, fish and wildlife and their habitats;
2. Direct development, uses and activities to less environmentally sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;
3. Prevent cumulative adverse environmental impacts to water quality, water quantity, wetlands, and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, aquifer recharge, and habitat conservation areas;
4. Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, or flooding; and
5. Alert owners, potential purchasers, real estate agents, appraisers, lenders, builders, developers and other members of the public to natural conditions that pose a hazard or otherwise limit development.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

E. This chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner reasonable use of the property or to prevent the provision of public facilities and services necessary to support existing development.

16.20.020 Applicability

This chapter applies to all development, uses and activities within areas or adjacent to areas designated as critical areas unless identified as exempt in BIMC 16.20.040. 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, intent, requirements, development standards and goals of this chapter.

16.20.030 Protection of Critical Areas

A. All proposed development, uses and activities subject to this chapter shall utilize mitigation sequencing as follows:

1. Avoid the impact altogether by not taking a certain action or parts of an action;
2. Minimize impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
3. Rectify the impact by repairing, rehabilitating, or restoring the affected environment;
4. Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action;
5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments, and;
6. Monitor the impact and take appropriate corrective measures.

B. The precautionary principle shall be applied in the review of any action, taken or proposed, that does not conform to the requirements of this chapter. The burden of proof that the action will cause no net loss or harm to persons or property falls on the applicant or the property owner.

16.20.040 Exemptions

A. Exempt activities are those that will not have a significant impact on a critical area's structure and function and most are expected to be very short term. All exempt activities shall use reasonable methods to avoid potential impacts to critical areas. Exempt activities do not grant permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempt activity shall be

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

considered a violation of this chapter and subject to enforcement and restoration under BIMC 16.20.170.

The following activities are exempt from the requirements of this chapter and do not require a critical area permit and are not subject to any review or approval process except where noted:

1. Emergency activities necessary to prevent an unanticipated and immediate threat to public health, safety or welfare or an immediate risk of danger to property which requires action within a time frame too short to allow compliance with this chapter. The person or agency undertaking such action shall notify the director within one working day following commencement of the emergency activity. Within 30 days, the director shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement provisions of BIMC 16.20.170 shall apply.

After the emergency, the ~~person or agency undertaking the action~~ **landowner** shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical areas report and mitigation plan. Restoration and/or mitigation activities must be initiated within one year of the date of the emergency and completed in a timely manner.

2. Existing and ongoing agricultural activities. For the purpose of this chapter, “existing and ongoing” means the activity has been conducted and/or maintained within the past five years under a farm management plan or other best management practices not resulting in a net loss of critical area functions and values. New or expanded agricultural uses, activities, and accessory structures are not considered “existing and ongoing.” Existing, ongoing agricultural activities shall comply with applicable water quality regulations set forth in BIMC 15.20 and utilize best management practices to protect and enhance water quality.
3. Normal and routine repair and maintenance of existing structures that will not further impact or alter critical areas or buffers.
4. Normal and routine yard and garden activities including, but not limited to, cutting and mowing lawns, weeding, removal of noxious and invasive species, harvesting and replanting of garden plants and crops, incidental vegetable gardening, pruning and planting of noninvasive ornamental vegetation, intended to maintain the general condition and extent of such areas; provided, that such activities are limited to legally existing yard and garden areas, do not further expand into critical areas or associated buffers, do not significantly alter topography, and do not diminish water quality or quantity. Normal and routine activities cannot result in a change to the location, size at the ground level or configuration of existing yard and garden areas. Normal and routine activities do not include tree and vegetation activities pursuant to BIMC 16.20.090.B that require a critical area permit and city pre-approval.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

5. Normal and routine repair, maintenance and operation of 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 fish and wildlife habitat conservation areas shall require approval from the Washington Department of Fish and Wildlife.
6. Normal and routine repair and maintenance of existing utility structures within a right-of-way or existing utility corridor or easement, including the cutting, removal and/or mowing of vegetation above the ground that utilizes best management practices and does not expand the use, activity or structure further into any critical area.
7. Class I, II and III forest practices regulated pursuant to Chapter 76.09 RCW.
8. Minor site investigative work. Work necessary for land use review submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require a critical area permit pursuant to BIMC 16.20.090 or construction of new roads. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored. Minor site investigative work may include educational and scientific research activities.
9. Activities within the improved right-of-way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, when such facilities are located within the improved portion of the public right-of-way or easement of a private street, except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater.
10. The installation of low impact fencing within critical area buffers provided the location does not result in restricting wildlife movement, the location and installation is the least impactful to the critical area and buffer as possible, and there is no alternative to fencing to achieve the purpose of the fence.
11. Signs for marking critical area boundaries, interpretive signs and survey markers or property boundaries.
12. Development, uses or activities within critical aquifer recharge areas that do not have the potential to generate a pollutant identified as a potential source of drinking water contamination pursuant to BIMC 16.20.100.A.1.a and are outside an Aquifer Recharge Protection Area (ARPA) if one has been designated pursuant to BIMC 16.20.100.E.

B. The following uses and activities qualify as exempt activities only after review and authorization by the city. These exempt activities do not require a critical area permit. Review and authorization may occur over-the-counter and will require a written letter of approval.

**CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018**

1. Activities within a portion of a wetland buffer or fish and wildlife habitat conservation area buffer separated from the critical area by an existing permanent substantial development, use or activity which serves to eliminate or greatly reduce the impact of the proposed activity on the critical area are exempt from establishing the full required buffer width; provided, that impacts to the critical area do not increase. The director shall review the proposal to determine the likelihood of associated impacts and may require the applicant to provide a critical areas report prepared by a qualified professional that demonstrates through a site assessment or functional analysis that the interrupted buffer area is functionally isolated from the critical area. The director shall consider the hydrologic, geologic, and/or biological habitat connection potential and the extent and permanence of the physical separation.
2. Fish, Wildlife and Wetland Restoration Activities. Fish, wildlife, and/or wetland restoration or enhancement activities not required as project mitigation; provided, that the project is approved by the jurisdictional agency (Washington State Department of Fish and Wildlife, U.S. Army Corps of Engineers, or other appropriate local, state, federal, or tribal jurisdiction).

16.20.050 Standards for existing development

A. Existing structures and related improvements. Structures and related improvements that were legally built or vested prior to the effective date of Ordinance No. 2018-01 that do not meet the requirements of this chapter 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 all other applicable sections of this Chapter.

B. Existing buildings that were legally built or vested prior to the effective date of Ordinance No. 2018-01 may be altered only one time within the lifetime of the structure and:

1. The expansion of the footprint is outside a landslide hazard area or landslide hazard area setback unless required for safety or seismic upgrades;
2. Any expansion of the footprint is located only within a critical area buffer. No expansion of the footprint is allowed within a wetland or fish and wildlife habitat conservation area;
3. Any expansion of the footprint within a critical aquifer recharge area is located outside the Native Vegetation Protection Area pursuant to BIMC 16.20.090.E.
4. Cantilevers over critical areas are not allowed;
5. The expansion of the footprint at ground level does not exceed 500 square feet;
6. Any expansion of the footprint is used only as indoor living space or to accommodate accessibility;

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

7. Any expansion of the footprint is no closer to the critical area than the existing footprint; and
8. If a building is harmed or destroyed by more than 50 percent of its square footage, the building must be reconstructed in compliance with the requirements of this Chapter.

C. Existing property improvements other than buildings, including driveways, parking areas, yards and landscaped areas, play areas, storage areas, decks less than 5 feet in height, patios, and similar improvements that were legally established or vested prior to the effective date of Ordinance No. 2018-01 may be altered if:

1. Any alteration is in substantially the same location as the original property improvement;
2. Any expansion of the footprint is located only within the required buffer. No expansion of the footprint is allowed within the critical area itself and cantilevers over critical areas are not allowed;
3. Any expansion of the footprint is no closer to the critical area than the existing footprint; and
4. Any expansion of the footprint within a critical aquifer recharge area is located outside the Native Vegetation Protection Area pursuant to BIMC 16.20.090.E.

D. Buffer modifications pursuant to BIMC 16.20.110 and 16.20.140 shall not be granted for existing development.

E. Alterations permitted by this Section must comply with other applicable city code or land use review requirements and require submittal of a critical areas permit application in accordance with the permit and review procedures required for the affected critical area(s).

16.20.060 Administration

A. Interpretation. The provisions of this chapter shall be held to be minimum requirements in their interpretation and application and shall be liberally construed to serve the purposes of this chapter.

B. Procedures. The director is authorized to adopt written procedures for the purpose of carrying out the provisions of this chapter.

C. Inventory of Critical Areas. This chapter shall apply to all critical areas located within the 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

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

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.

D. Suspension – Revocation. In addition to other penalties provided for elsewhere, the director may suspend or revoke a permit if it is found that the applicant or permittee has not complied with any or all of the conditions or limitations set forth in accordance with this chapter, has exceeded the scope of work set forth in the permit, or has failed to undertake the project in the manner set forth in the approved application.

E. Inadvertent discovery. Whenever a critical area or critical area buffer is discovered in the process of development, work on that portion of the development site shall be stopped immediately and the land owner shall report the discovery to the city as soon as possible. The city shall conduct a site investigation to verify the presence of a critical area or its buffer. Based upon the findings of the site investigation, the director may require submittal and approval of the applicable critical area permit, or may allow stopped work to resume. If required to approve the critical area permit, the landowner shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the development activity in accordance with an approved critical areas report and mitigation plan. Restoration and/or mitigation activities must be initiated within one year of the date of the discovery and completed in a timely manner.

F. Assessment relief. The City of Bainbridge Island, in imposing special assessments, shall take into account the easements or perpetual conservation restrictions in critical areas.

G. Other laws and regulations. No permit granted pursuant to this chapter shall remove an applicant's obligation to comply in all respects with the applicable provisions of any other federal, state, or local law or regulation.

H. Conflict.

1. General. When any provision of any other chapter of the BIMC conflicts with this chapter (or any existing regulations, easements, covenants, or deed restrictions), that which provides more protection to critical areas shall apply.
2. Shoreline Master Program. In case of conflict between the provisions of this chapter and the provisions of the Shoreline Master Program, Chapter 16.12 BIMC, the provisions of the Shoreline Master Program, Chapter 16.12 BIMC, shall prevail unless the Critical Areas Ordinance provides greater protection for critical areas. However, the classification or designation of any of the shoreline of Bainbridge Island shall not change from what it is under the Shoreline Master Program as a result of any provisions of the Critical Areas Ordinance.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

I. Severability. If any clause, sentence, paragraph, section or part of this chapter or the application thereof to any person or circumstances shall be adjudged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered and shall not affect or invalidate the remainder of any part thereof to any other person or circumstances and to this end the provisions of each clause, sentence, paragraph, section or part of this law are hereby declared to be severable.

16.20.070 Review procedures

A. Permit required. Any proposal to alter any critical area and/or required buffer including, but not limited to, earthwork including grade and fill activity, alteration of site hydrology including water temperature and characteristics of water sources, removal or alteration of vegetation, and construction or siting of buildings, structures, facilities, utilities, hard surfaces and other related infrastructure, shall require a critical area permit unless it qualifies as an exempt activity, as provided in BIMC 040.

B. Applications for critical area permits, unless otherwise provided for in this chapter, shall be reviewed and approved, approved with conditions, or denied pursuant to the administrative review procedures in BIMC 2.16.030 unless a Reasonable Use Exception is requested. Critical area permit applications shall be reviewed based on the proposal's ability to comply with all of the following criteria:

1. The proposal minimizes the impact on critical areas in accordance with mitigation sequencing (BIMC 16.20.030.A);
2. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
3. The proposal is consistent with the general purposes of this chapter and the public interest;
4. Any alterations permitted to the critical area are mitigated in accordance with mitigation requirements in BIMC 16.20.030.A;
5. The proposal protects the critical area functions and values consistent with best available science and results in no net loss of critical area functions and values;
6. The proposal addresses cumulative impacts of the action; and
7. The proposal is consistent with other applicable regulations and standards.

C. The city may condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by this chapter.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

D. Except as provided for by this chapter, any project that cannot adequately mitigate its impacts to critical areas in the sequencing order of preferences in BIMC 16.20.030.A shall be denied.

E. Application required. Any application for land use or development proposals within critical areas or their buffers, unless an exempt activity pursuant to BIMC 16.20.040, requires submittal of the city's Master Land Use Application (P100) to the Department of Planning and Community Development in accordance with the requirements outlined in the city's Administrative Manual for Land Use Permits. The applicant shall not be granted any approval or permission to conduct development or land use in a critical area or its buffer prior to fulfilling the requirements of this chapter.

F. Support Information Requirements. A critical area permit application shall include the following:

1. A site plan drawn to scale identifying locations of critical areas and their buffers, location of proposed development, uses and activities, location and estimated quantity of earthwork and vegetation clearing and location and type of drainage features or infrastructure.
2. Any critical area report or study required by this chapter. Such reports or studies shall be prepared by qualified professionals in the area of concern as defined in BIMC 16.20.190 (Definitions), and in accordance with the requirements provided in BIMC 16.20.180 (Critical Areas Reports) as follows:
 - a. Aquifer recharge study: Hydrogeologist;
 - b. Geological hazard assessment: 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.
 - c. Stream buffer enhancement plan: Biologist with stream ecology expertise; fish or wildlife biologist; a civil engineer may provide studies for drainage, surface and subsurface hydrology, and water quality;

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- d. Wetland buffer enhancement plan, wetland critical area report, wetland mitigation plan: Wetlands specialist.
 - e. Habitat Management Plans: Wildlife biologist and/or fisheries biologist.
 - f. The director is authorized to retain experts at the applicant's expense and request review from other jurisdictional agencies to assist in the review of application materials; and
3. Any additional information determined as relevant by the director.

G. Notice on Title

1. The owner of any property with field-verified presence of critical area or buffer on which a development proposal is submitted shall file for record with the Kitsap County auditor a notice approved by the director in a form substantially as set forth in Subsection 2 of this Section. Such notice shall provide notice in the public record of the presence of a critical area and buffer, the application of this chapter to the property, and that limitations on actions in or affecting such areas may exist. The applicant shall submit proof that the notice has been filed for record before the city shall approve any development proposal for such site. The notice shall run with the land and failure to provide such notice to any purchaser prior to transferring any interest in the property shall be in violation of this chapter.
2. Form of Notice.

Critical Areas
and/or
Critical Areas Buffer Notice

Legal Description: _____

Present owner: _____

NOTICE: This property contains critical areas or their buffers as defined by the City of Bainbridge Island Ordinance No. _____. The property _____

_____ was the
subject of a development proposal for _____

(type of permit) application # _____ filed on ____ (date) _____. Restrictions on use or alteration of the critical areas or their buffers may exist due to natural conditions of the property and resulting regulations. Review of such application has provided information on the location of critical areas or critical area buffers and restrictions on their use through setback areas. A copy of the plan showing such setback areas and other restrictions or required enhancements is attached hereto.

Signature of owner _____

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

STATE OF WASHINGTON)
COUNTY OF _____)

On this day personally appeared before me to me known to be the individual(s) described in and who executed the within and foregoing instrument and acknowledged that they signed the same as their free and voluntary act and deed for the uses and purposes therein stated.

Given under my hand and official seal this ____ day of _____, _____.
NOTARY PUBLIC in and for the state of Washington, residing at _____.

16.20.080 Reasonable use exceptions

A. Applicability and Intent. The purpose of the reasonable use exception (RUE) process is to allow reasonable use of property and explore alternatives to development that would be permitted in accordance with the underlying zoning designation and standards. An applicant may request an RUE pursuant to this Section when a site assessment review pursuant to BIMC 15.20 or a pre-application conference demonstrates that:

1. The subject property is encumbered to such an extent by critical areas and/or critical area buffers that application of this chapter would deny all reasonable use of the subject property;
2. Reasonable use of the subject property cannot be achieved through Buffer Modification (BIMC 16.20.110 and 140) or a Habitat Management Plan (BIMC 16.20.110); and
3. Alternatives to development through an RUE are not available or acceptable.

B. During the pre-application process, the city may:

1. Determine whether the property qualifies for inclusion in any program that would eliminate the need for an RUE including, but not limited to, transfer or purchase of development rights, mitigation banking, and open space acquisition or other conservation mechanism. If the property qualifies for inclusion in one or more of such programs, the director shall notify the applicant in writing of such qualification and of the applicable rules and regulations, and shall send an application form for inclusion in such program(s). If the property is included in one or more of such programs, an RUE application is not required; or
2. Determine to offer to purchase the development rights rather than grant an RUE, and the applicant, at his/her sole discretion, may agree to sell said development rights rather than pursue an RUE.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

C. RUE Request and Review Process. An application for an RUE shall include the city's Master Land Use Application; a critical area report or Habitat Management Plan, including mitigation plan, if necessary; and any other relevant information and reports that are necessary, as determined by the director, to process and prepare the recommendation on the application, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act, Chapter 43.21C RCW (SEPA documents).

D. The director shall prepare a recommendation to the Hearing Examiner based on review of the submitted information and reports, a site inspection, and the proposal's compliance with the criteria in Subsection (E), below.

E. Hearing Examiner Review. The hearing examiner shall review the RUE application and conduct a public hearing pursuant to the provisions of the BIMC 2.16.100. The Hearing Examiner shall approve, approve with conditions, or deny the request based on the proposal's compliance with all of the RUE review criteria in Subsection (F), below.

F. Reasonable Use Review Criteria. Criteria for review and approval of reasonable use exceptions are as follows:

1. The application of this chapter would deny all reasonable use of the property;
2. There is no reasonable alternative to the proposal with less impact to the critical area or its required buffer;
3. The proposal minimizes the impact on critical areas in accordance with mitigation sequencing (BIMC 16.20.030);
4. The proposed impact to the critical area is the minimum necessary to allow reasonable use of the property;
5. The inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant, or of the applicant's predecessor, that occurred after February 20, 1992;
6. The proposed total lot coverage does not exceed 1,200 square feet for residential development;
7. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the property;
8. Any alterations permitted to the critical area are mitigated in accordance with mitigation requirements applicable to the critical area altered;

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

9. The proposal protects the critical area functions and values consistent with the best available science and results in no net loss of critical area functions and values;
10. The proposal addresses cumulative impacts of the action; and
11. The proposal is consistent with other applicable regulations and standards.

G. Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application. The standard for the burden of proof shall be clear and convincing evidence.

16.20.090 Trees and vegetation

A primary goal of the city's comprehensive plan is protecting the Island's natural environment. The use of land on the Island should be based on the principle that the Island's environmental resources are finite and must be maintained at a sustainable level. Standards and review procedures for trees and vegetation within critical areas and their buffers are necessary to maintain or improve the functions and values of critical areas, implement the city's comprehensive plan, provide for reasonable maintenance or enhancement of views, and allow for appropriate vegetation maintenance and hazard tree removal. Tree or vegetation removal, coppicing or pruning is prohibited within critical areas and their buffers unless allowed pursuant to BIMC 16.20.090 (A) through (D) or approved by the director as provided in BIMC 16.20.090.F.

A. Applicability. This Section applies to any tree and vegetation activity within critical areas and their buffers or setbacks except for exempt activities described in BIMC 16.20.040. geologically hazardous areas and their setbacks and wetlands and fish and wildlife habitat conservation areas and their buffers, and Native Vegetation Protection Areas as described in BIMC 16.20.100.E.

B. The following tree and vegetation activities do not require city review or pre-approval:

1. General pruning of trees and shrubs provided:
 - a. Pruning operations of trees that do not remove more than 10 percent of living material (branches, stems and leaves) of an individual tree within any three-year period;
 - b. Pruning operations conducted with an ISA-certified arborist on site that remove from 10 percent to 25 percent of living material within any three-year period;
 - c. No portion of a live branch or stem more than 6 inches in diameter is removed from any tree;
 - d. Pruning operations use the natural pruning system to maintain the characteristic growth pattern of trees and shrubs;

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- e. Pruning activities conform to applicable practices of ANSI A300 (Part 1 – 2017) Tree, Shrub and Other Woody Plant Management – Standard Practices (Pruning), as amended, or City of Bainbridge Island pruning standards (hyperlink);
 - f. Trees and shrubs are not located in or overhanging a Type F stream;
 - g. The practice known as topping – the reduction of tree size by cutting live branches and leaders to stubs, without regard to long-term tree health or structural integrity is prohibited.
2. Specific pruning. The following pruning activities are allowed without the restrictions in B.1.a through c. above, provided that the structural integrity and long-term health of the vegetation is preserved.
- a. Coppicing and pollarding. The coppicing or pollarding of big leaf maple (*Acer macrophyllum*), cottonwood (*Populus sp.*), willow (*Salix sp.*), hazelnut (*Corylus cornuta*) and vine maple (*Acer circinatum*) and any species listed in BIMC 16.20.090.B(3) is allowed, provided:
 - i. Total area of canopy removal shall not exceed 2,500 square feet.
 - ii. No ground or root disturbance occurs as part of the cutting.
 - iii. The stems or shoots of trees or shrubs are less than 6 inches in diameter at 4-1/2 feet high above ground or top of stump.
 - iv. Coppicing and pollarding may only occur once every three years.
 - v. Coppicing and pollarding of native species is not allowed in wetlands or fish and wildlife habitat conservation areas or their associated buffers.
 - vi. Coppicing of big leaf maple trees must retain a stump height equal or greater than previous live stump height or 16 inches above ground level, whichever is greater.
 - b. ~~Within Native Vegetation Protection Areas delineated pursuant to BIMC 16.20.100.E, maintenance pruning of trees is allowed without the restrictions in B.1.a through c. above, provided the structural integrity and long-term health of the trees is preserved and the trees are not located within another type of critical area;~~
 - c. Maintenance pruning of hedges and shrubs without the restrictions in B.1.a through c. above, provided that the structural integrity and long-term health of the vegetation is preserved.
3. Invasive species removal. The removal of the following vegetation with hand labor or hand-held equipment provided: (a) the area of work is under 2,500 square feet in area and (b) any area of bare ground is planted with native species within the first appropriate growing season or otherwise protected by acceptable temporary erosion and sedimentation control strategies:
- a. English ivy (*Hedera helix*) from tree trunks or ground surface;
 - b. Himalayan blackberry (*Rubus discolor*, *R. procerus*);
 - c. Evergreen blackberry (*Rubus laciniatus*);
 - d. English/Portuguese laurel (*Prunus laurocerasus/lusitanica*)

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- e. English holly (*Ilex aquifolium*);
- f. Scotch broom (*Cytisus scoparius*);
- g. English hawthorne (*Crataegus laevigata*);
- h. Poison oak (*Toxicodendron diversilobum*); and
- i. Any plant on the Kitsap County or Washington State Noxious Weed Control Board list of noxious weeds, as amended, whether or not listed above.

~~4. Hazard tree removal within Native Vegetation Protection Areas delineated pursuant to BIMC 16.20.100.E in accordance with tree removal provisions set forth in BIMC 16.18 provided the tree(s) is not located within another type of critical area.~~

4. Tree and vegetation activities within Aquifer Recharge Protection Areas designated pursuant to BIMC 16.20.100.E, as follows:

- a. Notwithstanding any other provisions of this Chapter, the tree and vegetation activities listed in i. through iv., below, are allowed without city review and pre-approval provided the proposed activity is not located within (i) a critical area other than an Aquifer Recharge Protection Area or (ii) the buffers or setbacks of a critical area other than an Aquifer Recharge Protection Area;
 - i. Hazard tree removal in accordance with tree removal provisions set forth in BIMC 16.18;
 - ii. Invasive species removal;
 - iii. Maintenance pruning of trees, shrubs, and hedges without the restrictions in B.1.a through c. above, provided the structural integrity and long-term health of the vegetation is preserved;
 - iv. Wildfire mitigation activities, other than tree removal, within a 30-foot defensible space around a primary structure, in accordance with the Bainbridge Island Community Wildfire Protection Plan and as described by Section 603 of the International Wildland Urban Interface Code; and
- b. Removal of one or more significant trees, as defined in BIMC 16.20.180 and not including hazardous trees, requires City review and pre-approval of an Aquifer Recharge Protection Area stewardship plan prepared in accordance with BIMC 16.20.180.H.

C. The following tree and vegetation activities require city review and pre-approval of a critical area permit:

- 1. Any tree or vegetation activity not included in BIMC 16.20.090.B.
- 2. Hazard trees.
 - a. Hazard tree removal or wildlife snag creation not within erosion and landslide hazard areas or a landslide hazard area setback at the top of slope is allowed provided that it shall comply with the following standards and submittal requirements:

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- i. A report from an International Society of Arboriculture (ISA) Tree Risk Assessment Qualified (TRAQ) arborist that documents the hazard and provides a replanting plan for replacement trees;
 - ii. Land owners are encouraged, but not required, to retain all or portions of removed hazard trees on site to provide wildlife habitat;
 - iii. The land owner shall replace any trees that are removed with new trees at a minimum ratio of two replacement trees for each tree removed (2:1) within the first appropriate growing season in accordance with an approved planting plan. Replacement trees may be planted at a nearby location. Replacement trees shall be species that are native and indigenous to the site and a minimum size of six feet in height measured from top of root flare, with a minimum trunk diameter of one inch measured at four inches above top of root flare for both evergreen and deciduous trees. Smaller replacement trees are acceptable, at a minimum ratio of three replacement trees for each tree removed (3:1) and a minimum size of three feet (36 inches) in height measured from top of root flare.
 - iv. If a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods of removal that will minimize impacts; and
 - v. Hazard trees determined to pose an imminent threat or danger to public health or safety, to public or private property, or of serious environmental degradation may be removed or pruned by the land owner prior to receiving approval from the city; provided, that within 14 days following such action, the land owner shall submit the report required by Section (i) directly above and a planting plan that demonstrates compliance with the provisions of this title.
 - b. Hazard tree removal within erosion and landslide hazard areas and their setbacks at the top of slope is allowed provided that it shall comply with the standards and submittal requirements of both BIMC 16.20.090.C.2.a and the following:
 - i. No root disturbance or stump removal is permitted;
 - ii. Tree trunks, branches and stems may be left on a slope provided vegetative material does not result in a net increase in geological instability or create dangers to life or property.
 - iii. When removing more than one hazard tree, or more than two within a five-year period, the applicant shall demonstrate compliance with development standards in BIMC 16.20.130.D(1) as documented by a geotechnical engineer licensed in the State of Washington.
3. Coppicing, pollarding and other or vegetation activities.
- a. The coppicing, pollarding or removal of any species listed in BIMC 16.20.090.B(2) and (3) in an area greater than 2,500 square feet shall:

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- i. Include submittal of a replanting plan for city review and approval for any areas of bare ground; and
- ii. Demonstrate compliance with development standards in BIMC 16.20.130.D(1) as documented by a geotechnical engineer licensed in the State of Washington if located within erosion and landslide hazard areas and their buffers at the top of the slope.

D. Seasonal limitations. No vegetation removal, unless required to conduct a risk inspection by a certified arborist, is allowed in erosion and landslide hazard areas and their setbacks at the top of the slope between October 1 and April 1 unless (i) a waiver is granted by the director or (ii) it is required due to an emergency involving immediate danger to life or property.

E. Any tree or vegetation activity requiring a critical area permit pursuant to BIMC 16.20.090.C must:

1. Be performed by a licensed contractor, forester, or certified arborist in the State of Washington who has submitted a signed “Statement of Tree and Vegetation Standards and Requirements Acknowledgment” in accordance with BIMC 16.20.090.F prior to start of work; and
2. Conform to applicable practices of ANSI A300 (Part 1 – 2017) Tree, Shrub and Other Woody Plant Management – Standard Practices (Pruning), as amended, or City of Bainbridge Island pruning standards ([hyperlink](#)).

F. In order to assure compliance with the standards and requirements of this chapter, arborists, foresters and contractors or others involved in tree or vegetation operations in critical areas shall be required to sign and submit a “Statement of Tree and Vegetation Standards and Requirements Acknowledgment” to the city. This statement shall attest such professional’s knowledge of the City of Bainbridge Island’s tree and vegetation protection requirements. This statement shall be required in conjunction with normal city licensing requirements for persons performing work in the City of Bainbridge Island. The required statement shall be in substantially the following form:

“I, _____, a duly licensed professional contractor in the State of Washington, or forester or certified arborist, hereby attest that I have read and am knowledgeable of BIMC 16.20.090, “Trees and Vegetation”, of the City of Bainbridge Island.

“I further attest that, as a professional doing tree and/or vegetation work in the City of Bainbridge Island, I am accountable for following the city’s tree and vegetation standards and requirements, including obtaining a critical area permit, if required, prior to performing tree and/or vegetation work, as defined by BIMC 16.20.090, as well as following all conditions and requirements of said permit.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

“I attest that if I fail to follow tree and vegetation requirements of BIMC 16.20.090, I will be in violation of BIMC 16.20.090 and thereby subject to a fine as specified in BIMC 16.20.170 and I will be held jointly responsible with the landowner for any restitution required as a result of environmental damage determined by the city to be the result of improper tree and/or vegetation activities at the site. This may result in monetary penalties as allowed by this chapter or State law.”

Private arborists, foresters and contractors or others involved in tree or vegetation operations who do not provide the above statement shall be prohibited from performing tree or vegetation services within critical areas and their buffers when a critical areas permit is required within the City of Bainbridge Island. Said professionals who do not provide this statement and perform tree or vegetation services in the City of Bainbridge Island shall be considered in violation of this chapter and will be prosecuted under this chapter, the city’s civil penalties ordinance, or as otherwise provided by law. All foresters, arborists, or contractors involved in tree or vegetation operations shall be jointly responsible with the landowner for any tree or vegetation violation and restitution required at a site as a result of tree or vegetation activity.

G. Permit and review procedures

1. Applications for critical area permits for tree or vegetation activities shall include:
 - a. City of Bainbridge Island Master Land Use Application ([hyperlink](#));
 - b. A letter or report from an International Society of Arboriculture (ISA) certified arborist for any tree removal or coppicing greater than 2,500 square feet;
 - c. Documentation in letter format by a geotechnical engineer licensed in the State of Washington if required pursuant to BIMC 16.20.090.C.
 - d. A letter or report from an International Society of Arboriculture (ISA) Tree Risk Assessment Qualified (TRAQ) arborist for removal of any hazard tree;
 - e. A replanting plan if required pursuant to BIMC 16.20.090.C; and
 - f. Any additional information required by other sections of this Chapter.
2. A critical area permit for tree or vegetation activity shall not be approved if it creates or results in a net loss to one or more critical area functions or values.
3. The city may request technical review from qualified professionals or other agencies at the applicant’s expense to ensure no net loss in critical area functions and values.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

16.20.100 Aquifer recharge areas.

A. Applicability. Aquifer recharge areas are areas that have a critical recharging effect on groundwater used for potable water supplies and/or that demonstrate a high level of susceptibility or vulnerability to groundwater contamination from land use activities. In accordance with WAC 365-190-100, the entirety of Bainbridge Island is classified as an aquifer recharge area to preserve the volume of recharge available to the aquifer system and to protect groundwater from contamination. This section applies to:

1. This Section applies to:

1. Any development, use or activity not associated with permitted principal and accessory residential uses pursuant to BIMC 18.09.020 that has the potential to generate a pollutant identified as a potential source of drinking water contamination (either in Appendix A of the Washington State Critical Aquifer Recharge Area Guidance Document or on the North American Industry Classification System as used by the city's Department of Public Works) or known to be deleterious to the environment or human health; and
2. Any development, use or activity within designated critical aquifer recharge areas, which include all parcels within the R-0.4, R-1 and R-2 zoning districts, that qualifies as a regulated use or allowed activity pursuant to BIMC 15.20.040 in accordance with the thresholds in BIMC 15.20.060—Table 1. Any proposed development or activity requiring a site assessment review (SAR) pursuant to BIMC 15.19 and 15.20 located within the R-0.4, R-1 or R-2 zoning designations unless excluded by subsection BIMC 16.20.100.E.1.

B. Permit review and procedures

1. Any development, use or activity described in BIMC 16.20.100.A shall require a critical area permit.
2. Critical area permits shall be reviewed pursuant to the criteria in BIMC 16.20.070.
3. Applications for critical area permits for aquifer recharge areas shall include:
 - a. City of Bainbridge Island Master Land Use Application (hyperlink); and
 - b. ~~For~~ Proposals described in BIMC 16.20.100.A.1-a shall require submittal of a hydrogeologic assessment, as set forth in BIMC 16.20.180.A. If the applicant has completed a Site Assessment Review (SAR) in accordance with BIMC 15.19 that includes sufficient information to address the elements listed in 16.20.180.A, the SAR will suffice to fulfill this requirement. Additional in-depth site assessment elements as detailed in 16.20.180.A may be required by the city or if requested by affected public water purveyors (Group A & B), affected Tribes, or the Kitsap Public Health District upon review of the SAR.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- c. Proposals described in BIMC 16.20.100.A.2 shall require submittal of a site assessment review application.
 - i. ~~Hydrogeological Site Assessment meeting the requirements of BIMC 16.20.180.A, Critical area reports. If the applicant has completed a Site Assessment Review (SAR) in accordance with BIMC 15.19 that includes sufficient information to address the elements listed in 16.20.180.A, the SAR will suffice to fulfill this requirement. Additional in-depth site assessment elements as detailed in 16.20.180.A may be required upon review of the SAR.~~
 - A. ~~All hydrogeological site assessments must be prepared and stamped by a professional hydrogeologist licensed in Washington State in accordance with RCW 18.220 and WAC 308-15. Affected public water purveyors (Group A & B), affected Tribes, and the Kitsap Public Health District will be notified and invited to comment on all hydrogeological site assessments. The city will consider all recommendations submitted by these entities when considering permit conditions.~~
 - B. ~~An aquifer recharge mitigation plan, meeting the requirements of BIMC 16.20.180, critical area reports, is required if aquifer recharge impacts are identified in the hydrogeological site assessment.~~
 - C. ~~The city may require third-party independent review by a professional hydrogeologist of any required application materials.~~

C. Prohibited Activities and Uses. The following activities and uses are prohibited within critical aquifer recharge areas due to the probability or potential magnitude of their adverse effects on groundwater:

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 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells;
3. Chemical wood preservation and/or treatment facilities;
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;
5. Hazardous liquid transmission pipelines;
6. Commercial mining and chemical washing of metals, hard rock, sand, and gravel;
7. Hydrocarbon extraction, reprocessing, refinement, and storage;

**CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018**

8. Electroplating/metal finishing;
9. Facilities that treat, store, process, or dispose of hazardous waste; and
10. 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 stream.

D. Development standards – general

- ~~1. All proposals for new development or redevelopment shall incorporate low impact development techniques or other best management practices into the site design in order to disperse and/or infiltrate stormwater runoff to ensure that there is no net loss of infiltration as a result of the development or redevelopment.~~
1. No development, use or activity may exceed water quality standards ~~or sediment quality standards~~ or otherwise violate the anti-degradation requirements specified in WAC Chapters 173-200, ~~173-201A, and 173-204.~~
2. Any development or activity that is not exempt or excluded by subsection BIMC 16.20.100.E.1 shall ensure sufficient groundwater recharge, defined as maintaining 100 percent of the annual average pre-construction groundwater recharge volume for the site. The primary means to ensure sufficient groundwater recharge shall be through the designation of an Aquifer Recharge Protection Area in accordance with BIMC 16.20.100.E.

E. Development standards – Aquifer Recharge Protection Area (ARPA). ~~Native Vegetation Protection Area (NVPA) requirements. Native vegetation retention is a fundamental method for critical aquifer recharge area protection. Sixty five percent or more of the development site should be protected for the purposes of retaining or enhancing existing native forest and vegetation cover to maximize aquifer recharge opportunities.~~

1. Any proposed development or activity requiring a site assessment review (SAR) pursuant to BIMC 15.19 and 15.20 located within the R-0.4, R-1 or R-2 zoning designations requires designation of an ARPA; except, designation of an ARPA is not required for the following:
 - a. Removal of invasive species;
 - b. Construction of public trails provided the standards set forth in BIMC 16.20.110.G.1.a through e. are met;
 - c. Replacement of hard surfaces; and
 - d. Development and activities located on properties protected in perpetuity by a legal instrument acceptable to the City Attorney wherein at least 65 percent of

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

the site meets the development standards for aquifer recharge protection areas of this section.

2. ~~NVPA~~ ARPA general requirements
 - a. The location and configuration of the ARPA shall be determined through completion of a Site Assessment Review (SAR) in accordance with BIMC 15.19. The city may require a professional forester, ISA-certified arborist or landscape architect to determine the location and configuration of the ARPA if needed to ensure the ARPA design standards set forth in BIMC 16.20.100.E.3.a. through c. are met;
 - b. The ARPA shall include all existing native vegetation on a site, up to a maximum of 65 percent of the total site area. A lower percentage is allowed if necessary to achieve a development area of at least 12,500 square feet on a parcel;
 - c. The maximum area of the required ARPA may be reduced to 50 percent for public schools and public parks allowed in the underlying zoning district.
 - d. The location and configuration of the ARPA may change over time; however, the total area required pursuant to b., above, shall be retained once established. Any alteration to the location or configuration of the ARPA shall be approved by the director and documented on a site plan included with a notice to title in accordance with BIMC 16.20.070.G. The city may require a ARPA stewardship plan prior to approving a change to the location and configuration of the ARPA.
 - ~~a. Designation of a NVPA is required for any development, use or activity in a critical aquifer recharge area that qualifies as a regulated use or allowed activity pursuant to BIMC 15.20.040 in accordance with the thresholds in BIMC 15.20.060 Table 1.~~
 - ~~b. Designation of a NVPA is not required for the following development, use or activity:
 - a. Removal of invasive species; and
 - b. Construction and use of public trails provided the standards set forth in BIMC 16.20.110.G.6.a through e. are met.~~
 - ~~c. The location and configuration of the NVPA shall be determined through completion of a Site Assessment Review (SAR) in accordance with BIMC 15.19. The city may require a professional forester, ISA-certified arborist or landscape architect to determine the location and configuration of the NVPA if needed to ensure the NVPA design standards set forth in BIMC 16.20.100.E.2.a. through c. are met.~~
 - ~~d. The NVPA shall include all existing native vegetation on a site, up to a maximum of 65 percent of the total site area. A lower percentage is allowed if necessary to achieve a development area of at least 12,500 square feet on a parcel.~~
 - ~~e. The maximum area of the required NVPA may be reduced to 50 percent for public schools and public parks allowed in the underlying zoning district.~~

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- ~~f. If the NVPA area is less than 65 percent of the total site area, no net loss of infiltration as a result of the development or redevelopment shall be demonstrated through the critical area permit review process. Replacement planting located in clusters or contiguous tracts may be required to maximize low impact development and aquifer recharge opportunities.~~
- ~~g. The total area required pursuant to c., above, shall be retained once established, although the location and configuration of the NVPA may change over time. Any alteration to the location or configuration of the NVPA shall be approved by the director and documented on a site plan included with a notice to title in accordance with BIMC 16.20.070.G. The city may require a NVPA stewardship plan prior to approving a change to the location and configuration of the NVPA.~~

32. NVPA ARPA design and use standards

- a. Healthy, existing trees and vegetation should be retained to the maximum extent possible. Healthy significant trees shall be priority trees for retention. Trees shall be retained in **one or more** stands or clusters.
- b. The NVPA ARPA shall be delineated to include:
 - i. A low perimeter-to-area ratio;
 - ii. A minimum width of 12 feet; and
 - iii. The critical root zone of all significant trees.
- c. The NVPA ARPA shall be contiguous with abutting, off-site areas of other NVPA ARPAs, open space or critical areas to the extent feasible.
- d. The NVPA ARPA may include landscaping or open space requirements pursuant to BIMC 18.15.010.D and E and BIMC 17.12, respectively, and other critical areas and their buffers **or setbacks** pursuant to other sections of this chapter **if they contain native vegetation.**
- ~~e. The following uses and activities are allowed within the NVPA provided they do not result in an adverse impact to infiltration capacity or a net loss of critical area functions and values:~~

4. ARPA use standards. The following developments and activities are allowed within a designated ARPA:

- a. Any structure or activity as long as the new structure or activity is shown to not negatively impact the amount of groundwater recharge on the site. Specifically, any structure or activity is allowed as long as the structure or activity (including mitigation measures, if any are needed) maintains 100 percent of the annual average groundwater recharge volume that existed on the site prior to the structure or activity as demonstrated by the 2012 Western Washington Hydrology Model (WWHM2012) recharge module, as amended, or other methodology acceptable to the City Engineer.**
- b. Tree and vegetation activities specified in BIMC 16.20.090.
- c. Installation of native plants.
- d. Removal of invasive plant species.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- e. Passive recreation, including pervious trails.
 - f. Potable water wells and well houses.
 - g. Low impact fencing or signs marking the NVPA ARPA boundary.
 - h. On-site sewage drainfield facilities, if the applicant can demonstrate that (a) the proposed facility will not adversely affect the function or characteristics of the NVPA; and (b) construction of the system will not require the use of heavy equipment or removal of vegetation, including significant trees.
 - i. Storm drainage facilities if the applicant can demonstrate that (a) the proposed use will not adversely affect the function or characteristics of the NVPA, (a) the system meets the low impact design (LID) standards of BIMC 15.20, and (b) construction of the system will not require the use of heavy equipment or removal of vegetation, including significant trees.
 - j. Accessory solar panels, small wind energy generators, composting bins, rainwater harvesting barrels, and cisterns, as defined in BIMC 18.36.
 - k. Other structures or hard surfaces with a total footprint of no greater than 200 square feet.
 - l. Driveways may be allowed to pass through the NVPA if (a) siting of the driveway within the NVPA is determined by the director to be necessary to achieve greater native vegetation retention and use of non-structural low impact design practices, (b) site utilities are installed within the footprint of the driveway, (c) siting of the driveway avoids removal of significant trees to the maximum extent feasible and (d) the total area required pursuant to BIMC 16.20.100.E.1 is achieved, which may require replanting of areas comprised of non-native vegetation.
 - m. Removal of any significant tree, other than hazard tree removal, with City review and pre-approval of an Aquifer Recharge Protection Area stewardship plan prepared in accordance with BIMC 16.20.180.H.
5. NVPA ARPA protection.
- a. The NVPA ARPA, including the critical root zone of significant trees, shall be protected during construction as provided in BIMC 18.15.010.C.4 or as specified by an ISA-certified arborist.
 - b. The NVPA ARPA shall be documented on a site plan included with a notice to title in accordance with BIMC 16.20.070.G.

16.20.110 Fish and wildlife habitat conservation areas

A. Applicability. This Section applies to all fish and wildlife habitat conservation areas as classified in BIMC 16.20.110.B except those located within the city's shoreline jurisdiction, which are regulated by the city's shoreline master program (BIMC 16.12).

B. Fish and Wildlife Habitat Conservation Areas include:

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

1. Streams. Within the city of Bainbridge Island, streams shall include those areas which meet the definitions in BIMC 16.20.190 (Definitions). Streams shall be classified in accordance with the Washington Department of Natural Resources water typing system (WAC 222-16-030), which is hereby adopted in its entirety by reference and summarized as follows:
 - a. Type F: streams which contain fish habitat pursuant to BIMC 16.20.190 (Definitions);
 - b. Type Np: perennial non-fish habitat streams; and
 - c. Type Ns: seasonal non-fish habitat streams.
2. Habitats recognized by federal or state agencies for federal- and/or state-listed endangered, threatened, sensitive and candidate/monitored species which presence is documented in maps or databases available to City of Bainbridge Island.
3. Areas that contain habitats and species of local importance. Any person may nominate for designation a species or habitat of local importance. Nominations will be processed pursuant to definitions in BIMC 16.20.180 and nomination criteria developed by the director.
4. Biodiversity areas and corridors as defined in the 2008 Washington Department of Fish and Wildlife Priority Habitat and Species List, or as amended.
5. All areas within the city of Bainbridge Island meeting one or more of the preceding criteria in this Section 16.20.110.B, regardless of any formal identification or mapping, are hereby designated critical areas and are subject to the provisions of this chapter and shall be managed consistent with the best available science, such as the Washington Department of Fish and Wildlife's most recent Management Recommendations for Priority Habitat and Species.

C. Mapping

The location and extent of all mapped critical areas shown on the city of Bainbridge Island critical area maps are approximate and shall be used as a general guide only. The type, extent and boundaries shall be determined in the field by a qualified professional according to the requirements of this chapter. The critical area maps (provide hyperlink) are adopted as part of this chapter and are incorporated herein by this reference. Washington Department of Natural Resource (DNR) and Washington Department of Fish and Wildlife maps are not the only source of data. Any request to change the city's existing map shall be accompanied by a report from a qualified professional that includes a description of the critical area and a summary of how it meets the definitions in BIMC 16.20.190. The inventory and cited resources are to be used as a guide for the city, project applicants, and/or property owners and may be continuously updated as new or altered critical areas are identified

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

D. Permit and review procedures

1. Any development, use or activity within any fish and wildlife habitat conservation area shall require a critical area permit unless it qualifies as an exempt activity, as provided in BIMC 16.20.040.
2. Critical area permits shall be reviewed pursuant to the criteria in BIMC 16.20.070 and any applicable state or federal management recommendations.
3. Applications for critical area permits for fish and wildlife habitat conservation areas shall include:
 - a. City of Bainbridge Island Master Land Use Application (hyperlink);
 - b. Habitat Management Plan (HMP), prepared in accordance with BIMC 16.20.180, if a fish and wildlife habitat area described in BIMC 16.20.110.B.2 through 4 occurs within or adjacent to the project site; and
 - c. Buffer enhancement plan, prepared in accordance with BIMC 16.20.180, if only stream buffer modification is requested.
4. The city may request technical review of a HMP from other agencies to ensure consistency with state, federal or tribal management recommendations.

E. Development Standards – Streams

1. All designated streams require a buffer pursuant to Table 1. Buffers shall remain as undisturbed or enhanced vegetation areas for the purpose of protecting the integrity, function, and value of stream resources. Any buffer modification proposed shall be through an approved Buffer Enhancement Plan. No uses or activities shall be allowed within the buffer unless allowed by this Section. If the buffer has previously been disturbed, the director may require the disturbed buffer area be enhanced, including revegetation with native plant species, pursuant to an approved Buffer Enhancement Plan meeting the requirements of BIMC 16.20.160.180. No refuse, including but not limited to household trash, yard waste and commercial/industrial refuse, shall be placed in the buffer.
2. The required minimum buffers listed in Table 1 are based on the assumption that the buffer is well vegetated with native species appropriate to the site. If the buffer does not consist of vegetation adequate to provide stream protection and buffer functions, the director may require that the buffer be planted to achieve such protection and function.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

Table 1. Stream Buffers

Stream Type	Buffer Width
F	200
Np	100
Ns (connected to F or Np)	75
Ns (not connected to F, Np)	50

3. Buffer distances shall be measured from the ordinary high water mark (OHWM) or from the top of each bank where the OHWM cannot be identified.
4. 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 to include the entire stream feature.
5. 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:
 - a. The buffer width required for the stream type; or
 - b. A buffer width which extends 25 feet beyond the top of the ravine.
6. Increased buffer provisions. The director may increase buffer widths, up to 50 percent 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.
7. Structure or hard surface setback. A structure or hard surface setback line of fifteen feet is required from the edge of any stream buffer. Minor structural or impervious surface intrusions into the areas of the setback, such as but not limited to fire escapes, open/uncovered porches, landing places, outside walkways, outside stairways, retaining walls, fences and patios, may be permitted if the department determines upon review of an analysis of buffer functions submitted by the applicant, that construction and/or maintenance of such intrusions will not encroach into the stream buffer or adversely impact the stream. The functional analysis shall include a functional methodology supported by best available science. The setback shall be identified on a site plan and filed as an attachment to the notice on title as required by Section 16.20.070 (Notice on Title).
8. Buffer Modification. On each site, only one of the following modifications to buffer widths may be allowed provided the applicant demonstrates the need for modification through mitigation sequencing pursuant to BIMC 16.20.030.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- a. Buffer Width Averaging. The width of a required buffer may be averaged if the applicant can demonstrate that averaging can provide equal or greater functions and values as would be provided under the required buffer and all of the following conditions are met:
 - ii. The total area of buffer after averaging is equal to the area required without averaging.
 - iii. Averaging cannot result in the any portion of the buffer being reduced more than 25 percent of its required width.
- b. Buffer Width Reduction. The width of a required buffer may be reduced if the applicant can demonstrate that the reduction will provide equal or greater functions and values as would be provided under the required buffer and all of the following conditions are met:
 - i. The buffer may not be reduced more than 25 percent of its required width.
 - ii. Native vegetation on other portions of the site is retained in order to offset habitat loss from buffer reduction.
- c. Any request for buffer modification outlined above shall be reviewed in conjunction with the underlying land use or construction permit. A critical area permit is not required. Requests for buffer averaging or buffer reduction shall include a buffer enhancement plan prepared by a qualified consultant that meets the requirements of BIMC 16.20.180. Buffer enhancement plans shall be reviewed pursuant to the criteria in BIMC 16.20.070.
- d. The city may request technical review of a buffer enhancement plan from other agencies to ensure consistency with state, federal or tribal management recommendations.
- e. Any other buffer modification, other than non-compensatory enhancement, requires a Reasonable Use Exception pursuant to BIMC 16.20.080.

F. Development Standards – Other Fish and Wildlife Habitat Conservation Areas

- 1. All development, uses and activities within known fish and wildlife habitat conservation areas require submittal and approval of a Habitat Management Plan (HMP) as specified in BIMC 16.20.180, Critical area reports. The HMP shall consider measures to retain and protect the fish and wildlife habitat and shall consider the effects of land use intensity, buffers, setbacks, impervious surfaces, erosion control and retention of existing native vegetation.
- 2. In the case of bald eagles, the HMP shall comply with the federal Bald and Golden Eagle Protection Act (16 USC 668) to avoid impacting eagles and their habitat.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

G. Standards for specific development, uses and activities. The following development, uses and activities may be allowed within fish and wildlife habitat conservation areas and their buffers. Any proposal for the following development, uses and activities requires a critical area permit pursuant to BIMC 16.20.070 and shall comply with the standards of this Section and other applicable state, federal and local regulations. The director may waive the requirement for a HMP when project impacts are demonstrated to be de minimis through mitigation sequencing pursuant to BIMC 16.20.030.

1. Stream Crossings. Any private or public road or driveway expansion or construction proposed to cross streams classified within this chapter shall comply with the following minimum development standards. All other state and local regulations regarding water crossing structures shall apply, and the use of the *Water Crossing Design Guidelines* (WDFW, 2013), or as amended, is encouraged.
 - a. Bridges or bottomless culverts shall be required for all Type F streams. Other alternatives may be allowed upon (i) submittal of a Habitat Management Plan which demonstrates that other alternatives would not result in significant impacts to the fish and wildlife conservation area and (ii) as determined through the Hydraulic Project Approval (HPA) process administered by the Washington Department of Fish and Wildlife. The plan must demonstrate that fish habitat will not be reduced in area or function.
 - b. Crossings shall not occur in fish-bearing streams 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 Washington 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.
2. Stream Relocations. Stream relocations may be allowed only for the purpose of flood protection and/or fisheries restoration and only when consistent with a Washington Department of Fish and Wildlife Hydraulic Project Approval (HPA) process and the following minimum performance standards:
 - a. The channel, bank, and buffer areas are replanted with native or equivalent vegetation that replicates a natural, undisturbed riparian condition;
 - b. For those waters designated as Frequently Flooded Areas pursuant to BIMC 15.16, a professional engineer licensed in the State of Washington provides information demonstrating that the equivalent base flood storage volume and function will be maintained; and

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- c. Relocated stream channels are designed to meet or exceed the functions and values of the stream to be relocated.
- 3. Pesticides, Fertilizers and Herbicides. No pesticides, herbicides or fertilizers may be used in fish and wildlife conservation area or their buffers, except those approved by the U.S. Environmental Protection Agency (EPA) and approved under a Washington Department of Ecology Water Quality Modification Permit for use in fish and wildlife conservation area environments and applied by a licensed applicator in accordance with the safe application practices on the label.
- 4. 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 non-conforming lots, each new lot shall contain at least one building site that meets the requirements of this chapter, including buffer requirements for fish and wildlife habitat conservation areas. Each lot must also have access and a sewage disposal system location that are suitable for development that 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.
- 5. 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 are allowed in fish and wildlife conservation area or their buffers if there are no reasonable alternatives for meeting trail planning objectives and it is demonstrated through a Habitat Management Plan that the proposal will not result in a net loss of critical area functions and when the following standards are met.
 - a. Trails and related facilities shall be placed on existing road grades, utility corridors, or any other previously disturbed areas if present at the site and consistent with applicant's trail planning objectives.
 - b. Trails and related facilities shall be planned to minimize removal of trees, shrubs, snags and important wildlife habitat and disturbance to soil and existing hydrological characteristics;

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- 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. Viewing platforms shall be limited to one hundred (100) square feet in size, unless demonstrated that a larger structure will not result in a net loss of fish and wildlife habitat functions;
 - d. Trail planning shall utilize mitigation sequencing in BIMC 16.20.030 to first avoid siting trail and trail-related facilities within fish and wildlife habitat conservation areas and their required buffers. Trails and trail-related facilities are allowed in fish and wildlife conservation area or their buffers if there are no reasonable alternatives for meeting the applicant's trail planning objectives and it is demonstrated through a Habitat Management Plan that the proposal will not result in a net loss of critical area functions.
 - e. Trails shall be limited to non-motorized use. Trail width shall not exceed six 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.
6. Utilities. Placement of utilities within designated fish and wildlife conservation area may be allowed pursuant to the following standards:
- a. Construction of utilities may be permitted in fish and wildlife conservation area or their buffers, only when no practicable or reasonable alternative location is available and the utility meets the requirements for installation, replacement of vegetation and maintenance outlined below.
 - b. Sewer or on-site Sewage Utility. Construction of sewer lines or on-site sewage systems may be permitted in fish and wildlife conservation area or their buffers when the applicant demonstrates it is necessary to meet state and/or local health code requirements; there are no other practicable alternatives available; and construction meets the requirement of this Section. Joint use of the sewer utility may be allowed.
 - c. New utilities shall not be allowed in fish and wildlife conservation area with known locations of federal or state listed endangered, threatened or sensitive species, heron rookeries or nesting sites of raptors which are listed as state candidates except in those circumstances where an approved Habitat Management Plan indicates that the utility will not significantly impact the conservation area;
 - d. New Utility Construction. Utility construction and maintenance shall protect the environment of fish and wildlife conservation area and their buffers.
 - i. New utilities shall be aligned whenever possible to avoid cutting or root damage to trees greater than 12 inches in diameter at breast height (four and one-half feet) measured on the uphill side.
 - ii. Any area of disturbance shall be revegetated with appropriate native or equivalent vegetation at not less than pre-construction vegetation densities or greater, immediately upon completion of construction or as soon thereafter as possible due

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

to seasonal growing constraints. The utility or landowner responsible for installation shall ensure that such vegetation survives.

- iii. Any additional access for maintenance shall be provided wherever possible at specific points rather than by parallel roads. If parallel roads are necessary, they shall be of a minimum width but no greater than 15 feet; and shall be contiguous to the location of the utility corridor on the side away from the conservation area.

- e. Utility maintenance shall include the following measures to protect the environment of regulated fish and wildlife habitat conservation areas.

- i. Utility towers shall not be sandblasted or spray-painted. Lead-based paint is prohibited.
- ii. Pesticides, fertilizers and herbicides: No pesticides or fertilizers may be used in fish and wildlife habitat conservation areas or their buffers, except those applied by a licensed applicator in accordance with the safe application practices on the label.

7. Bank Stabilization.

- 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. Structural methods, or hard stabilization, may only be utilized where it can be demonstrated by a professional engineer licensed in the State of Washington that an existing primary residential structure or essential public facility cannot be safely maintained without such measures, and that the resulting hard stabilization 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.

- 9. 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

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

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.

10. 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, and the Stormwater Management standards in Chapters 15.20 and 15.21 BIMC, including the maintenance of buffers, where required.
11. Road/Street Repair and Construction. Any private or public road or street expansion or construction which may be allowed in a Fish and Wildlife Habitat Conservation Area or its buffer shall comply with the following minimum development standards:
 - a. No other reasonable or practicable alternative exists and the road or street crossing serves multiple properties whenever possible;
 - b. Expansion or construction of any private or public road shall only be allowed when adverse impacts can be avoided;
 - c. Public and private roads should provide for other purposes, such as utility crossings, pedestrian or bicycle easements, viewing points, etc.; and
 - d. The road or street construction is the minimum necessary, as required by the Department of Public Works, and shall comply with the Department of Public Works' guidelines to provide public safety and mitigated stormwater impacts.
 - e. Construction time limits shall be determined in consultation with Washington Department of Fish and Wildlife in order to ensure habitat protection.

16.20.120 Frequently flooded areas.

A. Designation and mapping. Frequently flooded areas include all areas of special flood hazard as mapped within the city, and other areas that could be threatened by flooding. The city uses Chapter 15.16, Flood Damage Prevention, adopted herein by reference, which provides the basis for establishing areas of special flood hazard.

B. Development in frequently flooded areas shall be subject to the provisions in Chapter 15.16, Flood Damage Prevention.

16.20.130 Geologically hazardous areas.

A. Applicability.

1. This chapter applies to all geologically hazardous areas classified pursuant to BIMC 16.20.130.B except as specified in subsection (2) of this section.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

B. Classification.

1. Geologically hazardous areas include erosion hazard areas, landslide hazard areas, and seismic hazard areas (including fault and liquefaction hazard areas). Zone of influence areas are not considered geologically hazardous areas.
2. 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 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.

C. Permit and review procedures.

1. Any development, use or activity proposed on a site containing any geologically hazardous area or a landslide hazard area setback shall require a critical area permit unless it qualifies as an exempt activity, as provided in BIMC 16.20.040 or is allowed without review pursuant to BIMC 16.20.090.
2. Critical area permits shall be reviewed pursuant to the criteria in BIMC 16.20.070.
3. Applications for critical area permits for geologically hazardous areas shall include:
 - a. City of Bainbridge Island Master Land Use Application ([hyperlink](#)); and
 - b. Indemnification. An indemnification or hold harmless agreement shall be required for all projects in geologically hazardous areas, except erosion hazard areas and landslide hazard area setbacks. The form of the agreement shall be approved by the city and executed prior to the commencement of construction or any land disturbing activity.
 - c. Notice. A notice of intent to construct on a landslide hazard area or reduce the standard setback in a landslide hazard area shall be given pursuant to BIMC 2.16.085.C.2. The notice of intent shall be issued within 14 days of a complete application pursuant to BIMC 2.16.055. The notice shall include a 21-day comment period and no permits or approval of reduced setbacks shall be issued before the end of the comment period.
 - d. Geological Hazards Assessment. A geological hazards assessment is required for all projects in geologically hazardous areas and landslide hazard area setbacks in accordance with BIMC 16.20.180, Critical area reports. To protect

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

public health, safety and welfare, the director may require third party review of any geological hazards assessment or 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 geologist or geotechnical engineer to perform the review shall be borne by the applicant.

D. Development Standards – General. The following development standards apply to all activities within any geologically hazardous area or associated landslide hazard area setback:

1. The proposed activity shall not create a net increase in geological instability, either on- or off-site, which is defined as follows:
 - a. The subject parcel shall not be less stable after the planned development than before; and
 - b. The adjacent parcels shall not have greater risk or be less stable after the planned development than before.
2. The proposed activity shall not increase the risk of life safety due to geological hazards above professionally acceptable levels.
3. The proposed activity shall not increase the risk due to geological hazards above professionally acceptable levels for:
 - a. Property loss of any habitable structures or their necessary supporting infrastructure on-site or;
 - b. Risk to any off-site structures or property of any kind; and
4. Proposed buildings shall be constructed using appropriate engineering methods that respond to the geologic characteristics specific to the site in order to achieve a high standard of safety and meet professional practice standards and codes.
5. The proposed activity shall not further degrade the values and functions of the associated critical areas.
6. Unless allowed pursuant to BIMC 16.20.090 or as part of an approved building permit, removal of vegetation from an erosion or landslide hazard area or setback is prohibited.

E. Development Standards -- Landslide Hazard Areas. The following requirements shall apply to any land disturbing activity or construction within a landslide hazard area or its setback as described herein:

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

1. Prohibited activities. Development of habitable structures and critical facilities is prohibited in landslide hazard areas and landslide hazard area setbacks.
2. Allowed activities. The following minor development may be allowed in landslide hazard areas on slopes forty (40) percent or greater and landslide hazard area setbacks if the development standards of this Section are met:
 - a. Surface water management, including outfalls
 - b. Septic facilities, including drainfields
 - c. Trails and stairs
 - d. Cable lifts and trams
 - e. Public or private utilities or streets
 - f. Seismic or other safety upgrades to protect existing habitable structures
 - g. Other non-habitable structures
3. Any land disturbing activity or construction within a landslide hazard area or its setback shall meet the following requirements:
 - a. All development proposals shall be designed to avoid impacts to 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;
 - b. 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;
 - c. Access shall be in the least sensitive part of the site, and common access drives and utility corridors are required to the extent feasible;
 - d. Roads, walkways and parking areas shall be designed to parallel the natural contours to the extent feasible;
 - e. Cut and fill slopes shall be prepared and maintained to control against erosion and instability; and
 - f. Drainage and stormwater designs in zones of influence shall incorporate elements of low impact design, add examples to the extent feasible, and shall be designed in such a manner that stormwater outlet discharges do not create additional impacts.
4. Factors of safety. Factors of safety in accordance with Table 2 are required. 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.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

Table 2. Factors of safety and standard setbacks

Structure, use or activity	Static factor of safety	Dynamic (seismic) factor of safety	Standard setback
Habitable structure	1.5	1.0	Top of slope: Height of slope up to maximum of 75 feet Bottom of slope: Height of slope
High-risk non-habitable structure	1.3	As determined by geological hazards assessment.	Top of slope: Height of slope up to maximum of 75 feet Bottom of slope: Height of slope
Lower-risk non-habitable structures	As determined by geological hazards assessment.	As determined by geological hazards assessment.	Height of slope up to 75 feet.
Other structure or use	As determined by geological hazards assessment.	As determined by geological hazards assessment.	Height of slope up to 75 feet.
Tree and vegetation activities in accordance with BIMC 16.20.090	n/a	n/a	25 feet only from top of slope.

5. Setback requirement. Setbacks from landslide hazard areas are required. A setback shall be established from all edges of a landslide hazard area as follows:
 - a. A standard setback in accordance with Table 2; or
 - b. A setback established by the findings of a geological hazards assessment prepared by a licensed geologist or geotechnical engineer that protects and minimizes the risk of property damage, death or injury resulting from a potential landslide impact. The geological hazards assessment shall require a third-party independent review by a qualified geologist or geotechnical engineer at the cost to the applicant;
 - c. A setback less than 20 feet is prohibited for habitable structures;
 - d. The setback for tree and vegetation activities in accordance with BIMC 16.20.090 is 25 feet only from the top of slope.
 - e. No setback is required for slopes forty (40) percent or greater with a vertical elevation change of up to twenty (20) feet, if compliance with development standards in BIMC 16.20.130.(D) and (E) is documented by a geotechnical engineer licensed in the State of Washington;

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- f. The setback may be increased beyond that specified in subsection (a) above if the director determines a larger setback is necessary to prevent risk of damage to proposed adjacent development and the associated critical areas.
- 6. For the purposes of establishing the factors of safety and setback using Table 2, the following categories shall apply:
 - a. Habitable structure: residences, accessory dwelling units, garages;
 - b. High-risk non-habitable structure: decks, patios, pool/hot tub, driveways, trams, cable lifts, carports;
 - c. Lower-risk habitable structure: storage shed, boathouse, stairs, pathways, structures intended for short-term use;
 - d. Other structures or uses: septic facilities including drainfields, drainage outfalls, bulkheads, landscape walls, other utilities; and
 - e. If a proposed structure, use or activity is not included in BIMC 16.20.130.E.6(a) through (d), the category shall be determined by the City Engineer.
- 7. Zone of influence. A zone of influence shall be established 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 to assess changes in land use and hydrology that may affect the stability of the geologically hazardous area.
 - a. The applicant shall have the stormwater pollution prevention plan (erosion control plan) for the project reviewed by a geotechnical engineer to determine if there are any potentially adverse impacts to the landslide hazardous area. The report shall contain recommendations to avoid adverse impacts to the geologically hazardous area. Concentrated discharge of stormwater shall only be allowed where specifically recommended in the report and authorized by the City Engineer.
 - b. 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.
- 8. Field marking requirements. Proposed clearing and work limit lines and landslide hazard setbacks shall be marked in the field for inspection and approval by the city prior to start of any land disturbing activity. Field marking shall remain in place until construction is completed and final inspection is completed by the city.

**CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018**

16.20.140 Wetlands.

A. Applicability

1. This chapter applies to:
 - a. All wetlands designated pursuant to BIMC 16.20.140.B except as specified in subsection (2) of this Section.
 - b. All wetland buffers as shown in the tables in BIMC 16.20.140.I.

B. Identification and designation.

1. Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the federal wetland delineation manual and applicable regional supplements (as updated), as required by WAC 173-22-035. All areas within the city meeting the wetland designation criteria, regardless of any formal delineation, are hereby designated as wetlands and are subject to provisions of this chapter unless specified in BIMC 16.20.190.
2. Wetland delineations shall be conducted by a qualified professional, in accordance with BIMC 16.20.070.
3. The wetland boundary shall be marked in the field and surveyed by a licensed surveyor. The surveyed wetlands shall be sized and mapped on a scaled site plan. The director may require the wetland delineation to be verified in the field by the Army Corps of Engineers or the Washington State Department of Ecology when there is uncertainty in the wetland boundary or there was unauthorized wetland disturbance. The requirement for a licensed surveyor to survey the wetland boundaries may be waived in limited circumstances, such as when there is no access to the wetland property or there is no proposed impact to the wetland and wetland buffer, with authorization from the director.
4. Wetland delineations shall be valid for five years from the date of the delineation.
5. A wetland delineation shall be required for any proposed development within 300 feet of a designated wetland. If any portion of the designated wetland is on a different site than the proposed development, the location of the wetland boundary may be determined using best professional judgement.

C. Wetland Categories. Wetlands shall be rated according to the Washington State Wetland Rating System for Western Washington – 2014 Update (Ecology Publication No. 14-06-029, October 2014), as revised. The wetland categories determined by the rating are as follows:

1. Category I wetlands are:

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- a. Relatively undisturbed estuarine wetlands larger than one acre;
 - b. Wetlands that are, or may be in the future, identified by scientists of the Washington Natural Heritage Program/Department of Natural Resources as wetlands of high conservation value;
 - c. Bogs;
 - d. Mature forested wetlands larger than one acre;
 - e. Wetlands in coastal lagoons; and
 - f. Wetlands that perform many functions well and score 23 points or more in the wetland rating. These wetlands are those that represent a unique or rare wetland type, are more sensitive to disturbance than most wetlands, or are relatively undisturbed and contain ecological attributes that are impossible to replace within one human lifetime.
2. Category II wetlands are:
 - a. Wetlands with a moderately high level of functions and score 20 to 22 points in the wetland rating.
 - b. Estuarine wetlands smaller than one acre or disturbed estuarine wetlands larger than one acre.
3. Category III wetlands are:
 - a. Wetlands with a moderate level of functions and score between 16 to 19 points in the wetland rating.
4. Category IV wetlands are:
 - a. Wetlands with a low level of functions, scoring less than 16 points in the wetland rating.
5. Date of Wetland Rating. The wetland rating categories in this Section shall be applied to wetland studies including but not limited to delineations, on or after the date of adoption of the ordinance codified in this chapter. The wetland rating shall be valid for five years unless the state rating system changes or the wetland and/or the wetland buffer have been altered since the rating.
6. A wetland rating pursuant to BIMC 16.20.140.C shall be required for any proposed development within 300 feet of a designated wetland. If any portion of the designated wetland is on a different site than the proposed development, the rating may be determined using best professional judgement.
7. Illegal modifications. Wetland rating categories shall not change due to illegal modifications.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

D. Mapping

The location and extent of all mapped critical areas shown on the City of Bainbridge Island critical area maps are approximate and shall be used as a general guide only. The type, extent and boundaries shall be determined in the field by a qualified professional according to the requirements of this chapter. The critical area maps (provide hyperlink) are adopted as part of this chapter and are incorporated herein by this reference. In addition, the National Wetlands Inventory and Soil Maps produced by the U.S. Department of Agriculture, National Resources Conservation Service may be useful in helping to identify potential wetland areas. The inventory and cited resources are to be used as a guide for the city, project applicants, and property owners, and may be continuously updated as new or altered critical areas are identified.

E. Protection of Wetlands

1. Any action taken pursuant to this chapter shall result in equivalent or greater functions and values of the wetlands and wetland buffers associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with mitigation sequencing as described in BIMC 16.20.030 and WAC 197-11-768.
2. Applicants must first demonstrate an inability to avoid or reduce impacts, before compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas.
3. Permanent protection of critical areas that are part of an approved mitigation plan or buffer enhancement plan shall be achieved through a Notice to Title recorded at the Kitsap County Auditor's Office, or similar means of protection in perpetuity.

F. Permit and review procedures

1. Any development, use or activity within any wetland and/or its required buffer shall require a critical area permit unless it qualifies as an exempt activity, as provided in BIMC 16.20.040.
2. Critical area permits shall be reviewed pursuant to the criteria in BIMC 16.20.070.
3. Applications for critical area permits for wetlands shall include:
 - a. City of Bainbridge Island Master Land Use Application (hyperlink); and
 - b. Wetland critical areas report prepared in accordance with BIMC 16.20.180.F if wetland or buffers occur within or adjacent to the project site; and
 - c. Wetland mitigation report, prepared in accordance with BIMC 16.20.180.G, if wetland and buffer impacts are anticipated; or

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- d. Buffer enhancement plan, prepared in accordance with BIMC 16.20.180.D, if only buffer modification is requested.

G. Prohibited activities

1. The following development, uses and activities are prohibited in all wetlands:
 - a. Draining, excavation, placement of fill material and flooding not associated with an exempt or regulated use
 - b. Forest Practices – Class IV General or Conversion Option Harvest Plan
 - c. New or expanded agriculture
 - d. On-site sewage facility
2. The following development, uses and activities are prohibited in Category I and II wetlands:
 - a. Fish hatchery
 - b. Golf course
 - c. Mineral extraction
 - d. Public facility
 - e. Public communications tower
 - f. New public road/street
 - g. New private access road or driveway
 - h. Stormwater retention/detention facility
 - i. Primary utility

H. Standards for specific development, uses and activities. The following development, uses and activities may be allowed within wetlands and their required buffers. Any proposal for the following development, uses and activities requires a critical area permit pursuant to BIMC 16.20.140.F and shall comply with the standards of this Section and other applicable state, federal and local regulations.

1. Road/street repair and construction: Any private or public road or street repair, maintenance, expansion or construction may be allowed within a wetland or its required buffer only when all of the following conditions are met:
 - a. No other reasonable or practicable alternative exists and the road or street crossing serves multiple properties whenever possible;
 - b. Publicly owned or maintained road or street crossings should provide for other purposes, such as utility crossings, pedestrian or bicycle easements, viewing points, etc.; and
 - c. The road or street repair and construction are the minimum necessary to provide safe roads and streets.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- d. Mitigation shall be performed in accordance with specific project mitigation plan requirements.
2. Land Divisions and Land Use Permits. All land divisions and land uses proposed on a site that includes regulated wetlands shall comply with the procedures and standards listed below. When a parcel contains a wetland, city policy shall always be to primarily protect the functions and values of the wetland, while recognizing the value of the development rights provided to the property by its zoning.
- 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 any wetland and its required 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 zoning variances are requested, the density from the wetland, except the area with permanent open water, 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 wetlands and 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.
3. Surface Water Management. Surface water structures or discharges from stormwater facilities may be allowed within wetlands and their required buffers only when the applicant has an approved Site Assessment Review (SAR) pursuant to the requirements

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

of BIMC 15.20 and the proposal meets criteria in Appendix I-D, Guidelines for Wetlands when Managing Stormwater, from Washington State Department of Ecology's 2012 Stormwater Management Manual for Western Washington, as amended in 2014.

4. Trails and Trail-Related Facilities. Construction of public and private trails and trail-related facilities, such as benches and viewing platforms, ~~are may be~~ allowed in wetlands or wetland buffers only when the following standards are met:
 - a. Trails and related facilities shall be placed on existing road grades, utility corridors, or any other previously disturbed areas if present at the site and consistent with trail planning objectives.
 - b. Trails and related facilities shall be planned to minimize removal of trees, soil disturbance, and maintain 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. Viewing platforms shall be limited to one hundred (100) square feet in size, unless demonstrated through a wetland critical areas report and mitigation plan that a larger structure will not result in a net loss of wetland functions.
 - d. Trail planning shall utilize mitigation sequencing in BIMC 16.20.030 to first avoid siting trail and trail-related facilities within wetlands and their required buffers. Trails and trail-related facilities ~~are may be~~ allowed within wetlands or wetland buffers if there are no reasonable alternatives for meeting ~~applicant's~~ trail planning objectives and it is demonstrated through a wetland critical areas report and mitigation plan that the proposal will not result in a net loss of wetland functions.
 - e. Trails shall be limited to non-motorized use. Trail width shall not exceed ~~six 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.
5. Utilities. Installation of utilities within wetlands or their required buffers may be allowed when the following standards are met:
 - a. Construction of new utilities outside the road right-of-way or an existing utility corridor may be permitted in wetlands or wetland buffers, only when no reasonable alternative location is available and the utility meets the requirements for installation, replacement of vegetation and maintenance outlined below, and as required in the filing and approval of applicable permits and special reports required by this chapter.
 - b. Sewer or On-site Sewage Utility. Construction of sewer lines or on-site sewage systems may be permitted in wetland buffers only when:
 - i. The applicant demonstrates it is necessary to meet state and/or local health code minimum design standards (not requiring a variance for either horizontal setback or vertical separation); and/or

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- ii. There are no other practicable or reasonable alternatives available and construction meets all other applicable requirements of this Section. Joint use of the sewer utility corridor by other utilities may be allowed.
- c. New utilities shall not be allowed when the wetland or buffer has known locations of federal or state listed endangered, threatened, monitored or sensitive species, heron rookeries or nesting sites of raptors which are listed as species of concern, except in those circumstances where an approved Habitat Management Plan indicates that the utility corridor will not significantly impact the wetland or wetland buffer;
- d. New utility construction and maintenance shall protect the wetland and buffer environment by utilizing the following methods:
 - i. New utilities shall be aligned to avoid tree removal to the greatest extent practicable.
 - ii. Any area of disturbance resulting from installation of a utility shall be revegetated with appropriate native or equivalent vegetation at preconstruction densities or greater, immediately upon completion of construction, or as soon thereafter as possible, if due to seasonal growing constraints. The utility or landowner responsible for installation shall ensure that such vegetation survives.
 - iii. Any access for maintenance shall be provided as much as possible at specific points, rather than by parallel roads. If parallel roads are necessary, they shall be of a minimum width but no greater than 15 feet; and shall be contiguous to the location of the utility corridor on the side away from the wetland. Mitigation will be required for any additional access through restoration of vegetation in disturbed areas.
 - iv. The director may require additional mitigation measures.
 - v. Utility maintenance shall include the following measures to protect the wetland and buffer environment:
 - A. Painting of utility equipment such as power towers shall not be sprayed or sandblasted. Lead-based paints are prohibited.
 - B. No pesticides, herbicides or fertilizers may be used in wetland areas or their buffers except those approved by the U.S. Environmental Protection Agency (EPA) and Washington Department of Ecology and applied by a licensed applicator in accordance with the safe application practices on the label.
- 6. Parks. Development of public park and recreation facilities may be allowed; provided, that no alteration of wetlands or wetland buffers is allowed except as allowed in BIMC 16.20.040 (Exemptions) and BIMC 16.20.140.H (Standards for specific development, uses and activities).

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

I. Wetland Buffers

1. Buffers shall remain as undisturbed or enhanced vegetation areas for the purpose of protecting the integrity, function, and value of wetland resources. Any buffer modification proposed shall be through an approved Buffer Enhancement Plan meeting the requirements of BIMC 16.20.180. No uses or activities shall be allowed within the buffer unless allowed by this Section. If a buffer on a site subject to land use review or a building permit application has previously been disturbed, the director may require the disturbed buffer area be enhanced, including revegetation with native plant species, pursuant to an approved Buffer Enhancement Plan meeting the requirements of BIMC 16.20.180. No refuse, including but not limited to household trash, yard waste and commercial/industrial refuse, shall be placed in the buffer.
2. All regulated wetlands shall be surrounded by a buffer, based upon *Appendix 8-C, Section 8C.2.3 of Wetlands in Washington State – Volume 2: Guidance for Protecting and Managing Wetlands* (Ecology Publication #05-06-008), as amended. Standard buffer widths are shown in Tables 1 through 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.
3. Standard buffer widths are based on impact of land use, which is categorized as follows:
 - a. High impact land use includes commercial development, industrial development, institutional development, residential (all residential zoning classifications other than R-0.4, R-1 and R-2) development, new agriculture (high-intensity such as dairies, nurseries, greenhouses, raising and harvesting crops requiring annual tilling, raising and maintaining animals), forestry activities, and high-intensity recreation such as golf courses and ballfields.
 - b. Moderate impact land use includes residential development (R-0.4, R-1 and R-2 residential zoning classifications), new agriculture (moderate-intensity such as orchard and hay fields), paved trails, and construction of temporary logging roads.
 - c. Low impact land use includes low-intensity open space such as passive recreation, natural resources preservation, and unpaved trails.
4. The required minimum buffers listed in Tables 3 through 6 are based on the assumption that the buffer is well vegetated with native species appropriate to the site. If the buffer does not consist of vegetation adequate to provide wetland protection and buffer functions, the director may require that the buffer be planted to achieve such protection and function.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

Table 3: Category I Wetlands - Buffers

Wetland Characteristics	Impact of Land Use	Buffer Width	Other Protection
Natural Heritage Wetlands	Low Moderate High	125 ft 190 ft 250 ft	No additional discharge of surface water. No septic systems within 300 ft. Restore degraded parts of the buffer
Bogs	Low Moderate High	125 ft 190 ft 250 ft	No additional surface discharges. Restore degraded parts of the buffer.
Forested	Low Moderate High	125 ft 190 ft 250 ft	If forested wetland scores high for habitat, maintain connectivity to other natural areas.
Estuarine	Low Moderate High	100 ft 150 ft 200 ft	N/A
Wetlands in Coastal Lagoon	Low Moderate High	100 ft 150 ft 200 ft	N/A
High level of function for habitat (score for habitat is 8-9 pts.)	Low Moderate High	150 ft 225 ft 300 ft	Maintain connectivity to other natural areas. Restore degraded parts of the buffer.
Moderate level of function for habitat (score for habitat is 5-7pts.)	Low Moderate High	75 ft 110 ft 150 ft	N/A
High level of function for water quality improvement and low for habitat (score for water quality pts.; habitat less than 5 pts.)	Low Moderate High	50 ft 75 ft 100 ft	No additional discharges of untreated runoff.
Not meeting any of the above criteria.	Low Moderate High	50 ft 75 ft 100 ft	N/A

Table 4: Category II Wetlands - Buffers

Wetland Characteristics	Impact of Land Use	Buffer Width	Other Protection
High level of function for habitat (score for habitat is -	Low Moderate	150 ft 225 ft	Maintain connectivity to other natural areas.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

9 pts.)	High	300 ft	
Moderate level of function for habitat (score for habitat is 5-7pts.)	Low Moderate High	75 ft 110 ft 150 ft	N/A
Estuarine	Low Moderate High	75 ft 110 ft 115 ft	N/A
Not meeting any of the above criteria	Low Moderate High	50 ft 75 ft 100 ft	N/A

Table 5: Category III Wetlands - Buffers

Wetland Characteristics	Impact of Land Use	Buffer Width	Other Protection
Moderate level of function for habitat (score for habitat is 5-7pts.)	Low Moderate High	75 ft 110 ft 150 ft	N/A
Not meeting above criterion	Low Moderate High	40 ft 60 ft 80 ft	N/A

Table 6: Category IV Wetlands - Buffers

Wetland Characteristics	Impact of Land Use	Buffer Width	Other Protection
All	Low Moderate High	25 ft 40 ft 50 ft	N/A

5. Buffer Measurement. All buffers shall be measured on a horizontal plane from the delineated wetland edge as marked in the field a qualified professional.
6. 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 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

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- 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.
7. Structure or hard surface setback. A structure or hard surface setback line of fifteen feet is required from the edge of any wetland buffer. Minor structural or impervious surface intrusions into the areas of the setback, such as but not limited to fire escapes, open/uncovered porches, landing places, outside walkways, outside stairways, retaining walls, fences and patios, may be permitted if the department determines upon review of an analysis of buffer functions submitted by the applicant, that construction and/or maintenance of such intrusions will not encroach into the wetland buffer or adversely impact the wetland. The functional analysis shall include a functional methodology supported by best available science. The setback shall be identified on a site plan and filed as an attachment to the notice on title as required by Section 16.20.070 (Notice on Title).
8. Buffer Modification. On each site, only one of the following modifications to buffer widths may be allowed provided the applicant demonstrates the need for modification through mitigation sequencing pursuant to BIMC 16.20.030 and the modification that results in the retention of the greatest area of buffer is used.
- a. Buffer Width Averaging. The width of a required buffer may be averaged if the applicant can demonstrate that averaging can provide equal or greater functions and values as would be provided under the required buffer and all of the following conditions are met:
 - i. The total area of buffer after averaging is equal to the area required without averaging.
 - ii. Averaging cannot result in the any portion of the buffer being reduced more than 25 percent of its required width.
 - b. Buffer Width Reduction. The width of a required buffer may be reduced if the applicant can demonstrate that the reduction will provide equal or greater functions and values as would be provided under the required buffer this will improve the protection of wetland functions and all of the following conditions are met:
 - i. The buffer may not be reduced more than 25 percent of its required width.
 - ii. Native vegetation on other portions of the site is retained in order to offset habitat loss from buffer reduction.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- c. The required buffer widths for proposed land uses with high-intensity impacts to wetlands may be reduced to those required for moderate-intensity impacts under the following conditions:
- i. For wetlands that score moderate or high for habitat (5 points or more for the habitat function), the width of the buffer may be reduced if both of the following criteria are met:
 - ii. A relatively undisturbed, vegetated corridor at least 100-feet wide is provided if the wetland contains any priority habitats as defined by the Washington Department of Fish and Wildlife. “Relatively undisturbed” and “vegetated corridor” are defined in the Western Washington Wetland Rating System. The corridor must be protected for the entire distance between the wetland and the priority habitat by some type of legal protection, such as a Notice to Title.
 - iii. Measures to minimize the impacts of different land uses on wetlands, such as the examples in Table 5, are applied.
 - iv. For wetlands that score less than 5 points for habitat, the buffer width may be reduced to that required for moderate land use impacts by applying measures to minimize the impacts of different land uses on wetlands, such as the examples in Table 5.
- d. Any request for buffer modification outlined above shall be reviewed in conjunction with the underlying land use or construction permit. A critical area permit is not required. Requests for buffer averaging or buffer reduction shall include a Buffer Enhancement Plan prepared by a qualified professional that meets the requirements of BIMC 16.20.180.D. Buffer enhancement plans shall be reviewed pursuant to the criteria in BIMC 16.20.070.
- e. Any other buffer modification resulting in a reduced buffer area, other than non-compensatory enhancement, requires a Reasonable Use Exception pursuant to BIMC 16.20.080.

Table 5: Examples of measures to minimize impacts to wetlands from different types of activities.

Examples of Disturbance	Examples of Measures to Minimize Impacts	Activities that Cause the Disturbance
Lights	• Direct lights away from wetland.	Parking lots, warehouses, manufacturing, residential
Noise	• Locate activity that generates noise away from wetland. • If warranted, enhance existing buffer	Manufacturing, residential

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

	with native vegetation plantings adjacent to noise source. • For activities that generate relatively continuous, potentially disruptive noise, such as heavy industry or manufacturing, establish an additional 10-foot heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.	
Toxic runoff*	• Route all new runoff away from wetland. • Establish covenants limiting use of pesticides within 150 feet of wetland. • Apply integrated pest management.	Parking lots, roads, manufacturing, residential areas, application of agricultural pesticides, landscaping
Stormwater runoff	• Retrofit stormwater detention and treatment for roads and existing adjacent development. • Prevent channelized flow from lawns that directly enters the buffer. • Use Low Impact Development techniques consistent with BIMC 15.20.	Parking lots, roads, manufacturing, residential areas, landscaping
Change in water regime	Infiltrate or treat, detain, and disperse new runoff into buffer.	Impermeable surfaces, lawns, tilling
Pets and human disturbance	• Plant buffer with dense, impenetrable native vegetation appropriate for region. • Install low impact fencing at buffer perimeter. • Place wetland and its buffer in separate open space tract or protect with conservation easement.	Residential areas
Dust	Utilize best management practices to control dust.	Tilled fields
* These examples are not necessarily adequate to meet the rules for minimizing toxic runoff if threatened or endangered species are present at the site.		

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

J. Wetland mitigation requirements.

1. Mitigation sequencing. All development, uses and activities proposed to impact wetlands shall be mitigated according to this Section and the mitigation sequencing steps outlined in BIMC 16.20.010.030. The applicant shall demonstrate to the satisfaction of the director that each step of mitigation sequencing has been adequately addressed prior to approval of impacts to wetlands.
2. Compensatory mitigation shall be required for development, uses or activities that result in the loss of wetland acreage or in the reduction of wetland functions or values.
3. Mitigation report. Where mitigation is required under the sequencing in subsection (1), a mitigation plan is a required component of a critical areas report meeting the requirements in BIMC 16.20.180, Critical area reports.
4. Wetland replacement.
 - a. The ratios shown in Table 7 shall be used to determine the required amount of wetland mitigation. The first number specifies the amount of wetland area to be restored, rehabilitated, created or enhanced, and the second number specifies the amount of wetland area lost. 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.
 - b. Mitigation requirements may also be determined using the credit/debit tool described in Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Final Report (Ecology Publication #10-06-011, March 2012), or as revised) consistent with Table 7.

Table 7: Replacement Ratios for Wetlands

Category and Type	Re-establishment or Creation	Rehabilitation	1:1 Re-establishment or Creation (R/C) and Enhancement (E)	Enhancement Only
I – Mature Forested	6:1	12:1	1:1 R/C and 10:1 E	24:1
I – Based on functions	4:1	8:1	1:1 R/C and 6:1 E	16:1
I – Bog or	Not considered	6:1	Case by Case	Case by Case

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

Natural Heritage Site	possible			
II	3:1	6:1	1:1 R/C and 4:1 E	12:1
III	2:1	4:1	1:1 R/C and 2:1 E	8:1
IV	1.5:1	3:1	1:1 R/C and 2:1 E	6:1

5. Approaches to compensatory mitigation.

- a. Compensatory mitigation may occur at the site of the allowed impacts or at an off-site location. Considerations for determining whether off-site mitigation is preferable include, but are not limited to one or more of the following:
 - i. On-site conditions do not favor mitigation success due to soil conditions, hydrology or adverse impacts of adjacent land uses;
 - ii. On-site conditions are isolated from other aquatic or riparian habitats;
 - iii. An off-site location is beneficial to larger ecosystem or watershed functions;
 - iv. An off-site location has greater likelihood of success or will provide greater functional benefits;
 - v. The proposal for an off-site location uses a watershed approach consistent with Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington) (Ecology Publication #09-06-32, December 2009).
- b. Off-site compensatory mitigation may include the use of a wetland mitigation bank or an in-lieu fee program, if such instruments are available within the city limits.
- c. Advanced mitigation. Compensatory mitigation in advance of proposed impacts may be allowed on a case-by-case basis for projects with pre-identified impacts consistent with Interagency Regulatory Guide: Advance Permittee-Responsible Mitigation (Ecology Publication #12-06-015, December 2012).

6. Monitoring requirements. The city shall require monitoring reports on an annual basis for a minimum of five years and up to ten years, or until the director determines the mitigation project has met the performance standards specified in the wetland mitigation plan. The wetland mitigation plan shall provide specific performance standards for monitoring the mitigation project. Performance standards shall be project-specific and use best available science to aid the director in evaluating whether or not the project has achieved success.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

16.20.150 The Winslow Ravine – Special Rules in Mixed Use Town Center.

A portion of the “Winslow Ravine” which contains a ravine, a Type F stream, and several wetlands, is located in the Mixed Use Town Center (MUTC) zoning designation. 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 streams (BIMC 16.20.100) and wetlands (BIMC 16.20.130), an applicant may select the prescriptive option or the mitigated option with respect to the Winslow Ravine within the MUTC as described below:

A. “Option A” - Prescriptive Standards.

CATEGORIES	BUFFER WIDTH STANDARD	MINIMUM STRUCTURE AND HARD SURFACE SETBACK	OTHER DEVELOPMENT STANDARDS
Streams and wetlands associated with the Winslow Ravine within the MUTC	50 feet measured from the top of the Winslow Ravine	15 feet beyond the buffer	No development, uses or activities are allowed within the buffer. Refuse, including but not limited to household trash, yard waste and commercial/industrial refuse, shall not be located in the buffer and shall be removed if present.

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.

CATEGORIES	BUFFER WIDTH STANDARD	MINIMUM STRUCTURE AND HARD SURFACE SETBACK	OTHER DEVELOPMENT STANDARDS
Streams and wetlands associated with the Winslow Ravine within the MUTC	25 feet measured from the top of the Winslow Ravine	15 feet beyond the buffer	No development, uses or activities are allowed within the buffer <u>other than public access meeting the standards of BIMC 16.20.110.G.6.a through e</u> . If the

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

			buffer has previously been disturbed, the disturbed buffer area shall be revegetated pursuant to an approved Buffer Enhancement Plan meeting the requirements of BIMC 16.20.D. Refuse, including but not limited to household trash, yard waste and commercial/industrial refuse, shall not be located in the buffer and shall be removed if present.
--	--	--	---

C. Permit and review procedures

1. Any development, use or activity within the Winslow Ravine shall require a critical area permit unless it qualifies as an exempt activity, as provided in BIMC 16.20.040.
2. Critical area permits shall be reviewed pursuant to the criteria in BIMC 16.20.070.
3. Applications for critical area permits for the Winslow Ravine shall include:
 - a. City of Bainbridge Island Master Land Use Application (hyperlink); and
 - b. Buffer enhancement plan, prepared in accordance with BIMC 16.20.180.D, if Option B, above is proposed.

16.20.160 Performance and maintenance surety.

A. Performance Surety. The director shall decide when a performance surety is required of an applicant, and the acceptable form of such surety. The amount and the conditions of the surety shall be consistent with the purposes of this chapter; provided, that the minimum amount of the surety, when required, shall be 125% of the estimated cost of performance. A performance surety shall not be required when the actual cost of performance, as documented in a form acceptable to the director, is less than \$1,000. The director shall release the surety upon determining that:

1. All activities, including any required compensatory mitigation, have been completed in compliance with the terms and conditions of the permit and the requirements of this chapter;
2. A maintenance surety has been posted by the applicant, where deemed appropriate by the director.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

3. Until such written release of the surety, the principal or surety cannot be terminated or canceled.

B. Maintenance Surety. When a maintenance surety is required, the holder of a development permit issued pursuant to this chapter shall post a surety for an amount and in a form acceptable to the director, with conditions sufficient to guarantee that maintenance of structures, improvements, and mitigation required by the permit or by this chapter perform satisfactorily for a minimum of two years after they have been completed. The director shall release the maintenance surety upon determining that performance standards established for evaluating the effectiveness and success of the structures, improvements, and/or compensatory mitigation have been satisfactorily met for the required period. For compensation projects, the performance standards shall be those contained in the mitigation plan developed and approved during the review process. The maintenance surety applicable to a compensation project shall not be released until the director determines that performance standards established for evaluating the effect and success of the project have been met.

C. Deposit Instruments. The deposit instrument for the performance or warranty deposit shall be cash, a non-revocable letter of credit, an assignment of funds, bond or other readily accessible source of funds approved by the director. The deposit instruments shall be on a form acceptable to the director. Any issuer of a deposit instrument shall pay invoices presented by the city pursuant to this chapter within 45 days. A bond will be accepted only for amounts over \$1,000.00 or when State Law requires a bond. Interest on deposited funds will accrue to the benefit of the depositor, except that any interest earned on a cash deposit will be retained by the city for account administration.

D. Default on deposit.

1. If the work covered by the deposit is not completed within the time specified in the notice given under this chapter, the city shall obtain the proceeds of the deposit and do the work covered by the deposit. The city may either have its employees or a contractor do the work.
2. If, at any time, the director determines that actions or inactions associated with permit work have created an emergency situation endangering public health, safety, or welfare, creating a potential liability for the city, or such an emergency precludes the notification of applicants as provided in this chapter while still minimizing or avoiding the effects of the emergency, the city may use the deposit to cover costs incurred by the city to correct the emergency situation. The city may either have employees of the city or a contractor do the work. If the city uses the deposit as provided by this Section, the applicant shall be notified in writing within four working days of the commencement of emergency work. The notice must state the work that was completed and the nature or timing of the emergency that necessitated the use of the deposit without prior notification.
3. The permittee is responsible for all costs incurred by the city in doing the work covered by the deposit. The city shall release or refund any proceeds of a deposit remaining after subtracting

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

all costs incurred. The permittee shall reimburse the city for any amount expended by the city that exceeds the deposit.

4. If the city uses any of the deposit it shall, within 30 days, provide the owner of the permit an itemized statement of all proceeds and funds used.

16.20.170 Compliance and enforcement.

A. It is a violation of this chapter for any person to fail to comply with a requirement of this chapter. It is further a violation of this chapter for any person to:

1. Initiate or maintain, or cause to be initiated or maintained, the use, construction, placement, alteration, or demolition of any structure, land, or property within the city without first obtaining permits or authorizations required by this chapter, or in a manner that violates the terms or conditions of such permits or authorizations;
2. Misrepresent any material fact in any application, plans or other information submitted to obtain permits or authorizations under this chapter; or
3. Remove or deface any sign, notice, complaint, or order required by or posted in accordance with this chapter.

B. When a critical area or its buffer has been altered in violation of this chapter, all ongoing development work shall stop and the critical area shall be restored. The city shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this chapter.

C. Restoration plan required. All development work shall remain stopped until a restoration plan is prepared and approved by the director. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum requirements described in Subsection (D) below. The director shall, at the violator's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

D. Minimum performance standard for restoration.

1. For alterations to frequently flooded areas, wetlands, and habitat conservation areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater critical area function or values can be obtained through the application of different standards, these standards may be modified:

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- a. The historic structural and functional values shall be restored, including water quality and habitat functions;
 - b. The historic soil types and configuration shall be replicated;
 - c. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration; and
 - d. Information demonstrating compliance with the requirements in Section BIMC 16.20.110 shall be submitted to the director.
2. For alterations to flood and geological hazard areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified:
 - a. The hazard shall be reduced to a level equal to, or less than, the pre-development hazard;
 - b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and
 - c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.
3. All restoration plans shall include a detailed estimate of the cost for implementation of the restoration plan.

E. Site investigations. The director is authorized to make site inspections and take such actions as are necessary to enforce this chapter. The director shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

F. Penalties. Any development or activity carried out contrary to the provisions of this chapter shall constitute a public nuisance and may be enjoined as provided by the statutes of the State of Washington. Enforcement of this chapter and the imposition of penalties for violations of this chapter shall be as provided for in Chapter 1.26 BIMC; provided, that in addition to the civil penalties provided for in BIMC 1.26.090, an additional penalty shall be imposed on any person, party, firm, corporation, property owner, or other legal entity who fails to complete a required restoration plan, who conducts any disturbance (including cutting or removing vegetation) of a critical area or its associated buffer in violation of this chapter, or who is otherwise in violation of this chapter, including a violation of BIMC 16.20.090.E. For such violations, the additional penalty shall be in the amount equal to 200% of the cost of restoration as approved under a restoration plan pursuant to Subsections (C) and (D) above for a minor violation and a minimum of \$2,500 for a major violation. The director shall determine whether the disturbance is a minor or major violation. Any person, party, firm, corporation, or other legal entity who knowingly and willfully refuses to complete a required restoration pursuant to Subsections (C) and (D) above shall be guilty of a misdemeanor punishable by not more than 30 days in jail and/or not more than a \$1,000 fine.

16.20.180 Critical area reports.

A. Aquifer recharge areas hydrogeological site assessment.

1. The hydrogeological site assessment shall include:
 - a. A site map drawn to scale which indicates the location of known or geologically representative wells (abandoned and active), springs, and surface water features within 1,000 feet of the project property boundary;
 - b. A description of the site-specific hydrogeological characteristics. At a minimum this will include a description of the lithology, depth and static water level of known underlying aquifer(s) and depiction of groundwater flow direction and patterns on the site map;
 - c. A description of the proposed land use and activities specifically detailing water consumption; an inventory of all chemical use, storage, transportation, production (including process wastewater), and disposal; and any potential pollutant identified by the U.S. EPA as a potential source of drinking water contamination (Appendix A of the Washington State Critical Aquifer Recharge Area Guidance Document) or known to be deleterious to the environment or human health; and
 - d. A general discussion of surface and groundwater quality and quantity in the area and the identification of the potential adverse quality and quantity impacts to groundwater and surface water features within 1,000 feet of the project.
2. In-depth Site Assessment Elements. The required elements of the in-depth site assessment for a given development or re-development will be based on the initial site assessment review by the city, the Kitsap Public Health District, affected Tribes, and affected public water purveyors.

One or more of the elements listed below may be required based upon the proposed project activity, complexity of underlying hydrogeological conditions, and the perceived potential to adversely impact groundwater or surface water quality or quantity. One or more of these elements may also be required if the applicant chooses to demonstrate that mitigation measures are not necessary to protect the quantity or quality of groundwater or surface water or that the project does not pose a risk of detriment to groundwater or surface water.

Additional in-depth site assessment elements may include:

- a. Lithologic characteristics and stratigraphic relationships of the affected aquifer(s) and overlying geologic units and soil types including thickness, horizontal and vertical extent, permeability, and infiltration rates of surface soils.
- b. Delineation of identified structural features such as faults, fractures, and fissures.
- c. Aquifer characteristics including determination of recharge and discharge areas, transmissivity, storage coefficient, hydraulic conductivity, porosity, and estimate of groundwater flow direction, velocity and patterns for the affected aquifer(s).
- d. Estimate of precipitation and evapotranspiration rates for the project area.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- e. Preparation of appropriate hydrogeological cross sections depicting underlying lithology and stratigraphy, aquifer(s), and potential or probable contaminant pathways to both surface and groundwater from a chemical release.
- f. Determination of background or existing groundwater quality underlying the project area and water quality of surface water bodies.
- g. Contaminant fate and transport including probable migration pathways and travel time of potential contaminant release(s) from the site through the unsaturated zone to the aquifer(s) and through the aquifer(s), and how the contaminant(s) may be attenuated within the unsaturated zone and the aquifer(s) with consideration to advection, dispersion, and diffusion of contaminants in the groundwater.
- h. Delineation of areas potentially affected by contaminant migration on the ground surface and/or through potentially affected aquifer(s).
- i. Determination of the degree of continuity between groundwater and nearby surface water including potential impacts to baseflow in streams from proposed groundwater withdrawals, and potential impacts to surface water quality from site runoff or contaminated groundwater discharge.
- j. Assessment of the potential for pumping-induced seawater intrusion.
- k. Nitrate Loading Assessment. For projects that have the potential to adversely impact groundwater quality by nitrate loading, the applicant shall test existing wells and/or required test wells for nitrate as nitrogen and calculate the current and projected future groundwater nitrate concentrations at full project build-out, at appropriate point(s) of compliance, as determined by project characteristics, and in a methodology approved by the city. If the calculated nitrate loading in the intended water supply equals or exceeds 5 milligrams per liter nitrate as nitrogen, the applicant shall develop a mitigation plan with the point(s) of compliance determined based on project characteristics.
- l. Multiple-stage (or phased) development must consider impacts of the total build-out of the project to allow for an assessment of the cumulative impacts of the entire development on critical aquifer recharge areas.

B. Aquifer Recharge Mitigation Plan.

For proposals requiring aquifer recharge area impact mitigations, the applicant shall develop for approval by the city a mitigation plan for the proposed development. Affected public water purveyors (Group A & B), affected Tribes, and the Kitsap Public Health District will be notified and invited to comment on all mitigation plans. The city will consider all recommendations submitted by these entities when developing appropriate permit conditions.

The city may, based on performance criteria and monitoring results, require additional amendments to the plan. The city reserves the right to submit mitigation plans for a third-party review at the applicant's expense and to reject any proposed land use or activity that poses significant risk to groundwater or surface water quality or quantity that cannot be satisfactorily mitigated.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

1. The mitigation plan shall contain the project's permit conditions and, as applicable:
 - a. A description of the mitigation measures to be taken, how they will be implemented, and performance criteria.
 - b. A groundwater and surface water monitoring program to measure potential impacts of the development to underlying aquifer(s) and surface water. The monitoring plan will describe monitoring, maintenance, and reporting requirements.
 - c. A contingency plan describing spill response and corrective actions to be taken if a release of a pollutant occurs or monitoring results indicate that mitigation measures are not effectively protecting groundwater and surface water resources and human health. The city shall have the authority to impose additional required corrective actions where such measures are necessary to protect groundwater and surface water resources or human health. Where appropriate contingencies are not feasible and result in an activity posing unacceptable risk to groundwater or surface water resources or human health, the city shall deny the proposal.
 - d. Multiple-stage (or phased) development must consider mitigation for each phase of development as well as the total build-out of the project to allow for an assessment of the cumulative impacts of the entire development on critical aquifer recharge areas.
 - e. Conditions that would arise that warrant ceasing the project operation altogether.
 - f. Wellhead Protection Mitigation. Where a wellhead protection plan addressing the project area exists, the city shall use the recommendations contained in the wellhead protection plan as a basis for formulating required mitigation measures. In the absence of such a mitigation plan, the city shall contact the owner of the public water system (Group A and B) impacted by the proposed project and jointly develop mitigation measures, a summary of which shall be signed by the applicant and recorded with the applicant's property title.
 - g. Nitrate Loading Mitigation.
 - i. General Requirements. If a calculated nitrate loading concentration for a project at the designated point(s) of compliance per BIMC 16.20 170.X is equal to or greater than 5 milligrams per liter nitrate as nitrogen, then the applicant shall be required to place a notification on the documents of title for the property affected. A monitoring plan shall be developed to monitor the nitrate level and include a contingency plan to be implemented if the nitrate level exceeds 10 milligrams per liter nitrate as nitrogen.
 - ii. Land Divisions. If the calculated nitrate loading concentration for a land division at the designated point(s) of compliance per BIMC 16.20 170.X is equal to or greater than 5 milligrams per liter nitrate as nitrogen, then the applicant shall:
 - (A) Develop a mitigation plan to minimize the nitrate loading rate; and
 - (B) Develop a contingency plan to be implemented if the nitrate concentration exceeds 10 milligrams per liter nitrate as nitrogen; and
 - (C) Submit the contingency plan with the final plat application. The contingency plan must be approved by the city, and then recorded with the Kitsap County

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

Auditor as part of the final plat. Conditions of the contingency plan shall be listed on the face of the plat.

- iii. Mitigation of nitrate in groundwater from on-site septic systems may include decreasing the density of septic system drainfields.

2. Recording of Mitigation Plan Summaries.

- a. General Requirements. The city may require that the applicant record a city-approved summary of the mitigation plan on the property title. A copy of the recorded summary shall be provided to the city in hard copy and electronic format. If a property owner can demonstrate, to the satisfaction of the city, that mitigation measures are no longer necessary, the city shall approve the addition of language on the title for the property nullifying the mitigation requirements.
 - b. Land Divisions. The mitigation plan must be approved by the city, and then recorded with the Kitsap County Auditor as part of the final plat. Conditions of the mitigation plan shall be listed on the face of the plat.
3. Performance Surety. The director may require that the applicant provide a performance surety to ensure conformance with mitigation requirements of the Aquifer Recharge Mitigation Plan pursuant to BIMC 16.20.180.B.

C. Habitat management plan.

- 1. A habitat management plan (HMP) is a detailed report that outlines and documents the location of fish and wildlife conservation areas, any planned incursions or habitat impacts and a strategy for limiting impacts.
- 2. HMP review. All HMPs shall be submitted to the Washington State Department of Fish and Wildlife habitat biologist and to the Suquamish Tribe for review and comment within 14 days of a complete application pursuant to BIMC 2.16.055. 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. Within that same time frame, the city's Environmental Technical Advisory Committee shall be asked to review the HMP and provide comments.
- 3. Map. The HMP shall contain a map prepared at an easily readable scale, showing:
 - a. The location of the proposed development site;
 - b. Property boundaries;
 - c. The relationship of the site to surrounding topographic and aquatic features and any connectivity to other wildlife habitat and corridors;
 - d. Proposed building locations;

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- e. A legend which includes acreage of the parcel, scale, north arrow, and date of map revision.
4. Report. The HMP shall contain a report that includes:
- a. A description of the nature and intensity of the proposed development
 - b. Identification of existing habitat functions and values;
 - c. An analysis of the effect of the proposed development, activity or land use change upon the wildlife species and habitat features and processes identified for protection;
 - d. Any review comments received from a habitat biologist from the Washington State Department of Fish and Wildlife, and the Suquamish Tribe and U.S. Fish and Wildlife Service;
 - e. Demonstration of consistency with current Washington State Department of Fish and Wildlife Habitat Management Recommendations for the applicable habitat or species. If the recommendations are not followed, the HMP report should identify the best available science guidance that is being followed or applied;
 - f. A description of proposed seasonal activity restrictions in accordance with the Washington State Department of Fish and Wildlife Habitat Management Recommendations;
 - g. An analysis of the feasibility to maintain wildlife corridors and connectivity, if applicable;
 - h. A plan identifying proposed measures to mitigate any adverse impacts to wildlife habitats created by the proposed development. Proposed mitigation measures shall be specific to the affected habitat or species; and
 - i. A schedule for periodic monitoring, and a contingency plan with corrective actions if conservation or mitigation actions do not lead to the desired outcome.
5. HMP adequacy. 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. If the Washington Department of Fish and Wildlife is not available to review the HMP in a timely manner, the applicant may choose to have the city refer the HMP 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.
6. Timing. An HMP must be developed and approved prior to issuance of a building permit or underlying land use application and must be implemented before the city grants a certificate of occupancy, as applicable.
7. 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 BIMC 16.20.G.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

D. Buffer Enhancement Plan

1. As part of a buffer modification request, the applicant shall submit a buffer enhancement plan that assesses the functions and values of the buffer and the effects of the proposed modification on those functions and values.
2. The buffer enhancement plan shall clearly demonstrate that equal or greater protection of the functions and values of critical areas and their buffers can be achieved through the buffer modification than could be achieved through providing the required buffer using an appropriate function assessment methodology.
3. The buffer enhancement plan shall identify how the applicant proposes to mitigate any adverse impacts to the critical area or buffer created by the proposed development.
4. The buffer enhancement plan shall be prepared in accordance with the applicable requirements of BIMC 16.20.170.G, Wetland mitigation plans.

E. Geological Hazards Assessment

1. A geological hazards assessment shall contain the following site- and proposal-related information at a minimum:
 - a. Site and Construction Plans. The report shall include a copy of the site plans for the proposal showing:
 - i. 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;
 - ii. 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;
 - iii. The topography, as determined by a professional engineer or geologist, of the project area and all hazard areas addressed in the report; and
 - iv. Clearing limits.
 - b. 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:

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- i. A description of the surface and subsurface geology, including complexes, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;
 - ii. 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
 - iii. A description of the vulnerability of the site to seismic and other geologic events.
 - c. 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.
 - d. 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 setbacks set forth in BIMC 16.20.130, 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.
 - e. A review of, and recommendations relating to, the low impact development (LID) infeasibility criteria in the 2014 Stormwater Management Manual for Western Washington, as amended, demonstrating reasonable consideration of all applicable LID practices.
2. Landslide Hazard and Erosion Hazard Areas. In addition to the basic geologic hazards assessment, an assessment 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 building permit.
 - 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.
 - c. Hazards Analysis. The hazards analysis component of the critical areas report shall specifically include:
 - i. A description of the extent and type of vegetative cover;

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- ii. A description of subsurface conditions based on data from site-specific explorations;
 - iii. Descriptions of surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;
 - iv. 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;
 - v. 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;
 - vi. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties;
 - vii. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;
 - viii. Recommendations for building siting limitations; and
 - ix. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion; and
 - x. A description of the potential modes of failure.
3. 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.
4. Seismic Hazards Areas. In addition basic geologic hazards assessment, an assessment 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.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- 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.
5. 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.

F. Wetland critical areas report.

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

1. A site plan showing the following:

- a. Surveyed wetland boundaries based upon a delineation by a wetland specialist or wetland boundaries recorded using a differential global positioning system, based upon a delineation by a wetland specialist.
- b. Location of required buffers pursuant to BIMC 16.20.130.I or as proposed through buffer modification.
- c. Site boundary property lines and roads;
- d. Internal property lines, rights-of-way and easements;
- e. Existing physical conditions of the site, including buildings, fences and other structures, existing hard surfaces, utilities, etc.
- f. Contours at the smallest readily available intervals;
- g. Hydrologic mapping showing patterns of surface water movement and known subsurface water movement into, through, and out of the site;
- h. Location of all test holes and vegetation sample sites, numbered to correspond with flagging in the field and field data sheets; and
- i. An aerial photograph with overlays displaying the site boundaries and wetland delineation.

2. A report including the following:

- a. Vicinity map
- b. Location information (parcel number and address)
- c. General site conditions including topography, size and surface area of all wetlands identified and water bodies within one-quarter mile of the site
- d. Analysis of functional values of existing wetlands
- e. Summary of proposed development, use or activities and potential impacts to wetlands
- f. Copies of rating forms and maps from the Wetland Rating System for Western Washington – Revised (2014) or as amended.
- g. Required buffers pursuant to BIMC 16.20.130.I.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- h. Complete U.S. Army Corps of Engineers wetland determination data forms
- i. National Wetland Inventory map
- j. Wetland mitigation plan, if compensatory mitigation is required.

G. Wetland mitigation plan.

1. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans – Version 1 (Ecology Publication #06-06-011b, March 2006), as revised, and, if applicable, Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington)(Ecology Publication 09-06-032, December 2009) and meet the following standards:
 - a. All critical area restoration, creation and/or enhancement projects required pursuant to this chapter 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.
2. 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;
 - A. Zoning setback and critical area buffer requirements;
 - B. Construction phasing and sequence of construction;
 - C. Site cross-sections, percent slope, existing and finished grade elevations;
 - D. Soil and substrate conditions;
 - E. Grading and excavation plan, including erosion and sediment control plans needed for construction and long-term survival; substrate stockpiling

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- locations and techniques, and source controls needed for critical area construction and maintenance;
 - F. 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
 - G. Water control structures and water-level maintenance practices needed to achieve the necessary hydrocycle/hydroperiod characteristics, etc.
3. 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:
 - c. Site selection criteria;
 - i. Identification of compensation goals;
 - ii. Identification of functions and values;
 - iii. Dates for beginning and completion of the project and compensation plan;
 - iv. A complete description of the relationship between and among structures and functions sought;
 - v. Review of available literature and/or known like-projects to date in restoring or creating the type of critical area proposed;
 - vi. 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
 - vii. 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.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- d. 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.
- e. 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.
- f. 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.
 - vii. 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.
 - viii. 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.
- A. 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 pursuant to BIMC 16.20.180.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

4. 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.
5. Permit Conditions. Any compensation project prepared pursuant to this section and approved by the director shall become part of the application for the permit.

H. Aquifer Recharge Protection Area (ARPA) Native Vegetation Protection Area (NVPA) Stewardship Plan.

1. An ARPA NVPA stewardship plan may be completed by the property owner. The city may request additional information or technical review from qualified professionals or other agencies at the applicant's expense to ensure no net loss in critical area functions and values.
2. The basic components of an ARPA NVPA stewardship plan are a site plan and narrative report:
 - a. The site plan shall include:
 - i. Location and dimensions of proposed development within ARPA NVPA
 - ii. Limits of construction and existing and proposed grade changes
 - iii. Location of trees and critical root zones of all trees within the limits of construction and area of grade changes
 - iv. Location and species of tree(s) proposed for removal and replanting, if required.
 - b. The narrative report shall include:
 - i. Project narrative (Step 2 from the SAR Guidesheet, revised as needed)
 - ii. Description of measures taken to avoid, minimize and reduce adverse impacts to the ARPA NVPA
 - iii. Description of proposed development within ARPA NVPA including any decrease in native vegetative area and increase in hard surfaces
 - iv. Assessment of any potential damage to tree(s) whose critical root zone is within the limits of construction and area of grade changes (e.g., windthrow, root damage)
 - v. Description of tree(s) and vegetation proposed for removal and replanting, if required, including size, species and condition
 - vi. Description of protection measures for trees and vegetation to be retained
 - vii. Description of measures to preserve forest litter and surface topography to most closely mimic natural hydrology
 - viii. Planting plan including location, species and size of trees and vegetation to be replanted, if required.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- ix. Description of performance standards and monitoring actions (e.g., plant survival count, percent canopy coverage estimate) sufficient to document success of any required replanting.

16.20.180 Definitions.

A. For the purposes of this chapter, the following definitions shall apply:

1. “Accessibility” means the that a building or structure can be independently used by people with a variety of disabilities.
2. “Adverse impact” means a condition that creates, imposes, aggravates, or leads to inadequate, unsafe, or unhealthy conditions on a site.
3. “Agricultural activities” means the normal actions associated with the production of crops such as plowing, cultivating, minor drainage, and harvesting; and/or raising or keeping of livestock, including operation and maintenance, and repair of farm and stock ponds, drainage ditches, irrigation systems, and normal operation, maintenance, and repair of existing serviceable agricultural structures, facilities, or improved areas.
4. “Alteration” means a human-induced action that changes the existing conditions of a critical area or its buffer and results in the modification of the existing topography, stability, vegetation, hydrology, wildlife or wildlife habitat.
4. “Alteration, structure” means a change, modification or adjustment.
5. “Anadromous fish” means fish whose life cycle includes time spent in both salt and fresh water.
6. “Applicant” means a person, corporation, or organization that files an application for a land use or development permit with the city and that is either the owner of the land on which that proposed activity would be located, or the authorized agent of such a person.
7. “Aquifer recharge protection area” means a portion of a development site comprised of native or equivalent vegetation in which existing vegetation, topography and supporting soils are free of development, uses or activities detrimental to the aquifer recharge of the total site area.
8. “Arborist” means an individual engaged in the profession of arboriculture who, through experience, education, and related training, possesses the competence to provide for or supervise the management of trees and other woody plants. Must be concurrently an International Society of Arboriculture (ISA) Certified Arborist to perform any role required of a Certified Arborist.
9. “Arborist, ISA Certified” means an arborist holding a current International Society of Arboriculture (ISA) Certified Arborist credential.
10. “Arborist, Tree Risk Assessment Qualified (TRAQ)” means an arborist who has successfully completed the International Society of Arboriculture (ISA) TRAQ training course and assessment and holds a valid ISA TRAQ credential.
11. “Bank stabilization” means modification used for the purpose of preventing erosion, protecting channels, and retaining uplands.
12. “Biodiversity areas and corridors” means areas of habitat that are relatively important to various species of native fish and wildlife.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- a. Biodiversity areas.
 - i. The area has been identified as biologically diverse through a scientifically based assessment conducted over a landscape scale (e.g., ecoregion, county- or city-wide, watershed, etc.). Examples include but are not limited to WDFW Local Habitat Assessments, Pierce County Biodiversity Network, and Spokane County's Wildlife Corridors and Landscape Linkages; or
 - ii. The area is within a city or an urban growth area (UGA) and contains valuable fish or wildlife habitat and is mostly comprised of native vegetation. Relative to other vegetated areas in the same city or UGA, the mapped area is vertically diverse (e.g., multiple canopy layers, snags, or downed wood), horizontally diverse (e.g., contains a mosaic of native habitats), or supports a diverse community of species as identified by a qualified professional who has a degree in biology or closely related field and professional experience related to the habitats or species occurring in the biodiversity area. These areas may have more limited wildlife functions than other priority habitat areas due to the general nature and constraints of these sites in that they are often isolated or surrounded by highly urbanized lands.
 - b. Corridors. Corridors are areas of relatively undisturbed and unbroken tracts of vegetation that connect fish and wildlife habitat conservation areas, priority habitats, areas identified as biologically diverse, or valuable habitats within the city.
13. "Best available science" (BAS) means scientifically valid information derived in accordance with WAC 365-195-9050 through 925, or as amended, that is used to develop and implement critical areas policies or regulations.
14. "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;
 - b. Minimize adverse impacts to surface water and groundwater flow, and to the chemical, physical, and biological characteristics of critical areas;
 - c. Protect trees, vegetation and soils designated to be retained during and following site construction and use native plant species appropriate to the site for re-vegetation of disturbed areas; and
 - d. Provide standards for proper use of chemical herbicides within critical areas.
 - e. 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.
15. "Bog" means a low-nutrient, acidic wetland with organic soils and characteristic bog plants, as described in Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-29, October 2014).
16. "Buffer" means a designated area contiguous to a wetland or stream intended to protect the wetland or stream and be an integral part of the wetland or stream ecosystem.
17. "Coppicing" means managing of strongly-regenerative species of trees and shrubs by an initial heading cut (leaving a stump) and allowing new shoots to grow to maintain live

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- roots. Shoots may be reduced to their point of origin at appropriate intervals of time without disturbing the resulting coppice head (stump).
18. "Critical aquifer recharge area" means areas with a critical recharging affect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge.
 19. "Critical areas" means aquifer recharge areas, fish and wildlife habitat-conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands.
 20. "Critical facilities" means facilities that are essential to the health and welfare of the community, including services that protect life and property. Such facilities include, but are not limited to, hospitals, emergency clinics, police and fire stations, emergency vehicle and equipment storage facilities, emergency operations centers, aviation control centers, and utility facilities such as sewage treatment plants and electric transmission substations.
 21. "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.
 22. "Cutting, vegetation" means the removal of the main trunk or stem of a small tree for the purposes of controlling aggressive or weedy species.
 23. "Designated Centers" means those areas of the Island referred to as Winslow, Lynwood Center, Island Center, Rolling Bay, Day Road and Sportsman Triangle and shown on Figure LU-3 in the City's 2017 Comprehensive Plan.
 24. "Development" means any action that would require review land use review or other approval from the city or other local, state or federal jurisdiction. Development includes, but is not limited to: land division; construction, reconstruction, structural alteration, relocation, or enlargement of any structure; clearing or grading; and changes to surface or ground waters.
 25. "Development area" means the area of land disturbing activity on a site.
 26. "Director" means the director of the city's Planning and Community Development Department or his/her designee.
 27. "Educational or scientific activities" means controlled and/or supervised scientific activities or educational activities that are associated with an educational or scientific program that result in no adverse impacts to critical areas or their buffers.
 28. "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.
 29. "Erosion hazard area" means those areas containing soils which, according to the United States Department of Agriculture Natural Resource Conservation Service Soil Survey Program, may experience significant erosion. Erosion hazard areas also include coastal erosion-prone areas and channel migration areas.
 30. "Estuarine, wetland" means a vegetated wetland that is predominantly tidal, as described in Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-29, October 2014).

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

31. "Existing development" means a development that was lawfully constructed, approved or established prior to the effective date of the ordinance codified in this chapter.
32. "Fish" means species of the vertebrate taxonomic groups *Cephalospidomorphi* and *Osteichthyes*.
33. "Fish and wildlife habitat conservation areas" means areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness.
34. "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.
35. "Fish habitat" means habitat which is used by any fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management and includes off-channel habitat.
36. "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:
 1. Either:
 - a. Certification by the American Fisheries Society, or;
 - b. Bachelor of Science degree in fisheries or the biological sciences from an accredited institution and five years of professional fisheries experience; and
 2. The prior successful completion of at least three habitat management plans.
31. "Frequently flooded areas" means lands subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high ground water. These areas include, but are not limited to, streams, lakes, coastal areas, wetlands and areas where high ground water forms ponds on the ground surface. (See Chapter 15.16 BIMC, Flood Damage Prevention.)
32. "Functions and values" means the natural processes and beneficial roles performed or provided by critical areas including, but not limited to, water quality and quantity protection and enhancement, providing fish and wildlife habitat, supporting terrestrial and aquatic food chains, providing flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, wave attenuation, protecting aesthetic value, and providing recreational and educational opportunities. These roles are not listed in order of priority.
33. "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

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

hazardous areas include erosion hazard areas, landslide hazard areas, and seismic hazard areas.

34. "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.
35. "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 maintain, enhance and improve terrestrial and/or aquatic habitat on a proposed development site.
36. "Habitat of local importance" means an area representing either high quality habitat for native terrestrial or aquatic species or habitat which is of limited availability, highly vulnerable to alteration, or provides landscape connectivity which contributes to the integrity of the surrounding landscape and which is not adequately protected by other city, state or federal policies, laws, regulations, or non-regulatory tools that prevent degradation of the habitat or its associated species. These may include areas of high relative density or species richness, breeding habitat, winter range, and movement corridors such as breeding areas or human-made ponds.
37. "Hazard tree" means a tree that has significant structural defects that are likely to lead to failure and possibly cause injury or damage as identified in a report from an International Society of Arboriculture (ISA) Tree Risk Assessment Qualified (TRAQ) arborist. 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.
38. "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).
39. "Hedge" means a line of closely-spaced trees and/or shrubs intentionally planted and/or maintained along a property boundary or landscape border for privacy, screening, safety, or similar function, which typically requires ongoing pruning or shearing to maintain its intended function and/or reasonable use of nearby developed areas.
40. "Hydric soil" means soil which is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.
41. "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.
42. "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.
43. "Invasive/exotic species" means 1) non-native (or alien) to the ecosystem under consideration and 2) whose introduction causes or is likely to cause economic or

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- environmental harm or harm to human health, or as amended by the United States Department of Agriculture National Invasive Species Information Center (NISIC).
44. “Land disturbing activity” means any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, clearing, grading, filling and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered a land disturbing activity. Vegetation maintenance practices are not considered land disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures.
45. “Land divisions” means any division of land subject to the city’s subdivision design standards (BIMC Chapter 17.12).
46. “Landslide hazard areas” means areas which are at risk of mass movement due to a combination of geologic, topographic, and hydrologic factors. 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).
47. “Landslide hazard area setback” means an area contiguous to a landslide hazard area sufficient in depth to meet the development standards set forth in BIMC 16.20.140 as determined by a geological hazards assessment prepared in accordance with BIMC 16.20.180, Critical area reports.
48. “Liquefaction” means a process in which a water-saturated soil, upon shaking, suddenly loses strength and behaves as a fluid.
49. “Low impact development (LID)” means a stormwater and land use management strategy that strives to mimic predisturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.
50. “Low impact development best management practices (LID BMPs)” mean distributed stormwater management practices, integrated into a project design, that emphasize predisturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration. LID BMPs include, but are not limited to: bioretention, rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, minimal excavation foundations, vegetated roofs, and water reuse.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

51. “Native or equivalent vegetation” means species which are indigenous to the Puget Sound lowlands ecoregion; or a species that is equivalent in providing the same site-specific functional arrays as would the native species. Functional arrays may include forage, floodwater restraint, hiding habitat, or other physical or biologic roles in the ecosystem, that singly or in combinations correspond to those of the native species. As with natives, the role of an equivalent species may vary depending on the site and its surrounding ecosystem. Invasive/exotic species shall not be considered equivalent species.
52. “Native vegetation protection area (NVPA)” means a portion of a development site comprised of native vegetation in which existing vegetation, topography and supporting soils are free of development, uses or activities detrimental to the infiltration capacity and critical area functions and values of the total site area.
53. “Natural pruning system” means a pruning system intended to maintain a tree’s characteristic growth pattern and adaptations that may allow for changes in appearance to achieve certain specified objectives per ANSI A300 (Part 1 – 2017).
54. “No net loss” means the maintenance of the aggregate total of the city’s critical areas functions and values over time. The no net loss standard requires that the impacts of a proposed use and/or development, whether permitted or exempt from permit requirements, be identified and mitigated on a project-by project basis, so that as development occurs critical areas functions and values stay the same.
55. “Normal maintenance” means those usual acts to prevent a decline, lapse or cessation from a lawfully established condition. 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 or width beyond the original ditch dimensions;
 - c. Re-digging existing drainage ditches to drain wetlands on lands not classified as existing and ongoing agriculture under BIMC 16.20.040 (Exemptions).
56. “Normal repair” means activities to restore a structure or use to a state comparable to original condition, including but not limited to size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction.
57. “Ordinary high water mark” means the mark on the shores of all waters, which will be found by examining the beds and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation; provided, that in any area where the ordinary high-water mark cannot be found, the ordinary high-water mark adjoining freshwater shall be the line of mean high-water.
58. “Pollarding” means a pruning system that maintains crown size by initial heading of branches on young trees, followed by removal of shoots to their point of origin at appropriate intervals without disturbing the resulting pollarding head.
59. “Pruning” means the selective removal of plant parts to achieve defined objectives.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

60. "Pruning amount" means the quantity of plant parts removed at one pruning, expressed in terms of a number of branches or other parts removed, and/or percentage of the crown or buds removed on an entire tree or specific branches.
61. "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 than a 15 percent slope.
62. "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.
63. "Reasonable use exception (RUE)" is a means of relief that is available for a property that is encumbered to such an extent by critical areas and/or critical area buffers that application of this chapter would deny all reasonable use of the subject property, as further defined by the decision criteria of BIMC 16.20.080.
64. "Redevelopment" means, on a site that is already substantially developed (i.e., has 35 percent or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.
65. "Removal, vegetation" means to eliminate the presence or hazard of unwanted vegetation.
66. "Seismic hazard areas" means areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, debris flows, or tsunamis. 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.
67. "Shrub" means a woody perennial plant, usually with several stems that may be erect or close to the ground, generally smaller than a tree.
68. "Significant tree" means a deciduous tree greater than 12 inches in diameter at four feet high and an evergreen tree greater than 10 inches in diameter at four feet high.
69. "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.
70. "Species of local importance" means those species that are of local concern due to their population status or their sensitivity to habitat alteration."
71. "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

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

- 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.
72. “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 fish habitat. Waters having the following characteristics are presumed to meet the physical criteria for fish use: Stream segments having a defined channel of 2 feet or greater within the bankfull width and having a gradient of 16 percent or less. Also, stream segments having a defined channel of 2 feet or greater within the bankfull width and having a gradient greater than 16 percent and less than or equal to 20 percent, and having greater than 50 acres in contributing basin size based on hydrographic boundaries.
- 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.
73. “Tree” means a woody perennial plant with a single or multiple trunks, which typically develop a mature size of over several inches diameter, and ten (10) or more feet in height.
74. “Wetland” means areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include, but are not limited to, swamps, estuaries, marshes, bogs, ponds less than twenty acres, including their submerged aquatic beds and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, stormwater facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands include those legally established artificial wetlands intentionally created from non-wetland areas to mitigated the conversion of wetlands.
75. “Wetland boundary” means the boundary or outer edge of a wetland as delineated in accordance with the federal wetland delineation manual and applicable regional supplements (as updated), as required by WAC 173-22-035.

CITY COUNCIL REVISED PUBLIC HEARING DRAFT
February 27, 2018

76. “Wetland category” means category as defined in Washington State Wetland Rating System for Western Washington – 2014 Update (Ecology Publication No. 14-06-029, October 2014), or as revised and adopted by the department.
77. “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.
78. “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:
 - ii. Certification as a professional wildlife biologist through The Wildlife Society, or;
 - iii. 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 managements plans.
71. “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.
72. “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.