

Title 18. Zoning

Chapter 18.06. DEFINITIONS

AKART

“AKART”

Means all known, available and reasonable methods of prevention, control and treatment. AKART shall represent the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge. The concept of AKART applies to both point and nonpoint sources of pollution. The term "best management practices" typically applies to nonpoint source pollution controls and is considered a subset of the AKART requirement. The stormwater management manuals (see definition in this section) may be used as a guideline, to the extent appropriate, for developing best management practices to apply AKART for stormwater discharges.

Anadromous Fish.

“Anadromous Fish”

Means fish that spawn and rear in freshwater and mature in the marine environment. While Pacific salmon die after their first spawning, adult char (bull trout) can live for many years, moving in and out of saltwater and spawning each year. The life history of Pacific salmon and char contains critical periods of time when these fish are more susceptible to environmental and physical damage than at other times. The life history of salmon, for example, contains the following stages: upstream migration of adults, spawning, inter-gravel incubation, rearing, smoltification (the time period needed for juveniles to adjust their body functions to live in the marine environment), downstream migration, and ocean rearing to adults.

§ 18.06.065. Best Management Practices.

“Best management practices (BMPs)”

means conservation practices and management measures ~~which serve to protect trees~~, including the following practices:

1. Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics and sediment;~~Avoiding physical damage to tree trunk, branches, foliage and roots;~~
2. Minimize adverse impacts to surface water and ground water flow and circulation patterns and to the chemical, physical, and biological characteristics of wetlands~~Restricting the~~

~~movement, operation, and location of construction materials and equipment to avoid the area under a tree canopy;~~

3. Protect trees and vegetation designated to be retained during and following site construction and use native plant species appropriate to the site for re-vegetation of disturbed areas~~Minimizing adverse changes in drainage conditions around tree roots;~~

4. Provide standards for proper use of chemical herbicides within critical areas~~Minimizing adverse changes to the chemical, physical, structural, and organic characteristics of soil around tree roots;~~ and

5. Those conservation practices defined by the State of Washington Department of Agriculture, Washington State Department of Ecology, and International Society of Arborists as intended to protect trees.

(Ord. 2741 § 4 (part), 2024)

§ 18.06.161. Compensatory Mitigation

“Compensatory Mitigation”

means restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of critical areas or buffers for the purposes of offsetting unavoidable adverse impacts that remain after all appropriate and practicable avoidance and minimization has been achieved.

Critical Aquifer Recharge Area

“Critical Aquifer Recharge Area”

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

(Ord. 2741 § 4 (part), 2024)

§ 18.06.199. Defective Tree.

“Defective tree”

means a tree ~~that meets all of the following criteria:~~with a combination of structural defects and/or disease documented by an ISA Certified Tree Risk Assessment Qualified (TRAQ) Arborist to beas one of the following risk categories:

~~1. A tree with a combination of structural defects and/or disease that makes it subject to a high probability of failure~~

- a. Moderate risk with significant consequences;
- b. Moderate risk with severe consequences;
- c. High risk with a Target or Risk Target; or
- d. Extreme risk.

; and

~~2. A tree in proximity to moderate to high frequency targets (persons or property that can be damaged by tree failure); and~~

~~3. The ~~hazard-condition~~ risk of the tree cannot be lessened below this TRAQ threshold with reasonable and proper arboricultural practices nor can the or reasonable target mitigation measures such as relocation, etc.~~ be removed.

(Ord. 2741 § 4 (part), 2024)

Delineation.

“Delineation”

Means the method used to establish the existence (location) and physical limits (size) of a wetland for the purposes of federal, state, and local regulations.

§ 18.06.252. Emergency.

“Emergency”

Means those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to public or private property and that require remedial or preventive action in a timeframe too short to allow for compliance with the requirements of the critical areas regulations.

Fish and Wildlife Habitat Conservation Areas.

“Fish and Wildlife Habitat Conservation Areas”

Means areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors, and areas with high relative population density or species richness. Counties and cities may also designate locally important habitats and species.

Fish and wildlife conservation areas do 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.

§ 18.06.341. Frequently Flooded Areas.

“Frequently Flooded Areas”

means lands in the floodplain subject to a one percent (1%) or greater chance of flooding in any given year, areas subject to flooding due to high groundwater, and those lands that provide important flood storage, conveyance, and attenuation functions in accordance with WAC 365-190-110. Frequently flooded areas perform important hydrologic functions and may present a risk to persons and property. Classifications of frequently flooded areas include, at a minimum, the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

§ 18.06.342. Functions and Values.

“Functions and Values” also “ecological functions and values”

means the services provided by critical areas to society, including, but not limited to, improving and maintaining water quality, providing fish and wildlife habitat, supporting terrestrial and aquatic food chains reducing flooding and erosive flows, wave attenuation, historical or archaeological importance, educational opportunities, and recreation.

Geologically Hazardous Areas.

“Geologically Hazardous Areas”

means areas that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to siting commercial, residential, or industrial development consistent with public health or safety concerns. Types of geologically hazardous areas include erosion, landslide, seismic, and areas subject to other geologic events, such as mine, and volcanic hazards.

Habitat Assessment.

“Habitat Assessment”

means a project-based site-specific report for land use activities in a Fish and Wildlife Habitat Conservation Area that could affect ecosystem functions and values.

(Ord. 2741 § 4 (part), 2024)

Hydrogeologic Assessment.

“Hydrogeologic Assessment”

means a report prepared by a qualified professional that characterizes site-specific groundwater and surface water conditions and evaluates the potential effects of existing or proposed land uses on aquifer systems, recharge areas, and related water resources. The report shall also identify potential impacts from the proposed activity and recommend measures to avoid, minimize, or mitigate adverse effects to groundwater quantity and quality.

§ 18.06.451. In-lieu Fee Program.

“In-lieu Fee Program”

Means an agreement between a regulatory agency (state, federal, or local) and a single sponsor, generally a public natural resource agency or nonprofit organization. Under an in-lieu-fee agreement, the sponsor collects funds from individuals and/or entities required to conduct compensatory mitigation under a wetland regulatory program. The sponsor uses the funds pooled from multiple permittees to create one or more mitigation sites under the authority of the agreement to satisfy the permittees’ required mitigation.

§ 18.06.581. Mitigation.

“Mitigation”

means a prescribed order of steps taken to reduce the impacts of activities on wetlands. As defined in WAC 197-11-768, mitigation includes the following: ~~replacing project induced critical area and buffer losses or impacts, and includes but is not limited to the following:~~

1. Avoiding the impact altogether by not taking a certain action or parts of an action;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
3. Rectifying the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project;
4. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
5. Compensating for the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and

6. Monitoring the hazard or other required mitigation and taking remedial action when necessary. Mitigation for individual actions may include a combination of the above measures.~~Restoration: Actions performed to reestablish critical area and its buffer functional characteristics and processes that have been lost by alterations, activities or catastrophic events within an area that no longer meets the definition of a critical area;~~

~~2. Creation: Actions performed to intentionally establish a critical area and its buffer at a site where it did not formerly exist;~~

~~3. Enhancement: Actions performed to improve the condition of an existing degraded critical area or its buffer so that the functions it provides are of higher quality.~~

(Ord. 2741 § 4 (part), 2024)

§ 18.06.582. Mitigation Bank.

“Mitigation Bank”

Means a site or suite of sites where resources are restored, created, enhanced, and/or preserved, for the purpose of providing compensatory mitigation for impacts. In general, a mitigation bank sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. The operation and use of a mitigation bank are governed by a mitigation banking instrument.

Monitoring.

“Monitoring”

Means evaluating the impacts of development proposals on biological, hydrological, and geological elements of critical areas, and assessing the performance of required mitigation measures through the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features. Monitoring includes gathering baseline data.

Noxious - or - Invasive Plants.

“Noxious” or “Invasive” Plants

Means non-native plant species that have been introduced, established, or spread beyond their historical ranges and that cause, or are likely to cause, ecological, economic, or human health harm by displacing native vegetation, degrading habitat, altering ecological processes, or interfering with land use. This includes species listed as noxious weeds by the Washington State Noxious Weed Control Board, as well as other plant species identified by the King County Noxious Weed Control Board that are detrimental to critical area functions.

Off-site Mitigation.

“Off-site Mitigation”

Means the replacement of critical areas away from the site on which a critical area has been impacted.

On-site Mitigation.

“On-site Mitigation”

Means the replacement of critical areas at or adjacent to the site on which a critical area has been impacted.

Priority Habitats.

“Priority Habitats”

Means habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species (e.g., juniper savannah), a described successional stage (e.g., old-growth forest), or a specific habitat feature (e.g., cliffs).

Priority Species.

“Priority Species”

Means State Endangered, Threatened, Sensitive, and Candidate species; animal aggregations (e.g., heron colonies, bat colonies) considered vulnerable; and species of recreational, commercial, or tribal importance that are vulnerable.

§ 18.06.659. Qualified Professional.

“Qualified Professional”

Means a person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology, or related field, and have at least five years of related work experience.

1. A qualified professional for wetlands must be a professional wetland scientist with at least two years of full-time work experience as a wetlands’ professional, including delineating wetlands using the state or federal manuals, preparing wetlands reports, conducting function assessments, and developing and implementing mitigation plans;

2. A qualified professional for habitat must have a degree in biology or a related degree and professional experience related to the subject species;

3. A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the state of Washington;

4. A qualified professional for critical aquifer recharge areas means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.

§ 18.06.845. Tree.

“Tree”

means any self-supporting woody plant characterized by one main trunk or, for certain species, multiple trunks, typically reaching ~~12~~-15 feet minimum in height at maturity, with a trunk diameter of 6 inches or more measured at 4.5 feet above average grade (DBH) or any multi-stemmed tree whose combined stem diameters meet or exceed 6 inches at 4.5 feet above grade and a crown width of at least 8 feet.

, that is recognized as a Tree in the nursery and arboricultural industries.

1. At-Risk Tree.

“At-risk tree” means a tree that is exposed to potential damage but can be retained during construction by use of appropriate tree protection measures as prescribed by a Qualified Tree Professional or by TMC Chapter 18.54.

2. Crown.

“Crown” means the area of a tree containing leaf-or needle-bearing branches.

3. Dead Tree.

“Dead tree” means a tree with no live crown and no functioning vascular tissue.

4. Dripline.

“Dripline” means the distance from the tree trunk that is equal to the furthest extent of the tree’s crown or six-foot radius from the trunk of the tree, whichever is greater.

#. Dying Tree

A “dying tree” means a tree (add def?)as determined by a Qualified Tree Professional

5. Exceptional Tree.

“Exceptional tree” means a tree that is at least 18 inches in diameter (DBH). For trees with two stems, if the stems have a combined total diameter of at least 18 inches, the tree shall be considered an Exceptional Tree. For trees with three or more stems, if the three largest stems have a combined total diameter of at least 18 inches, the tree shall be considered an Exceptional Tree.

[#. Emergency Tree Removal.](#)

[\(Move definition from 18.45 to here?\)](#)

6. Heritage Tree or Heritage Grove.

“Heritage tree” means a tree, or group of trees comprising a grove, specifically designated by the City because of historical significance, special character, and/or community benefit.

7. Invasive Tree.

“Invasive tree” means a non-native tree species, which is likely to spread and disrupt the balance of an eco-system.

8. Nuisance Tree.

“Nuisance tree” means a tree that is causing obvious physical damage to structures including, but not limited to, sidewalks; curbs; the surfaces of streets, parking lots, and driveways; underground utilities; or building foundations. Nuisance Tree does not include trees that currently meet the definition of Hazardous or Defective Tree.

9. Qualified Tree Professional.

“Qualified tree professional” means an individual who is a certified professional with academic and/or field experience that makes them a recognized expert in urban forestry and tree protection. A Qualified Tree Professional shall be a member of the International Society of Arboriculture (ISA) and/or the Association of Consulting Arborists, and shall have specific experience with urban tree management in the state of Washington. A Qualified Tree Professional preparing tree valuations shall have the necessary training and experience to use and apply the appraisal methodology prescribed in the most recent edition of the ISA Plant Appraisal Guide.

10. Risk.

“Risk” means, in the context of urban forestry and trees, the likelihood of tree failure causing damage to a Target such as property or persons.

11. Street Tree.

“Street tree” means a tree located within the public right-of-way, or easement for street use granted to the City, provided that, if the trunk of the tree straddles the boundary line of the

public right-of-way and the abutting property, it shall be considered to be on the abutting property.

12. Target or Risk Target.

“Target or risk target” means, as used in the context of urban forestry or trees, people, property, or activities that could be injured, damaged, or disrupted by a tree.

13. Tree Risk Assessment.

“Tree risk assessment” means the systematic process to identify, analyze and evaluate tree risk prepared by a Qualified Tree [Risk Assessor](#)~~Professional~~ in accordance with the latest version of the International Society of Arboriculture (ISA) Best Management Practices Guide [for Tree Risk Assessment](#).

14. [Qualified](#) Tree Risk Assessor.

“[Qualified](#) Tree risk assessor” means a Qualified Tree Professional with a Tree Risk Assessment Qualification ([TRAQ](#)), who identifies subject tree(s) and site conditions, evaluates and classifies the likelihood of failure, estimates the consequences of tree(s) hitting a Target, and determines options for treatment or mitigation.

15. Viable Tree.

“Viable tree” means a Significant Tree that a Qualified Tree Professional has determined to be in good health with a low risk of failure; is relatively Windfirm if isolated or exposed; and is a species that is suitable for its location and is therefore worthy of long-term retention.

16. Windfirm.

“Windfirm” means a tree that is healthy and well-rooted and that a Qualified Tree Professional has evaluated and determined can withstand normal winter storms or surrounding tree removal.

(Ord. 2741 § 4 (part), 2024)

[Wellhead Protection Area](#)

[“Wellhead Protection Area”](#)

[means the portion of a well's, wellfield's or spring's zone of contribution defined using WHPA criteria established by the Washington Dept. of Health \(DOH\), which requires use of groundwater time-of-travel criteria to determine the primary zones of a wellhead protection area using a 6-month, 1-, 5-, and 10-year time of travel factors as described in Washington Dept. of Health Wellhead Protection Program Guidance Document DOH 331-018 \(2017\) or most recent version per WAC 246-290-135\(3\)\(c\)\(ii\)\(A\).](#)

Wetland Mosaic

“Wetland mosaic”

An area with a concentration of multiple small wetlands, in which each patch of wetland is less than one acre; patches are less than 100 feet from each other; and areas delineated as wetland are more than 50 percent of the total area of the entire mosaic, including uplands and open water.

Title 18. Zoning

Chapter 18.45. ENVIRONMENTALLY CRITICAL AREAS

§ 18.45.010. Purpose.

A. The purpose of TMC Chapter 18.45 is to protect the environment, human life, and property; to designate and classify ecologically critical areas, ~~including but not limited to regulated wetlands and watercourses and geologically hazardous areas~~ and to protect these critical areas and their functions while also allowing for reasonable use of public and private property. These regulations are prepared to comply with the Growth Management Act, RCW 36.70A, to apply best available science according to WAC 365-195-900 through 925, ~~and~~ to protect critical areas as defined by WAC 365-190-080, and implement the goals and policies of the City's Comprehensive Plan.

B. Standards are hereby established to meet the following goals of protecting environmentally critical areas:

1. ~~Avoid~~Minimize developmental impacts on the natural functions of these areas. If avoidance is infeasible, appropriate use of the mitigation sequence shall be utilized in alignment with TMC 18.45.075.
2. Protect quantity and quality of water resources.
3. Protect the ~~community's~~ stormwater amelioration benefits provided by wetlands and watercourses and their fully vegetated buffers and strive for a gain over present conditions.
4. ~~3~~ Minimize turbidity and pollution of wetlands and fish-bearing waters and maintain wildlife habitat.
5. ~~4~~ Prevent erosion and the loss of slope and soil stability caused by the removal of trees, shrubs, and root systems of vegetative cover.
6. ~~5~~ Protect the public against avoidable losses, the cost of public emergency rescue and relief operations ~~cost~~, and subsidy cost of public mitigation from landslide, subsidence, erosion, and flooding.

76. Protect the community's aesthetic resources and distinctive features of natural lands and wooded hillsides.

87. Balance the private rights of individual property owners with the public benefits from the preservation of environmentally critical areas.

98. Prevent the loss of wetland and watercourse function and acreage, and strive for a gain over present conditions.

109. Give special consideration to conservation or protection measures necessary to protect or enhance anadromous fisheries, including delivery of cool, clean water from surrounding lands into the Green-Duwamish River.

1140. Incorporate the use of best available science in the regulation and protection of critical areas as required by the State Growth Management Act, according to WAC 365-195-900 through 365-195-925 and WAC 365-190-080.

12. Protect all functions and values of critical areas to ensure no net loss of ecological functions and values.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.020. Best Available Science.

A. Per RCW 36.70A.172, pPolicies, regulations and decisions concerning critical areas shall rely on best available science to protect the functions of these areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitats.

B. Nonscientific information may supplement scientific information but is not an adequate substitution for valid and available scientific information.

C. Incomplete or unavailable scientific information leading to uncertainty for permitting critical area impacts may require application of effective adaptive management on a case-by-case basis. Adaptive management relies on scientific methods to evaluate how well regulatory or non-regulatory actions protect critical areas or replace their functions.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.030. Critical Area Applicability, Maps, and Inventories.

A. Applicability: The provisions of TMC Chapter 18.45 shall apply to all land uses and all development activities in a critical area or a critical area buffer as defined in the "Definitions" chapter of this title. The provisions of TMC Chapter 18.45 apply whether or not a permit or authorization is required within the City of Tukwila. No person, company, agency, or applicant

shall alter a critical area or buffer except as consistent with the purposes and requirements of TMC Chapter 18.45. The following are critical areas regulated by TMC Chapter 18.45:

~~1. Coal Mine Hazard Areas;~~

~~12. Geologically Hazardous Areas~~~~Areas of potential geologic instability~~: Class 2, 3, 4 areas (as defined in the Definitions chapter of this title and TMC Section 18.45.120.A);

~~23.~~ Wetlands;

~~34.~~ Watercourses;

~~45.~~ Fish and Wildlife Habitat Conservation Areas; and

~~56.~~ Special Hazard Flood Areas (see TMC Chapter 16.52 for additional regulations)-

~~67.~~ Critical aquifer recharge areas.

B. Areas of seismic instability are identified as critical areas by the Growth Management Act and are defined and regulated through the Washington State Building Code.

C. In the event of a conflict between this TMC Chapter 18.45 and any other laws, regulations, ordinances or restrictive covenants, the provision that ~~imposes greater restrictions or higher standards upon the development or use of land shall prevail~~provides the greatest protection to critical areas shall apply. For properties within the jurisdiction of the Shoreline Management Act, the regulations in TMC 18.44 supersede any conflicting regulation in this chapter.

D. Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required. The applicant is responsible for complying with all other applicable requirements.

~~E~~D. Critical Areas Maps and Inventories:

1. The location and distribution of many critical areas and potential critical areas in Tukwila ~~are is~~ displayed on ~~the Critical Areas Maps Tukwila iMap~~, and on file with the Department. These maps are based on prior critical areas reports as well as site assessment of current conditions and review of the best available scientific data and are hereby adopted by reference. Not all critical areas are shown on the map. These maps are for the guidance of the City of Tukwila, project applicants, and/or property owners. They are a reference and do not provide a final critical area designation or delineation. Site conditions may change over time, affecting the presence and classification of critical areas. The provisions of this chapter and the findings of a current critical areas report and review of the report by the City take precedence over the City's mapping. ~~Thus it~~ is the responsibility of property owners and applicants to verify the actual presence or absence of a critical area or critical area buffer based on the definitions in this code. Applicant is also responsible for delineation and categorization of potential wetlandss based on methodology required under TMC Section

18.45.080 and verifying that watercourse typing and location is consistent with TMC Section 18.45.100.

2. Studies, preliminary inventories and ratings of potential critical areas are on file with the Department ~~of Community Development~~.

3. As new environmental information related to critical areas becomes available, the Director is hereby designated to periodically add, remove, or alter new information ~~on~~^{to} the Critical Areas Maps. Removal of any information from the Critical Areas Maps is a Type 1 decision as described in TMC Chapter 18.108.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.040. Critical Area ~~Report~~^{Special Studies}.

A. Critical Area ~~Report~~^{Special Studies} Required: If an initial assessment indicates that a critical area or critical area buffer exists or may exist on the subject property, or adjacent to the subject property, the applicant shall prepare and submit a critical area report in accordance with this subsection. For the purposes of this chapter, adjacent shall mean:

1. Land within one hundred fifty (150) feet of a wetland;
2. Land within one hundred fifty (150) feet of a watercourse;
3. Land within fifty (50) feet of an area of potential geologic instability;
4. Land within three hundred (300) feet of a designated fish and wildlife habitat conservation area; or
5. Land within a special hazard flood area.

~~An applicant for a development proposal within a parcel that may include a critical area and/or its buffer shall submit those studies as required by the City and specified within this section to adequately identify and evaluate the critical area and its buffers.~~

- ~~1. The applicant shall either
 - a. Fund a critical area study prepared by the City's consultant, if available, which will not be subject to peer review; or
 - b. Submit a critical area study prepared by a qualified professional as defined herein, which may be subject to an applicant-funded peer review by the City or the City's consultant, if the City deems it necessary.~~

B. Preparation of Report: The critical area report shall be prepared by a qualified professional.

1. The applicant shall either:

a. Fund a critical area ~~study~~report prepared by the City's consultant, if available, which will not be subject to peer review; or

b. Submit a critical area ~~study~~report prepared by a qualified professional as defined herein, which may be subject to an applicant-funded peer review by the City or the City's consultant, if the City deems it necessary.

2. ~~If option 1(b) is chosen, t~~The required critical area ~~study~~report shall be prepared by a person with experience and training in the scientific discipline appropriate for the relevant critical area as outlined within this section and in accordance with WAC 365-195-905(4). A qualified professional must have obtained a B.S. or B.A. or equivalent degree in ecology or related science, ~~environmental studies~~, fisheries, geotechnical or related field, and two years of related work experience. Additional qualifications may be required depending on the type of critical area ~~study~~report required:

a. A qualified professional for Fish and Wildlife Habitat Conservation Areas must have a degree in ecology or related sciences and professional experience related to the subject species.

b. A qualified professional for wetlands ~~s critical area studies~~ must be a certified Professional Wetland Scientist or a Wetland Scientist with at least two years of full-time work experience as a wetlands professional, including delineating wetlands using the approved federal manual and applicable regional supplements, preparing wetland reports, conducting functional assessments, and developing and implementing mitigation plans if relevant.

c. A qualified professional for ~~a~~geological hazards ~~s study~~ must be a professional geotechnical engineer as defined in the Definitions chapter of this title, licensed in the state of Washington.

d. A qualified professional for watercourses and frequently flooded areas ~~means a~~must be a hydrologist, fisheries biologist, engineer, or other scientist with experience in preparing watercourse assessments.

3. The critical area ~~study~~report shall use scientifically valid methods and studies in the analysis of critical area data and shall use field reconnaissance and reference the source of science used. The report shall clearly outline the use of best available science, as defined by WAC 365-195-905. The critical area ~~study~~report shall evaluate the proposal and all probable impacts to critical areas as applicable.

C. General Standards for Critical Area Reports: Wetland and watercourse reports are valid for five years following the date of the report, unless otherwise determined by the Director. The critical area report shall contain the following information, as applicable:

1. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested.
2. The dates, names and qualifications of the person(s) preparing the study-and ~~documentation of any fieldwork performed on the site.~~
3. A vicinity map for the project.
4. Description of the methodologies used to conduct the critical area assessment, including references.
5. Identification, characterization and boundaries of all critical areas, waterbodies, shorelines, floodplains, and buffers on or adjacent to the proposed project areas. For areas off the project site, estimate conditions within 150 feet of the project boundaries using all reliable information.
6. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc.
7. A statement specifying the accuracy of the report and all assumptions made and relied upon.
8. A description of the proposed project, including an estimate of impacts. A copy of the site plan showing critical areas and buffers and the development proposal with dimensions and clearing limits.
9. A description of how mitigation sequencing under TMC 18.45.075 was applied to the project proposal.
10. An evaluation of the functions of the critical area and its buffer, including discussion of any required mitigation.
11. Any other technical information required by the Director to assist in determining compliance with this chapter.

DB. Additional Standards for Wetland and Watercourse Critical Area ~~Studies~~Reports: ~~Wetland and watercourse special studies reports are valid for five years following the date of the study report, unless otherwise determined by the Director.~~ The critical area ~~study~~report shall contain the following information, as applicable:

- ~~1. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;~~
- ~~12. A copy of the site plan for the development proposal showing: critical areas and buffers and the development proposal with dimensions, clearing limits, p~~Proposed storm water management plan, and mitigation plan for impacts due to drainage alterations;

~~3. The dates, names and qualifications of the persons preparing the study and documentation of any fieldwork performed on the site;~~

24. Identification and characterization of all critical areas, water bodies, and buffers on or adjacent to the proposed project area or potentially impacted by the proposed project as described in the following sections:

a. Characterization of wetlands must include:

(1) A description of the methodologies used to conduct the wetland delineations, wetland ratings, and impact analyses including references~~A wetland delineation report that includes methods used, field indicators evaluated and the results.~~ Wetland

delineation must be performed in accordance with approved federal wetland delineation manual and current applicable regional supplements. Field data forms are to be included in the report. Data collection points are to be shown on the site plan with their corresponding numbers indicated. After the City of Tukwila confirms the boundaries, they are to be professionally surveyed to the nearest square foot and the site plan modified as necessary to incorporate the survey data. Exact wetland acreage will be calculated after the boundaries have been surveyed. Applicant must submit electronic survey data in AutoCAD~~ead~~, GIS or similar format at the time of as-built submittal.

(2) Cowardin (Classification of Wetlands and Deepwater Habitats of the U.S. – U.S. Department of Interior) classification of the wetland(s).

(3) Hydrogeomorphic classification of the wetland(s).

(4) Hydroperiod.

(5) Brief landscape assessment of the wetland (identify hydrologic basin/sub-basin; inlets, outlets; surrounding land use; habitat quality and connectivity; ultimate point of discharge; presence of culverts or other constraints to flow; relationship to other wetlands/watercourses adjacent to or potentially impacted by the proposed project).

(6) Description of buffer size per this chapter, conditions (topographic considerations, existing vegetation types and density, habitat features, watercourse edges, presence of invasive species, etc.) and functions.

(7) A discussion of the potential impacts to wetland(s) associated with any anticipated hydroperiod alterations from the project.

~~(8)~~ For proposed wetland filling or proposed projects that will impact buffers, the most current Washington Wetland Classification System shall be used as a functional assessment.

b. Characterization of the watercourses on site, adjacent to or potentially impacted by the proposed project must include:

- (1) Description of: flow regime, physical characteristics of streambed, banks, dimensions and bank-full width, stream gradient, stream and buffer vegetation conditions, habitat conditions, and existing modifications.
- (2) Brief landscape assessment of the watercourse (identify hydrologic basin/sub-basin, and contributing basin area acreage, outlets, surrounding land use, habitat quality and connectivity, ultimate point of discharge, presence of culverts or other constraints to flow, presence of man-made or natural barriers to fish passage, relationship to wetlands or other watercourses adjacent to or potentially impacted by the proposed project, flow regime).
- (3) Classification of the watercourse under Tukwila's rating system.
- (4) Description of buffer size per this chapter, conditions (topographic considerations, existing vegetation types and density, habitat features, watercourse edges, presence of invasive species, etc.) and functions.
- (5) Description of habitat conditions, wildlife/fish use of the watercourse, including sensitive, threatened or endangered species.

c. Citation of any literature or other resources utilized in preparation of the report.

~~5. A statement specifying the accuracy of the study and assumptions used in the study.~~

~~36.~~ Determination of the degree of hazard and risk from the proposal both on the site and on adjacent properties.

~~47.~~ An assessment of the probable cumulative impacts to critical areas, their buffers and other properties resulting from the proposal.

~~8. A description of reasonable efforts made to apply mitigation sequencing to avoid, minimize and mitigate impacts to critical areas.~~

~~59.~~ Plans for adequate mitigation to offset any impacts.

~~610.~~ Recommendations for maintenance, short-term and long-term monitoring, contingency plans and bonding measures.

~~711.~~ Any technical information required by the Director to assist in determining compliance with this chapter.

~~EC.~~ Additional Standards for Geotechnical Reports:

1. A geotechnical report appropriate both to the site conditions and the proposed development shall be required for development in Class 2, Class 3, Class 4 areas, and any areas identified as Coal Mine Hazard Areas.

2. Geotechnical reports for Class 2 areas shall include at a minimum a site evaluation review of available information regarding the site and a surface reconnaissance of the site and adjacent areas potentially impacted by the proposed project. Subsurface exploration of site conditions is at the discretion of the geotechnical consultant.

3. Geotechnical reports for Class 3, Class 4 and Coal Mine Hazard Areas shall include a site evaluation review of available information about the site, a surface reconnaissance of the site and adjacent areas potentially impacted by the proposed project, a feasibility analysis for the use of infiltration on-site and a subsurface exploration of soils and hydrology conditions. Detailed slope stability analysis shall be done if the geotechnical engineer recommends it in Class 3 or Coal Mine Hazard Areas, and must be done in Class 4 areas.

4. ~~Applicants shall retain a geotechnical engineer to prepare the reports and evaluations required in this subsection.~~ The geotechnical report and completed site evaluation checklist shall be prepared in accordance with the generally accepted geotechnical practices, under the supervision of and signed and stamped by the geotechnical engineer. The [scope of the](#) report shall be prepared in consultation with the Community Development ~~and Public Works~~ Departments.

5. The opinions and recommendations contained in the report shall be supported by field observations and, where appropriate or applicable, by literature review conducted by the geotechnical engineer, which shall include appropriate explorations, such as borings or test pits, and an analysis of soil characteristics conducted by or under the supervision of the engineer in accordance with standards of the American Society of Testing and Materials or other applicable standards. If the evaluation involves geologic evaluations or interpretations, [the City shall require applicant funding of a qualified professional selected and retained by the City, subject to a third-party contract, to review the geotechnical report and recommendations](#)~~the report shall be reviewed and approved by a geotechnical engineer.~~

F. Additional Standards for Hydrogeologic Assessments. A hydrogeologic assessment shall be prepared by a qualified professional, and shall include the following site and proposal-related information:

1. Available information regarding geologic and hydrogeologic characteristics of the site including the permeability of the unsaturated zone;

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

3. Currently available data on wells and springs within one thousand three hundred (1,300) feet of the project site;

4. Location of other critical areas, including surface waters, within one thousand three hundred (1,300) feet of the project site;

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

6. Best management practices and contamination prevention plans proposed to be utilized should consider:

a. Protect groundwater by minimizing activities and conditions that pose contamination risks.

b. Manage groundwater withdrawals and recharge impacts to:

(1) Maintain availability for drinking water sources.

(2) Maintain stream base flow from groundwater to support in-stream flows, especially for salmon-bearing streams.

GD. Critical Area ~~Report~~Study – Modifications to Requirements:

1. The Director may limit the required geographic area of the critical area ~~report~~study as appropriate if the applicant, with assistance from the City, cannot obtain permission to access properties adjacent to the project area.

2. The Director may allow modifications to the required contents of the study where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.

HE. Review of ~~Report~~Studies: The Department shall review and verify the information submitted in the critical area ~~report~~study to confirm the nature and type of the critical area. ~~The Public Works Department shall seek a p~~Peer review of ~~the~~ geotechnical reports on Class 3 and 4 slopes ~~is standard~~; and peer review on Class 2 slopes may be required at the discretion of the ~~Public Works~~ Director. ~~Peer review of the geotechnical reports shall be at the expense of the applicants. For all other critical areas and a~~At the discretion of the Director, any critical area ~~studies~~ reports may undergo peer review, at the expense of the applicant.

(Ord. 2741 § 4 (part), 2024; Ord. 2765 § 73, 2025)

§ 18.45.050. Critical Area Permitted Activities~~Designation Permit.~~

~~A. A Critical Area Designation Permit establishes whether critical areas or buffers are present on or near the property and includes a critical area study report if needed.~~

~~1. A Critical Area Designation Permit is required for any property that contains, or is located within the distances specified in TMC 18.45.040. A 150 feet of, a confirmed or potential critical area before any other development permit can be accepted or issued.~~

~~2. A Critical Area Designation Permit may be applied for at any time by the property owner or the property owner's agent.~~

~~B. To apply for a Critical Area Designation Permit, the property owner or the property owner's agent must submit an application to the dDepartment using a form provided by the dDepartment. The application may cover the entire site or a portion, provided that a map is included identifying the area for which designation is sought.~~

~~C. The dDepartment, or its consultant, shall conduct an initial site review to determine whether critical areas or buffers exist, or have the potential to exist, on the property or within 150 feet. If a critical areawetland or stream is identified, the applicant must obtain a critical area report consistent with TMC Section 18.45.0470.B through G, as applicable, as provided in subsection D as currently enacted or hereafter amended. If the presence or classification of a watercoursestream is uncertain, the report shall include a professional recommendation. If the report concludes that no critical areawetland or stream exists on or within 150 feet of adjacent to the subject property, and the dDepartment concurs, no further assessment shall be required.~~

~~D. To fulfill the requirement for a critical area report, the applicant shall either:~~

- ~~1. Fund a critical area study prepared by the City's consultant, which will not be subject to peer review; or~~
- ~~2. Submit a critical area study prepared by a qualified professional as defined in TMC Title 18, which may be subject to applicant-funded peer review by the City or its consultant.~~

18.45.050. Critical Area Designation Permit

A. Purpose.

A Critical Area Designation Permit establishes whether watercourse and wetland critical areas or their buffers are present on or near a property, and may also be used to conduct a critical area study on sites with known critical areas consistent with TMC Section 18.45.040.

1. A Critical Area Designation Permit is required before the City may accept or issue any other development permit for:
 - a. Any property, or proposed development area, located within 150 feet of an uninterrupted suspected critical area; or
 - b. Any property containing a potential critical area as mapped by the City pursuant to TMC Section 18.45.050.

2. A Critical Area Designation Permit may be applied for at any time by the property owner or their authorized agent.

B. Application.

The property owner or their authorized agent must submit an application to the Department on a form provided by the Department. The application may cover the entire property or a defined portion thereof, provided a map is included identifying the area for which designation is sought.

C. Initial Site Review.

Upon receipt of a complete application, the Department or its consultant shall conduct an initial site review to determine whether critical areas or their buffers exist, or have the potential to exist, on the property or within 150 feet of its boundaries.

1. If no wetland or stream is identified, no further assessment is required.
2. If a wetland or stream is identified, the applicant must obtain a critical area report consistent with TMC Section 18.45.070.
3. If the presence or classification of a stream is in question, the critical area report shall include a professional recommendation on that question consistent with TMC 18.45.040.
4. At the applicant's written request, a property with known critical areas may bypass the initial site review and proceed directly to a critical area study under subsection D.

D. Critical Area Report.

To satisfy the critical area report requirement, the applicant shall either:

1. Fund a critical area study prepared by the City's consultant, which shall not be subject to peer review; or
2. Submit a critical area study prepared by a qualified professional as defined in TMC Title 18, which may be subject to peer review by the City or its consultant at the applicant's expense.

E. Final Determination.

Based on the critical area report, the Department shall issue a written final determination on the Critical Area Designation Permit. The Department shall issue this determination within 120 days of receiving a complete application, unless an extension is authorized under the Tukwila Municipal Code.

F. Permit Validity.

A Critical Area Designation Permit is valid for five (5) years from the date of issuance, unless invalidated earlier by either of the following:

1. Physical conditions on or within 300 feet of the subject property have materially changed due to natural processes or human activity; or
2. An applicable regulatory agency has adopted updated maps or designations that conflict with the original determination.

§ 18.45.070. Critical Area Permitted Activities.

A. Exempt Activities~~Outright Permitted Activities: The following activities are outright permitted subject to the provisions of TMC Chapter 21.04 and of the mitigation requirements of this chapter, if applicable:~~The following activities, improvements and uses are exempt from the provisions of this chapter if they have little or no environmental impact, are temporary in nature, or are an emergency, unless otherwise determined by the Director. However, the activities listed below may not be exempted from other city, state or federal permit requirements or regulations. Exemptions may be permitted through notification, written approval from the Director, or review with the underlying permit.

An exemption does not give permission to degrade a critical area or ignore risks from natural hazards. All exempt activities shall use reasonable methods to avoid impacts to critical areas or their buffers. Any temporary damage to, or alteration of, a critical area or buffer shall be restored, rehabilitated, or replaced to its prior condition or better at the responsible party's expense.

The following activities, improvements, and uses are exempt:

1. Maintenance, improvement, and repair of existing facilities provided no alteration or additional fill materials will be placed or heavy construction equipment used in the critical area or buffer. These activities shall not expand the existing footprint and shall not result in adverse impacts to the critical area or buffer.
2. Site investigative work necessary for development permits~~exploration~~ or research studies, including geotechnical tests, water quality studies, wildlife studies, and critical area investigations; provided, that any disturbance of the critical area or its buffer shall be the minimum necessary to carry out the work or studies and the area must be restored with native vegetation after testing is done. Use of any mechanized equipment requires written approval from City staff.~~that does not include use of heavy equipment or native vegetation removal.~~
3. Maintenance, improvement, and repair of essential streets, roads, rights-of-way, or utilities, and placement, maintenance, and repair of new fiberoptic utilities within existing improved

and paved roads. These activities shall not expand the existing footprint and shall not result in adverse impacts to the critical area or buffer.

~~4. Actions to remedy the effects of emergencies that threaten the integrity of the critical area, public health, safety or welfare; which may include the clean-up of encampments.~~

~~5. Maintenance activities of existing landscaping and gardens in a critical area buffer including, but not limited, to mowing lawns, weeding, harvesting and replanting of garden crops and pruning and planting of vegetation. This provision does not apply to removal of established native trees and shrubs, or to the excavation, filling, and construction of new landscaping features, such as concrete work, berms and walls.~~

~~6. Voluntary native revegetation and/or removal of invasive species that does not include use of heavy equipment. The use of herbicide by a licensed contractor with certification as needed from the Washington Department of Ecology and the Washington Department of Agriculture is permitted but requires notification prior to application to the City and shall comply with TMC Section 18.45.158.E.3.~~

4. Emergencies. Alterations in response to or to remedy the effect of an emergency that poses an immediate threat to public health, safety or welfare, the integrity of a critical area, or that poses an immediate risk of damage to private property may be exempted. Any alteration undertaken as an emergency, including encampment clean-ups, shall be reported within one business day to the Department. The Director shall confirm that an emergency exists and determine what, if any, mitigation and conditions shall be required to protect the health, safety, welfare and environment and to repair any damage to the critical area and its required buffers. Emergency work must be approved by the City. If the Director determines that the action taken, or any part thereof, was beyond the scope of an allowed emergency action, then the enforcement provisions of TMC Section 18.45.195 shall apply.

B. Activities Which Require Critical Area Permits: The following activities may be permitted only after administrative review and approval of a Type 2 Critical Areas permit application by the Director: These activities are subject to the requirements of TMC 18.45.075, TMC 18.45.090.C through E, TMC 18.45.110.C through E, and TMC 18.45.158, as applicable.

1. Maintenance, improvement, and repair of existing uses and facilities where alteration or additional fill materials will be placed or heavy construction equipment used in the critical area or buffer. These activities shall not expand the existing footprint and shall not result in adverse impacts to the critical area or buffer.

2. New surface water discharges to a critical areas or their wetland buffers from detention facilities, pre-settlement ponds or other surface water management structures may be allowed provided that the discharge meets the clean water standards of RCW 90.48 and WAC 173-200 and 173-201A, as amended, and does not increase the rate of flow, reduce flood attenuation or adversely affect wetland hydrology or watercourse flow. The applicant must

demonstrate compliance with Department of Ecology 2019 Stormwater Management Manual for Western Washington, as amended and adopted by the City. Water quality monitoring may be required as a condition of use.

~~3. Construction of bioswales and dispersion trenches are the only stormwater facilities allowed in wetland or watercourse buffers. Water quality monitoring may be required as a condition of use.~~ Stormwater management facilities, limited to stormwater dispersion outfalls and bioswales, may be allowed within the outer twenty-five percent (25%) of a wetland or watercourse buffers, provided that:

a. No other location is feasible; and

b. The location of such facilities will not degrade the functions or values of the wetland or watercourse; and

c. Stormwater management facilities are not allowed in buffers of Category I or II wetlands.

4. Enhancement or other mitigation including landscaping with native plants that requires heavy equipment.

~~5. Construction or maintenance of essential utilities if designed to protect the critical area and its buffer against erosion, uncontrolled storm water, restriction of groundwater movement, slides, pollution, habitat disturbance, any loss of flood carrying capacity and storage capacity, and excavation or fill detrimental to the environment.~~

56. Construction or maintenance of essential transportation infrastructure including public streets, roads and rights-of-way as defined by TMC Section 18.06.285, provided the following criteria are met:

a. Are designed and maintained to prevent erosion and avoid restricting the natural movement of groundwater.

b. Are located to conform to the topography so that minimum alteration of natural conditions is necessary. The number of crossings shall be limited to those necessary to provide essential access.

c. Are constructed in a way that does not adversely affect the hydrologic quality of the wetland or watercourse and/or its buffer. Where feasible, crossings must allow for combination with other essential utilities.

67. Public/Private Use and Access:

a. Public and private access shall be limited to trails, boardwalks, covered or uncovered viewing and seating areas, footbridges only if necessary for access to other areas of the property, and displays (such as interpretive signage or kiosks), and must be located ~~in~~

~~areas that have the lowest~~ outside of areas with particular sensitivity to human disturbance or alteration. Access features shall be the minimum dimensions necessary to avoid adverse impacts to the critical area. Pedestrian ~~T~~trails shall be no wider than 5 feet and bicycle trails no wider than 6 feet and are only allowed in the outer 25 percent of the buffer, except for allowed wetland or stream crossings. The Director may approve wider trails on a limited basis when they have been demonstrated to provide exceptional public benefit. Crossings and trails must be limited to the amount necessary to facilitate passive enjoyment and circulation; trails must be designed to avoid adverse impacts to critical area functions. The Director may require mechanisms to limit or control public access when environmental conditions warrant (such as temporary trail closures during wildlife breeding season or migration season). Wetland or watercourse crossings, subject to state and federal permits such as WDFW's HPA requirements.

b. Public access must be specifically developed for recreation, interpretive, educational or research purposes by, or in cooperation with, the City or as part of the adopted Tukwila Parks, Recreation, and Open Space Plan. Private footbridges are allowed only for access across a critical area that bisects the property.

c. No motorized vehicle is allowed within a critical area or its buffer except as required for necessary maintenance, agricultural management or security.

d. Any public access or interpretive displays developed along a critical area and its buffer must, to the extent possible, be connected with a park, recreation or open-space area.

e. Vegetative edges, structural barriers, signs or other measures must be provided wherever necessary to protect critical areas and their buffers by limiting access ~~to~~ from designated public use or interpretive areas.

f. Access trails and footbridges must incorporate design features and materials that protect water quality and allow adequate surface water and groundwater movement. Trails must be built of permeable materials when feasible.

g. Access trails and footbridges must be located where they do not disturb nesting, breeding and rearing areas and must be designed so that sensitive plant and critical wildlife species are protected. Trails and footbridges must be placed so as to not cause erosion or sedimentation, destabilization of watercourse banks, interference with fish passage or significant removal of native vegetation. Footbridges must be anchored to prevent their movement due to water level or flow fluctuations. Any work in the wetland or stream below the OHWM will require additional federal and state permits.

78. Dredging, digging or filling may occur within a critical area or its buffer only with the permission of the Director provided it meets mitigation sequencing requirements and is permitted under TMC Section 18.45.090 (alteration of wetland), TMC Section 18.45.110 (alteration of watercourse), or TMC Sections 18.45.120 and 18.45.130 (areas of geologic

instability). Dredging, digging or filling shall only be permitted for flood control, improving water quality, and habitat enhancement, unless otherwise permitted by this chapter.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.075. Mitigation Sequencing.

A. ~~Applicants~~ Projects shall demonstrate that reasonable efforts have been made ~~examined with the intent~~ to avoid and minimize impacts to critical areas and critical area buffers. When an alteration to a critical area or its required buffer is proposed, such alteration shall be avoided, minimized or compensated for in the following order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of an action;
2. Minimizing critical area or critical area buffer impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
3. Rectifying the impact by repairing, rehabilitating or restoring the affected environment;
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
6. Monitoring the impact and taking appropriate corrective measures.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.080. Wetlands Designations, Ratings and Buffers.

A. Wetland Designations:

1. For the purposes of TMC Chapter 18.45, “wetlands” are defined in the Definitions chapter of this title. A wetland boundary is the line delineating the outer edge of a wetland established in accordance with the U.S. Army Corps of Engineers’ (Corps) Wetland Delineation Manual (U.S. Army Corps of Engineers, 1987), and the applicable Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, Version 2.0 (U.S. Army Corps of Engineers, 2010), or as amended. ~~approved federal wetland delineation manual and applicable regional supplement.~~
2. Wetland determinations and delineation of wetland boundaries shall be made by a qualified professional, as described in TMC Section 18.45.040.
3. Wetland determinations and delineation of ~~for~~ wetland boundaries ~~must be conducted within no more than~~ are valid for five years ~~prior to the date of permit application.~~ After such date,

the Director shall determine whether revision or additional assessment is necessary for a permit application.

B. Wetland Ratings:

1. Wetlands shall be designated in accordance with the Washington State Wetlands Rating System for Western Washington: 2014 Update, Version 2.0 (Washington State Department of Ecology, ~~2014~~, Publication # 23-06-00914-06-029), as amended; or as otherwise amended by Ecology, as Category I, II, III, or IV. Wetland ratings are valid for five years. After such date the Director shall determine whether a revision or additional rating is necessary for a permit application.

C. Wetland Buffers:

1. The purpose of the buffer area shall be to protect the integrity and functions of the wetland area. Any land alteration must be located out of the buffer areas as required by this section.

Wetland buffers are intended in general to:

- a. Minimize long-term impacts of development on properties containing wetlands;
- b. Protect wetlands function and values from adverse impacts during development;
- c. Preserve the edge of the wetland and its buffer for its critical habitat value;
- d. Provide an area to stabilize banks, to absorb overflow during high water events and to allow for slight variation of aquatic system boundaries over time due to hydrologic or climatic effects;
- e. Reduce erosion and increased surface water runoff;
- f. Reduce loss of or damage to property;
- g. Intercept fine sediments from surface water runoff and serve to minimize water quality impacts; and
- h. Protect the critical area from human and domestic animal disturbances.

D. Buffer Requirements:

1. Buffer widths in Table 18.45.080-1 have been established in accordance with the best available science. They are based on the category of wetland and the habitat score and assume the buffer is vegetated with a fully functioning native plant community appropriate for the ecoregion.

<u>Table 18.45.080-1 – Wetland Buffer Widths</u>			
<u>Wetland buffer width (feet), Ecology Publication #22-06-014, as amended</u>			
<u>Category</u>	<u>Habitat score 3-5</u>	<u>Habitat score 6-7</u>	<u>Habitat score 8-9</u>
	<u>Standard buffer if vegetated</u>	<u>Standard buffer if vegetated</u>	<u>Standard buffer if vegetated</u>

	<u>per TMC 18.45.080.D.2</u>	<u>per TMC 18.45.080.D.2</u>	<u>per TMC 18.45.080.D.2</u>
<u>I</u>	<u>100</u>	<u>150</u>	<u>300</u>
<u>II</u>	<u>100</u>	<u>150</u>	<u>300</u>
<u>III</u>	<u>80</u>	<u>150</u>	<u>300</u>
<u>IV</u>	<u>50</u>	<u>50</u>	<u>50</u>

Notes:

(1) If an applicant implements the minimization measures in Table 18-8 of Title 18 and provides a habitat corridor, the buffers specified in Table 18-7 of Title 18 may be utilized.

Table 18.45.080-1—Wetland Buffer Widths						
Wetland buffer width (feet), Ecology 2014, high-intensity land use impact						
Category	Habitat score <6	Habitat score <6	Habitat score 6-7	Habitat score 6-7	Habitat score 8-9	Habitat score 8-9
	Standard Buffer	Alternate Buffer if impact minimization measures taken AND buffer is replanted	Standard Buffer	Alternate Buffer if impact minimization measures taken AND buffer is replanted. Also, 100 feet vegetated corridor between wetland and any nearby Priority Habitats is maintained (see footnote [†])	Standard Buffer	Alternate Buffer if impact minimization measures taken AND buffer is replanted. Also, 100 feet vegetated corridor between wetland and any nearby Priority Habitats is maintained. (see footnote [†])
I	100	75	150	110	300	225
II	100	75	150	110	300	225
III	80	60	150	110	300	225
IV	50	40	50	40	50	40

Notes:

^(†) A relatively undisturbed, vegetated corridor at least 100 feet wide is protected between the wetland and any nearby Priority Habitats as defined by the Washington State Department of Fish and Wildlife. The corridor must be protected for the entire distance between the wetland and the Priority Habitat by some type of legal protection such as a conservation easement. Presence or absence of a nearby habitat must be confirmed by a qualified biologist. If no option for providing a corridor is available, Table 18.45.080-1 may be used with the required measures in Table 18.45.080-2 alone.

Table 18.45.080-2—Required Measures to Minimize Impacts to Wetlands	
Disturbance	Required Measures to Minimize Impacts
Lights	• Direct lights away from wetland
Noise	• Locate activity that generates noise away from wetland • If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source

	For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10-foot heavily vegetated buffer strip immediately adjacent to the outer edge of wetland buffer
Toxic runoff	- Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered - Establish covenants limiting use of pesticides within 150 feet of wetland - Apply integrated pest management
Stormwater runoff	- Retrofit stormwater detention and treatment for roads and existing adjacent development - Prevent channelized flow from lawns that directly enters the buffer - Use Low Intensity Development (LID) techniques where appropriate (for more information refer to the drainage ordinance and manual)
Change in water regime	Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	- Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion - Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	Use best management practices to control dust

2. The buffer widths in Table 18.45.080-1 above assume the buffer is vegetated with a native plant community appropriate for the ecoregion. To be considered fully functioning, a wetland buffer must contain:

a. An average of 80% native vegetation cover, with no more than 10% noxious weed cover; and

b. A native plant community that includes tree, shrub, and groundcover strata in proportions ~~that mimic~~ representative of native forest for the region.

3. If the existing buffer does not meet the vegetative buffer standards of TMC 18.45.080.D.2, the buffer must be densely planted to create the appropriate native plant community through the implementation of a mitigation plan per TMC 18.45.090.F or be widened by 33 percent to ensure that the buffer provides adequate functions to protect the wetland.

E. Buffer Setbacks:

1. All commercial and industrial buildings shall be set back 15 feet and all other development shall be set back 10 feet from the buffer's edge. The building setbacks shall be measured from the foundation to the buffer's edge. ~~Building plans shall also identify a 20-foot area beyond the buffer setback within which the impacts of development will be reviewed.~~
2. The Director may waive setback requirements when a site plan demonstrates there will be no impacts to the buffer from construction or occasional maintenance activities.

F. Variation ~~o~~Of Standard Wetland Buffer Width:

1. Buffer averaging may be allowed by the Director as a Type 2 permit if the total area of the buffer after averaging is equal to the area required without averaging and the buffer at its narrowest point is never less than either 3/4 of the required width or 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater, and so long as the following criteria is met:

a. ~~The wetland has significant differences in characteristics that affect its habitat functions, and the buffer is increased adjacent to the higher-functioning area of habitat or more-sensitive portion of the wetland and decreased adjacent to the lower-functioning or less-sensitive portion as demonstrated by a critical areas report.~~ If the wetland has significant differences in characteristics that affect its habitat functions, buffer averaging may not be permitted adjacent to the higher-functioning area of habitat or more-sensitive portion of the wetland as demonstrated by a critical areas report.

b. There are no feasible alternatives to the site design that could be accomplished without buffer averaging, and the averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report.

c. Compliance with mitigation sequencing requirements (TMC Section 18.45.075).

d. Compliance with TMC Chapter 18.45.158, "Vegetation Protection and Management" section.

e. Submittal of buffer enhancement plan, mitigation monitoring and maintenance plan along with financial guarantee in accordance with this chapter. Areas of buffer increase shall be enhanced per the standards in this chapter.

2. Interrupted Buffer: A regulated buffer may be deemed interrupted where an existing legally established improvement creates a substantial barrier to the movement of water, wildlife, vegetation recruitment, or other ecological processes between the critical area and the portion of the buffer located beyond the improvement. -The Director may waive the buffer requirements for interrupted wetland buffers based on criteria in TMC 18.45.080(F)(2)(a) or require the interrupted buffers to be evaluated as a Type 2 process when these criteria are not met. ~~The regulated buffer will be deemed to end at the point it is~~

~~interrupted~~Waiver for interrupted buffer may be allowed by the Director as a Type 2 permit if it complies with the following:

a. Administrative Interrupted Buffer Waiver. The regulated buffer may be deemed interrupted administratively at the point of interruption where the buffer is separated from the critical area by one of the following existing legally established improvements:

(1) Legally constructed paved linear transportation facilities at least eight (8) feet wide, open to public or private use, that are constructed on berms or at or below natural grade, and incorporate curbing or stormwater drainage infrastructure along their edges that prevents the sheet flow of surface water across their surface;

(2) Existing or future levees legally constructed adjacent to an off-channel habitat; or

(3) Rail alignments that are constructed on berms or at or below natural grade and feature at least one train movement per day.

b. Type 2 Interrupted Buffer Waiver. The Director may determine that a buffer is interrupted by an existing legally established development including buildings, parking lots, or similar substantial improvements if the applicant demonstrates conclusively in a critical area report that all of the criteria below are met. Accessory structures, such as fences, sheds, and detached garages, shall not qualify as buffer interruptions.

(1) The existing legal improvement creates a substantial barrier to the buffer function;

(2) The portion of the buffer beyond the interruption does not provide additional protection to the critical area from the proposed development;

(3) The portion of the buffer beyond the interruption does not provide significant hydrologic, water quality, habitat, or other ecological functions, and does not contain significant trees or other valuable native vegetation; and

(4) The interrupted portion of the buffer no longer functions as part of the critical area buffer due to the presence of the intervening improvement.

c. General Requirements:

(1) The project shall enhance the remaining buffer to the maximum extent feasible.

(2) The project shall comply with the provisions regarding retention and replacement of significant trees in TMC Chapter 18.45.158, Vegetation Protection and Management, for the interrupted portion of the buffer under the applicant's control.

(3)d. Applications shall include a statement and supporting analysis from a qualified professional to affirm the interruption. ~~Where uncertainty exists regarding buffer interruption or functional loss, the Director may require a critical area report to evaluate buffer functionality. If the applicant's consultant prepares the critical area~~

~~report, the applicant shall also fund peer review of the report by the City's consultant.~~

- ~~a. The buffer is interrupted by a paved public or private road; existing or future levee legally constructed adjacent to an off-channel habitat; legally constructed buildings or parking lots. A buffer shall not be determined to be interrupted due to the presence of accessory structures such as sheds and garages;~~
- ~~b. The existing legal improvement creates a substantial barrier to the buffer function;~~
- ~~c. The interrupted buffer does not provide additional protection of the critical area from the proposed development;~~
- ~~d. The interrupted buffer does not provide significant hydrological, water quality and wildlife functions, and large trees or other significant native vegetation do not exist; and.~~
- ~~e. The project proposes to enhance the remaining buffer as much as is feasible.~~

3. Buffers for all types of wetlands will be increased when they are determined to be particularly sensitive to disturbance or the proposed development will create unusually adverse impacts. Any increase in the width of the buffer shall be required only after completion of a wetland ~~study~~ report by a qualified wetlands professional or expert that documents the basis for such increased width. An increase in buffer width may be appropriate when:

- a. The development proposal has the demonstrated potential for significant adverse impacts upon the wetland that can be mitigated by an increased buffer width; ~~or;~~
- b. The area serves as a critical habitat; or priority area for a priority species as defined by WDFW; or habitat for endangered, threatened, sensitive or monitor species listed by the federal government or the State.
- c. The buffer contains or is adjacent to land susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts.
- d. The buffer area on site does not meet the vegetative buffer requirements in TMC 18.45.080.D.2; or
- e. The land has slopes greater than 30 percent.

(Ord. 2741 § 4 (part), 2024; Ord. 2765 § 74, 2025)

§ 18.45.090. Wetlands Uses, Alterations and Mitigation.

A. Use or Development in a Wetland or its Buffer: No use or development may occur in a wetland or its buffer except as specifically allowed by TMC Chapter 18.45. Any use or development allowed is subject to review and approval by the Director. Wetland impacts must be

avoided and minimized to the greatest extent practicable, as demonstrated through implementing the mitigation sequencing requirements of TMC 18.45.075. Unavoidable impacts to wetlands must be offset by compensatory mitigation to achieve no net loss of wetland function. Where required, a mitigation plan must be developed and must comply with the standards of mitigation required in this chapter. Where unauthorized alterations occur within a critical area or its buffer, the City will require the applicant to submit a critical area ~~study~~report, that includes mitigation, subject to approval. The applicant shall be responsible for implementing the mitigation and for additional penalties as determined by the Director. In addition, federal and/or state authorization is required for direct impacts to waters of the United States or the State of Washington.

B. Alterations to Wetlands:

1. Alterations to wetlands are discouraged and are limited to the minimum necessary for eligible project feasibility. Requests for alterations must be accompanied by a mitigation plan, are subject to Director approval, and may be approved only if the following findings are made:
 - a. The alteration complies with mitigation sequencing requirements (TMC Section 18.45.075);
 - b. The alteration will not adversely affect water quality;
 - c. The alteration will not adversely affect fish, wildlife, or their habitat;
 - d. The alteration will not have an adverse effect on drainage and/or storm water detention capabilities;
 - e. The alteration will not lead to unstable earth conditions or create an erosion hazard or contribute to scouring actions;
 - f. The alteration will not be materially detrimental to any other property;
 - g. The alteration will not have adverse effects on any other critical areas; and
 - h. Complies with the maintenance and monitoring requirements listed within this section.
2. Alterations are not permitted to Category I and II wetlands unless specifically exempted under the provisions of this chapter.
3. Alterations to Category III and IV wetlands are allowed only where unavoidable and adequate mitigation is carried out in accordance with the standards of this section.
4. ~~Alterations to isolated~~ Category III wetlands 1,000 square feet or less and Category IV wetlands less than 1,000 4,000 square feet or less in size that meet all of the following ~~criteria~~conditions are not subject to the avoidance and minimization requirements of the mitigation sequence in TMC 18.45.075 and do not require buffers. They may be filled if the impacts are fully mitigated based on the remaining actions in TMC 18.45.075.A.3 through 6.

Impacts should be mitigated through the purchase of credits from a mitigation bank or in-lieu fee program. In order to verify whether the following criteria are met, it is essential that a critical area report for wetlands meeting the requirements in TMC 18.45.040 be submitted. ~~allowed where adequate mitigation is carried out in accordance with the standards of this section.~~

- a. They are not associated with ~~a~~ riparian areas or their buffers ~~corridor~~;
- b. They are not associated with Shorelines of the State or their associated buffers;
- c. They are not part of a wetland mosaic;
- d. They do not contain a Priority H ~~abitat~~ or a Priority Area identified ~~as essential for local populations of priority species identified~~ by the Washington State Department of Fish and Wildlife and do not contain state or federally listed species or their critical habitat; and
- e. They do not score 6 points or greater for habitat function on ~~in~~ the ~~Western~~ Washington State Wetland Rating System for Western Washington (Ecology Publication #14-06-029).

C. Mitigation Standards:

1. Types of Wetland Mitigation:

- a. Mitigation for wetlands shall follow the mitigation sequencing steps in this chapter and may include the following types of actions in order of decreasing preference:

(1) Restoration: The manipulation of physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions and environmental processes to a former or degraded wetland. Restoration is divided into two categories:

(a) Re-establishment: The manipulation of the physical, chemical or biological characteristics of a site with the goal of ~~restoring wetland functions to a former wetland, resulting in a net increase in wetland acres and functions~~ returning natural/historic functions and environmental processes to a former wetland. Re-establishment results in rebuilding a former wetland and results in a gain in wetland area and functions.

(b) Rehabilitation: The manipulation of the physical, chemical or biological characteristics of a site with the goal of repairing historic functions and environmental processes ~~to~~ of a degraded wetland, resulting in a gain in wetland functions but does not ~~acreage~~ result in a gain in wetland area. The area already meets wetland criteria, but hydrological processes have been altered.

(2) Creation (establishment): The manipulation of the physical, chemical or biological characteristics of a site to develop a wetland on an upland where a wetland did not

previously exist at an upland site. Establishment results in a gain in wetland area and functions.

~~(a) The manipulation of the physical, chemical or biological characteristics to develop a wetland on an upland or deepwater site, where a biological wetland did not previously exist.~~

(3) Preservation: The removal of a threat to, or preventing the decline of, wetlands by an action in or near those wetlands. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms such as recording conservation easements and providing structural protection like fences and signs. Preservation does not result in a gain of aquatic resource area or functions but may result in a gain in functions over the long term. Preservation of a wetland and associated buffer can be used only if:

(a) The Director determines that the proposed preservation is the best mitigation option;

(b) The proposed preservation site is under threat of undesirable ecological change due to permitted, planned, or likely actions that will not be adequately mitigated under existing regulations;

(c) The area proposed for preservation is of high quality or critical for the health and ecological sustainability of the watershed or sub-basin. Some of the following features may be indicative of high-quality sites:

i. Category I or II wetland rating.

ii. Rare or irreplaceable wetland type [e.g. peatlands, estuarine, mature forested wetland] or aquatic habitat that is rare or a limited resource in the area.

iii. The presence of habitat for threatened or endangered species (state, federal, or both).

iv. Provides biological and/or hydrological connectivity to other habitats.

v. Priority sites identified in an adopted watershed plan.

(d) Permanent preservation of the wetland and buffer shall be provided through a legal mechanism such as a conservation easement or tract held by an appropriate natural land resource manager/land trust.

(e) The Director may approve another legal and administrative mechanism in lieu of a conservation easement if it is determined to be adequate to protect the site.

(43) Enhancement: The manipulation of the physical, chemical or biological characteristics to heighten, intensify, or improve specific wetland function(s) ~~(such as vegetation) or to change the growth stage or composition of the vegetation present, resulting in a change in wetland functions but not in a gain in wetland acreage.~~

Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in the gain of selected wetland function(s) but may also lead to a decline in other wetland function(s). Enhancement does not result in a gain in wetland area. Enhancement activities could include planting vegetation, controlling non-native or invasive species, and modifying site elevations to alter hydroperiods in existing wetlands.

Applicants proposing to enhance wetlands and/or associated buffers shall demonstrate how the proposed enhancement will increase the wetland and/or buffer functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.

(54) Combination: A combination of the three types of actions listed above.

b. Mitigation Ratios: Required mitigation ratios are described in ~~TMC Section 18.45.090.C.1.b.(1)-(4)~~ Table 18.45.090-1 (below). ~~Alternate mitigation ratios may be accepted by the Director upon presentation of justification based on best available science that shows the proposed compensation represents a roughly proportional exchange for the proposed impacts.~~

<u>Table 18.45.090-1 – Wetland Mitigation Ratios</u>				
<u>Category of impacted wetland</u>	<u>Re-establishment or creation</u>	<u>Rehabilitation</u>	<u>Preservation</u>	<u>Enhancement</u>
<u>Category I</u>	<u>4:1</u>	<u>8:1</u>	<u>16:1</u>	<u>16:1</u>
<u>Category I (Forested)</u>	<u>6:1</u>	<u>12:1</u>	<u>24:1</u>	<u>24:1</u>
<u>Bogs</u>	<u>NA</u>	<u>NA</u>	<u>24:1</u>	<u>NA</u>
<u>Category I (Estuarine)</u>	<u>3:1 (re-establishment only)</u>	<u>6:1</u>	<u>12:1</u>	<u>Limited circumstances (case by case)</u>
<u>Category II (based on functions)</u>	<u>3:1</u>	<u>6:1</u>	<u>12:1</u>	<u>12:1</u>
<u>Category II (Estuarine)</u>	<u>4:1 (re-establishment only)</u>	<u>8:1</u>	<u>16:1</u>	<u>Limited circumstances (case by case)</u>
<u>Category III</u>	<u>2:1</u>	<u>4:1</u>	<u>8:1</u>	<u>8:1</u>
<u>Category IV</u>	<u>1.5:1</u>	<u>3:1</u>	<u>6:1</u>	<u>6:1</u>

~~(1) Alterations are not permitted to Category I or II wetlands unless specifically exempted under the provisions of this program. When alterations are allowed, mitigation ratios for Category I wetlands shall be at a 4:1 for creation or re-~~

~~establishment, 8:1 for rehabilitation, and 16:1 for enhancement. Mitigation ratios for Category II wetlands shall be at 3:1 for creation or re-establishment, 6:1 for rehabilitation and 12:1 for enhancement. Creation or re-establishment shall be contiguous to the wetland, unless an exception is authorized by the Director. For Category II estuarine wetlands, re-establishment, creation and enhancement ratios will be decided on a case-by-case basis.~~

~~(2) Alterations to Category III wetlands are prohibited except where unavoidable and mitigation sequencing in accordance with this chapter has been utilized and where mitigation is carried out in accordance with the standards in the section. Mitigation for any alteration to a Category III wetland must be provided at a ratio of 2:1 for creation or re-establishment, 4:1 for rehabilitation and 8:1 for enhancement alone.~~

~~(3) Mitigation for alteration to a Category IV wetland will be 1.5:1 for creation or re-establishment, 3:1 for rehabilitation or 6:1 for enhancement. Where only a portion of a Category IV wetland is filled, the potential functionality of the remaining reduced wetland must be considered in mitigation planning.~~

~~(14)~~ Mitigation for ~~impacts~~~~alteration~~ to wetland buffers ~~shall~~~~will~~ be at a minimum ratio of 1:1. That ratio may be increased at the Director's discretion to replace lost functions and values. Compensatory buffer mitigation shall replace those buffer functions lost from development.

2. Minimum Performance Standards: The following shall be considered the minimum performance standards for approved wetland alterations:

- a. Wetland functions improved over those of the original conditions.
- b. Hydrologic conditions and hydroperiods are improved over existing conditions and the specific hydrologic performance standards specified in the approved mitigation plan are achieved.
- c. Square feet requirements for creation, reestablishment, rehabilitation or enhancement and for proposed wetland classes are met.
- d. Vegetation native to the Pacific Northwest is installed and vegetation survival and coverage standards over time are met and maintained.
- e. Habitat features are installed, if habitat is one of the functions to be improved.
- f. Buffer and bank conditions and functions exceed the original state.

3. Maintenance and Monitoring: Maintenance and monitoring of mitigation shall be done by the property owner for a period of no less than five (5) years and for ten (10) years when the mitigation plan includes establishing forested wetland and/or buffers. Maintenance shall be carried out in accordance with the approved mitigation plan. Monitoring reports for

mitigation projects shall be submitted to the City every year, unless an alternative schedule is approved.~~Monitoring reports must be submitted to the City for review with the frequency specified in the approved mitigation plan.~~

D. Wetland and Buffer Mitigation Location:

1. In instances where portions of a wetland or wetland buffer impacted by development remain after buffer averaging, mitigation for buffer impacts shall be provided on-site, if feasible. Where an essential public road, street or right-of-way or essential public utility cannot avoid buffer alterations, buffer enhancement must be carried out at other locations around the impacted wetland.
2. On-site mitigation for wetland impacts shall be provided, except where the applicant can demonstrate that:
 - a. On-site wetland mitigation is not scientifically feasible due to problems with hydrology, soils, waves or other factors; or
 - b. Mitigation is not practical due to potentially adverse impact from surrounding land uses; or
 - c. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions compared to the altered wetland~~Existing functions created at the site of the proposed restoration are significantly greater than lost wetland functions~~; or
 - d. Regional goals for flood storage, flood conveyance, habitat or other wetland functions have been established and strongly justify location of mitigation at another site, and where off-site mitigation is demonstrated to provide a greater ecological benefit to the watershed. Refer to 2005 WRIA 9 Salmon Habitat Plan as it now reads and hereafter updated or amended, for potential offsite mitigation locations.
3. Purchase of mitigation credits through mitigation banks and in lieu fee programs is preferred over permittee responsible off-site mitigation.
4. The Director may approve, through a Type 2 Critical Area Permit, the transfer of wetland mitigation to a wetland mitigation bank or in-lieu fee program using the criteria in 4.a. through 4.f. below. Wetland mitigation bank credits shall be determined by the certified mitigation banking or in-lieu fee instrument.
 - a. Off-site mitigation is proposed in a wetland mitigation bank that has been approved by all appropriate agencies, including the Department of Ecology, Corps of Engineers, EPA and certified under state rules; and
 - b. The proposed wetland alteration is within the designated service area of the wetland bank; and

- c. The applicant provides a justification for the number of credits proposed; and
- d. The mitigation achieved through the number of credits required meets the intent of TMC Chapter 18.45; and
- e. The Director bases the decision on a written staff report, evaluating the equivalence of the lost wetland functions with the number of wetland credits required; and
- f. The applicant provides a copy of the wetland bank ledger demonstrating that the approved number of credits has been removed from the bank.

5. Where off-site mitigation location is proposed it shall comply with the following criteria:

- a. Mitigation sites located within the Tukwila City limits are preferred.
- b. Mitigation bank or in-lieu fee option is not feasible.
- c. The proposed mitigation will not alter or increase buffers on adjacent properties without their permission.

6. The Director may approve permittee-responsible offsite mitigation sites outside the city upon finding that:

- a. Adequate measures have been taken to ensure the non-development and long-term viability of the mitigation site; and
- b. Adequate coordination with the other affected local jurisdiction has occurred.
- c. The applicant has selected a site in a location where the targeted functions can reasonably be performed and sustained and has pursued sites in the following order of preference:

- (1) Sites within the immediate drainage sub-basin;
- (2) Sites within the next higher drainage sub-basin; and
- (3) Sites within Green/Duwamish River basin.

7. Wetland creation for restoration projects may only be approved if the applicant can show:

- (1) that the adjoining property owners are amenable to having wetland buffers extend onto or across their property; or
- (2) that the on-site wetland buffers are sufficient to protect the functions and values of the wetland and the project as a whole results in net environmental benefit.

E. Mitigation Timing: Mitigation projects shall be completed prior to activities that will permanently disturb wetlands and either prior to or immediately after activities that will temporarily disturb wetlands. Construction of mitigation projects shall be timed to reduce impacts to existing wildlife, flora and water quality, and shall be completed prior to use or

occupancy of the activity or development. The Director may allow activities that permanently disturb wetlands prior to implementation of the mitigation plan under the following circumstances:

1. To allow planting or re-vegetation to occur during optimal weather conditions;
2. To avoid disturbance during critical wildlife periods; or
3. To account for unique site constraints that dictate construction timing or phasing.

F. Wetland Mitigation Plan Content:

1. The mitigation plan shall be developed as part of a critical area ~~report~~^{study} by a qualified professional. Wetland and/or buffer alteration or relocation may be allowed only when a mitigation plan clearly demonstrates that the changes would ~~improve~~^{be an improvement of} wetland and buffer ~~ecological functions and values~~^{quantitative and qualitative functions}. The plan shall show how water quality, habitat, and hydrology would be improved.

2. The scope and content of a mitigation plan shall be decided on a case-by-case basis taking into account the degree of impact and the extent of the mitigation measures needed. As the impacts to the critical area increase, the mitigation measures to offset these impacts will increase in number and complexity.

3. For wetlands, the format of the mitigation plan should follow that established in Wetland Mitigation in Washington State, Part 2 – Developing Mitigation Plans (Washington Department of Ecology, Corps of Engineers, EPA, March 2006 or as amended).

4. The components of a complete mitigation plan are as follows:

a. The written report shall be prepared by a qualified professional and contain, at a minimum:

(1) The name and contact information of the applicant; the name, qualifications, and contact information of the primary author(s) of the compensatory mitigation plan; a description of the development proposal; a summary of the impacts and proposed compensation concept; identification of all the local, state, and federal wetland-related permits required for the project; and a vicinity map for the project.

(2) Description of how the development project has been designed to avoid, minimize, or reduce adverse impacts to wetlands consistent with TMC 18.45.075.

(3) Description of the existing wetland and buffer areas proposed to be altered. Include acreage or square footage, water regime, vegetation, soils, functions, landscape position, and surrounding land uses. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating.

(4) Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of the existing conditions, including acreage or square footage of wetlands and uplands, water regime, sources of water, vegetation, soils, functions, landscape position, and surrounding land uses. Estimate future conditions in this location if the compensation action are not undertaken.

(5) Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, established, or restored compensatory mitigation areas. Where applicable, include illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions.

(6) A description of the proposed actions for compensation of wetland and buffer areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and expected categories of wetlands.

(7) A description of the proposed mitigation construction activities and timing of activities.

(8) Performance standards (measurable for years post-installation) for wetland and buffer areas, a monitoring schedule, a maintenance schedule, and actions proposed by year.

(9) A discussion of ongoing management practices that will protect wetlands after the development project has been implemented, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands).

(10) A performance security or other assurance device, as described in TMC Section 18.45.210, estimate for the entire compensatory mitigation project, including the following elements: site preparation, plant materials, construction materials, installation and oversight, maintenance at least twice per year for up to ten (10) years, annual monitoring field work and reporting, contingency actions for a maximum of the total required number of years for monitoring, and removal of all non-natural site implements (e.g., irrigation equipment, construction fencing, plant protectors, weed barrier fabric) by the end of the monitoring period.

(11) Proof of establishment of Notice on Title, per the requirements in TMC 18.45.170, for the remaining wetlands and buffers on the development project site (if any) and a legal site protection mechanism for the compensatory mitigation areas.

b. The scaled plan sheets shall contain, at a minimum:

(1) Mapped, ground-ground verified edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, and location of proposed wetland and/or buffer compensation actions.

(2) Existing topography at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed in the compensation area(s). Also include existing cross-sections of wetland areas on the development site that are proposed to be altered and of the proposed areas of wetland and buffer compensation.

(3) Conditions expected from the proposed actions on site, including future hydrogeomorphic classes, vegetation community types (e.g., Cowardin class), and future hydroperiods.

(4) Required wetland buffers for existing wetlands and proposed compensation areas. Also identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter.

(5) A planting plan for the compensation area, including all species by proposed stratum, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species, and timing of installation.

~~a. Baseline information of quantitative data collection or a review and synthesis of existing data for both the project impact zone and the proposed mitigation site.~~

~~b. Environmental goals and objectives that describe the purposes of the mitigation measures. This should include a description of site selection criteria, identification of target evaluation species and resource functions.~~

~~c. Performance standards of the specific criteria for fulfilling environmental goals and for beginning remedial action or contingency measures. They may include water quality standards, species richness and diversity targets, habitat diversity indices, or other ecological, geological or hydrological criteria.~~

~~d. A detailed construction plan of the written specifications and descriptions of mitigation techniques. This plan should include the proposed construction sequence, construction management and tree protection and be accompanied by detailed site diagrams and blueprints that are an integral requirement of any development proposal.~~

~~e. A monitoring and/or evaluation program that outlines the performance standards and methods for assessing whether those performance standards are achieved during the specified monitoring period, at least 5 years. At a minimum, the monitoring plan should address vegetative cover, survival, and species diversity. Any project that alters the dimensions of a wetland or creates a new wetland shall also monitor wetland hydrology. An outline shall be included that spells out how the monitoring data will be evaluated by agencies that are tracking the mitigation project's progress.~~

~~f. Contingency plan identifying potential courses of action and any corrective measures to be taken when monitoring or evaluation indicates project performance standards have not been met.~~

~~g. Performance security or other assurance devices as described in TMC Section 18.45.210.~~

(Ord. 2741 § 4 (part), 2024; Ord. 2765 § 75, 2025)

§ 18.45.100. Watercourse Designations, Ratings and Buffers.

A. Watercourse Ratings: Watercourse ratings are consistent with the Washington Department of Natural Resources water typing categories (WAC 222-16-030) or as amended, which are based on the existing habitat functions and classified as follows:

1. Type S Watercourse: Watercourses inventoried as Shorelines of the State, under RCW 90.58. These watercourses shall be regulated under TMC Chapter 18.44, Shoreline Overlay.
2. Type F Watercourse: Those watercourses that are known to be used by fish or meet the physical criteria to be potentially used by fish (as established in WAC 222-16-030~~1(3)~~ or as amended) and that have perennial (year-round) or seasonal flows.
3. Type Np Watercourse: Those watercourses that have perennial flows and do not meet the criteria of a Type F stream or have been proven not to contain fish using methods described in the Forest Practices Board Manual Section ~~13~~23.
4. Type Ns Watercourse: Those watercourses that have intermittent flows (do not have surface flow during at least some portion of the year); do not meet the physical criteria of a Type F watercourse; or have been proven to not support fish using methods described in the Forest Practices Board Manual Section ~~13~~23.

B. Watercourse Buffers: Any land alteration must be located out of the buffer areas as required by this section. Watercourse buffers are intended in general to:

1. Minimize long-term impacts of development on properties containing watercourses;
2. Protect the watercourse's function and values, with special consideration for anadromous fish, from adverse impacts during development;
3. Preserve the edge of the watercourse and its buffer for its critical habitat value;
4. Provide shading to maintain stable water temperatures and vegetative cover for additional wildlife habitat;
5. Provide input of organic debris and uptake of nutrients;

6. Provide an area to stabilize banks, to absorb overflow during high water events and to allow for slight variation of aquatic system boundaries over time due to hydrologic or climatic effects;
7. Reduce erosion and increased surface water runoff;
8. Reduce loss of, or damage to, property;
9. Intercept fine sediments from surface water runoff and serve to minimize water quality impacts; and
10. Protect the critical area from human and domestic animal disturbance.

An undisturbed and high quality critical area or buffer may substitute for the yard setback and landscape requirements of TMC Chapters 18.50 and 18.52.

C. Watercourse Buffer Widths: The following buffer widths, measured from the Ordinary High Water Mark (OHWM), apply to each side of a watercourse. If the OHWM cannot be determined, then the buffer will be measured from the top of bank. Where a channel migration zone (CMZ) is present, the buffer shall be measured from the edge of the CMZ.:

<u>Table 18.45.100-1 – Watercourse Buffer Widths</u>	
<u>Stream Type (WAC 222-16-030)</u>	<u>Standard Buffer Width if Fully Vegetated per 18.45.100(C)(1)</u>
<u>Type S Watercourse</u>	<u>Regulated under TMC Chapter 18.44, Shoreline Overlay.</u>
<u>Type F Watercourse</u>	<u>150 feet</u>
<u>Type N Watercourse</u>	<u>100 feet</u>

1. The buffer widths in Table 18.45.100-1 above assume the buffer is vegetated with a native plant community appropriate for the ecoregion. To be considered fully functioning, a watercourse buffer must contain:

a. An average of 80% native vegetation cover, with no more than 10% noxious weed cover; and

b. A native plant community that includes tree, shrub, and groundcover strata in proportions ~~that mimic~~ representative of native forest for the region.

2. If the existing buffer does not meet vegetative buffer standards above, the buffer must be densely planted to create the appropriate native plant community through the implementation of a mitigation plan per TMC 18.45.110.E or be widened by 33 percent to ensure that the buffer provides adequate functions to protect the stream. ~~Type S Watercourse: Regulated under TMC Chapter 18.44, Shoreline Overlay.~~

~~2. Type F Watercourse: 100-foot-wide buffer.~~

~~3. Type Np Watercourse: Standard 80-foot-wide buffer; alternate buffer in the 50-65 range allowed with buffer enhancement.~~

~~4. Type Ns Watercourse: 50-foot-wide buffer.~~

D. Buffer Setbacks:

1. All commercial and industrial buildings shall be set back 15 feet and all other development shall be set back 10 feet. Building setbacks shall be measured from the foundation to the buffer's edge. Building plans shall also identify a 20-foot area beyond the buffer setback within which the impacts of development will be reviewed.
2. The Director may waive setback requirements when a site plan demonstrates there will be no impacts to the buffer from construction or occasional maintenance activities.

E. Variation of Standard Watercourse Buffer Width:

1. Buffer Averaging: Buffer averaging may be allowed by the Director as a Type 2 Critical Area Permit if the total area of the buffer after averaging is equal to the area required without averaging and the buffer at its narrowest point is never less than either 3/4 of the required width or 100 feet, whichever is greater; and the following criteria is met:

a. ~~The watercourse has significant differences in characteristics that affect its habitat functions, and the buffer is increased adjacent to the higher-functioning area of habitat or more-sensitive portion of the watercourse and decreased adjacent to the lower-functioning or less-sensitive portion as demonstrated by a critical areas report from a qualified professional.~~ If the riparian area has significant differences in characteristics that affect its habitat functions, buffer averaging may not be permitted adjacent to the higher-functioning area of habitat or more-sensitive portion of the riparian area as demonstrated by a critical areas report.

b. There are no feasible alternatives to the site design that could be accomplished without buffer averaging, and the averaged buffer will not result in degradation of the watercourse's functions and values as demonstrated by a critical areas report.

c. Compliance with mitigation sequencing requirements (TMC Section 18.45.075).

d. Compliance with TMC Section 18.45.158, "Vegetation Protection and Management."

e. Submittal of buffer enhancement plan, mitigation monitoring and maintenance plan, along with financial guarantee in accordance with this chapter.

f. Buffer averaging shall not adversely affect water quality.

g. No adverse affect to water temperature or shade potential will occur to the watercourse using methodology per 2011 Washington State Department of Ecology's Green River Temperature Total Maximum Daily Load (TMDL) assessment or as amended.

2. Interrupted Buffer: A regulated buffer may be deemed interrupted where an existing legally established improvement creates a substantial barrier to the movement of water, wildlife, vegetation recruitment, or other ecological processes between the critical area and the portion of the buffer located beyond the improvement. The Director may waive the buffer requirements for interrupted watercourse buffers or require the interrupted buffers to be evaluated as Type 2 process.

a. Administrative Interrupted Buffer Waiver. The regulated buffer may be deemed interrupted administratively at the point of interruption where the buffer is separated from the critical area by one of the following existing legally established improvements:

(1) Legally constructed paved linear transportation facilities at least eight (8) feet wide, open to public or private use, that are constructed on berms or at or below natural grade, ~~and incorporate curbing or stormwater drainage infrastructure along their edges that prevents the sheet flow of surface water across their surface~~;

(2) Existing or future levees legally constructed adjacent to an off-channel habitat; or

(3) Rail alignments that are constructed on berms or at or below natural grade and feature at least one train movement per day.

b. Type 2 Interrupted Buffer Waiver. The Director may determine that a buffer is interrupted by an existing legally established development including buildings, parking lots, or similar substantial improvements if the applicant demonstrates conclusively in a critical area report that all of the criteria below are met. Accessory structures, such as fences, sheds, and detached garages, shall not qualify as buffer interruptions.

(1) The existing legal improvement creates a substantial barrier to the buffer function;

(2) The portion of the buffer beyond the interruption does not provide additional protection to the critical area from the proposed development;

(3) The portion of the buffer beyond the interruption does not provide significant hydrologic, water quality, habitat, or other ecological functions, and does not contain significant trees or other valuable native vegetation; and

(4) The interrupted portion of the buffer no longer functions as part of the critical area buffer due to the presence of the intervening improvement.

c. General Requirements:

(1) The project shall enhance the remaining buffer to the maximum extent feasible.

(2) The project shall comply with the provisions regarding retention and replacement of significant trees in TMC Chapter 18.45.158, Vegetation Protection and Management, for the interrupted portion of the buffer under the applicant's control.

d. Where uncertainty exists regarding buffer interruption or functional loss, the Director may require a critical area report to evaluate buffer functionality. If the applicant's consultant prepares the critical area report, the applicant shall also fund peer review of the report by the City's consultant.

~~2. Interrupted Buffer: Waiver for interrupted buffer may be allowed by the Director as a Type 2 Critical Area Permit if it complies with the following:~~

- ~~a. The buffer is interrupted by a paved public or private road, legally constructed buildings, or parking lots. A buffer shall not be determined to be interrupted due to the presence of accessory structures such as sheds and garages; and~~
- ~~b. The existing legal improvement creates a substantial barrier to the buffer function; and~~
- ~~c. The interrupted buffer does not provide additional protection of the critical area from the proposed development; and~~
- ~~d. The interrupted buffer does not provide significant hydrological, water quality and wildlife functions, and large trees or other significant native vegetation do not exist; and~~
- ~~e. The project proposes to enhance the remaining buffer as much as is feasible.~~

3. Buffers for all types of watercourses will be increased when they are determined to be particularly sensitive to disturbance or the proposed development will create unusually adverse impacts. Any increase in the width of the buffer shall be required only after completion of a watercourse study by a qualified professional or expert that documents the basis for such increased width. An increase in buffer width may be appropriate when:

- a. The development proposal has the demonstrated potential for significant adverse impacts upon the watercourse that can be mitigated by an increased buffer width; or
- b. The area serves as a critical habitat; or priority area for a priority species as defined by WDFW; or habitat for endangered, threatened, sensitive or monitor species listed by the federal government or the State.
- c. The buffer contains or is adjacent to land susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse watercourse impacts.
- d. The buffer area on site does not meet the vegetative buffer requirements in TMC 18.45.100.C.1.
- e. The site contains slopes greater than 30 percent.

(Ord. 2741 § 4 (part), 2024; Ord. 2765 § 76, 2025)

§ 18.45.110. Watercourse Alterations and Mitigation.

A. Watercourse Alterations: No use or development may occur in a watercourse or its buffer except as specifically allowed by this chapter. Any use or development allowed is subject to the standards of this chapter.

B. Alterations: Daylighting and meandering of watercourses is encouraged. Culvert replacement is required where applicable, and upgrades are required to meet State standards. Piping, dredging, diverting or rerouting is discouraged. Culverts are piped segments of streams that flow under a road, trail or driveway. Daylighting of a stream refers to taking a stream out of a pipe that is flowing underground, but not necessarily under a road. All watercourse alterations shall be carried out as specified by the State Department of Fish and Wildlife in accordance with an approved Hydraulic Project Approval (HPA).

1. The City encourages daylighting of a watercourse that is located in a pipe or meandering of a previously altered watercourse to restore the stream to a more natural and open condition. Daylighting or restoration of a watercourse may be approved based on a critical area report and an approved watercourse daylighting or restoration plan prepared by a qualified professional. The critical area report and watercourse daylighting or restoration plan shall include the following: ~~As an incentive for daylighting, the Director may approve reduced buffers or setbacks. Daylighting or meandering of a watercourse is only permitted if the following criteria are met:~~

a. The critical area report and watercourse daylighting or restoration plan shall include the following:

(1) A detailed site plan of existing improvements, utilities, topography, and hydrologic flow in relation to the daylighting or watercourse restoration activities. The site plan shall illustrate existing and proposed channel conditions, including the location and configuration of the daylighted or restored watercourse, any proposed channel meanders, flow conditions before and after the project, and the connection to upstream and downstream reaches.

(2) Demonstration that the design will:

(a) Improve of ~~the~~ the values and functions of the watercourse ~~are improved,~~ including reducing stream flow during storm and flood events, and providing fish and wildlife habitat;

(b) Include the formation of gentle and stable side slopes, no steeper than two (2) feet horizontal to one (1) foot vertical, and the installation of both temporary and permanent erosion-control features that include native vegetation on stream

banks. The steepness of the slope of the stream may be modified given existing conditions;

(c) Include native vegetation normally associated with streams, emphasizing native plants with high food and cover value for fish and wildlife and approved by the City;

(d)~~b. No~~Not result in adverse impact to fish~~are expected to occur;-~~

(e)~~e. Maintain or improve W~~water quality~~is equal or better than existing condition;-~~

(f)~~d. Maintain h~~Hydraulic capacity~~is maintained~~ within the new channel~~;- and~~

(g)~~e. The watercourse design complies~~Comply with the Washington Department of Fish and Wildlife Water Crossing Design Guidelines Manual 2013 as it now reads and hereafter updated or amended.

b. Incentives. To encourage voluntary stream daylighting and restoration, the following incentives may be applied when a daylighting or restoration project complies with the performance standards of TMC 18.45.110.B.1.a(2) and is supported by a critical area report.

(1) The standard watercourse buffer otherwise required for the applicable watercourse classification may be reduced by up to twenty-five percent where daylighting results in a net gain in ecological function, as demonstrated through a critical areas report and the following standards are met:

(a) The applicant must demonstrate water quality will be maintained through low impact development techniques, stormwater pre-treatment or equivalent measures;

(b) The adjacent riparian buffer is planted and restored in accordance with the performance standards in TMC 18.45.100.C.1; and

(c) The resulting buffer is contiguous and net ecological gain in function is demonstrated.

(2) Buffer averaging may be approved in accordance with the buffer averaging provisions of this chapter.

2.-When an existing culvert or watercourse crossing is replaced on a property or within a public or private right-of-way, and the structure conveys a fish-bearing watercourse or a watercourse with the potential to support fish based on the criteria in WAC 222-16-031, Washington Forest Practices Rules and Regulations, ~~On properties with culverts that are being developed or re-developed, or when stream crossings in public or private rights-of-way~~

~~are being replaced, existing culverts that carry fish-bearing watercourses or those that could bear fish (based on the criteria in WAC 222-16-031, Washington Forest Practices Rules and Regulations)~~ the replacement shall meet the standards of the ~~be upgraded to meet the standards in the~~ Washington Department of Fish and Wildlife Water Crossing Design Guidelines Manual 2013, or as amended, where~~if~~ technically feasible. Any culvert replacement shall comply with the following criteria:

- a. The values and functions of the watercourse are improved including reducing stream flow during storm and flood events, and providing fish and wildlife habitat.
- b. No adverse impact to fish are expected to occur.
- c. Water quality is equal or better than existing condition.
- d. Hydraulic capacity is maintained within the new channel.
- e. The watercourse design complies with the Washington Department of Fish and Wildlife Water Crossing Design Guidelines manual 2013 as it now reads and hereafter updated or amended.

f. The project shall comply with Washington Department of Fish and Wildlife in-water work timing restrictions and, prior to construction, shall obtain all required federal and state permits.

~~43.~~ Piping, dredging, diverting or rerouting of any watercourse shall be avoided, if possible. Relocation of a watercourse or installation of a bridge is preferred to piping. If piping occurs in a watercourse, it shall be limited to the degree necessary for stream crossings for access. Additionally, these alterations may only occur with the permission of the Director as a Type 2 decision and subject to mitigation sequencing and an approved mitigation plan, and shall meet the following criteria:

- a. The watercourse alteration shall comply with the standards in current use and the standards of the Washington Department of Fish and Wildlife Water Crossing Design Guidelines Manual 2013 or as amended, demonstrate that there is no other feasible alternative route for the crossing with less impact on the environment, and ensure that fish passage will not be impaired.
- b. The watercourse alteration shall not cause adverse impacts to fish, confine the channel or floodplain, or adversely affect riparian habitat (including downstream habitat).
- c. Maintenance dredging of watercourses shall be allowed only when necessary to protect public safety, structures and fish passage and shall be done as infrequently as possible. Long-term solutions such as stormwater retrofits are preferred over ongoing maintenance dredging.

- d. Stormwater runoff shall be detained and infiltrated to preserve the existing hydrology of the watercourse.
- e. All construction shall be designed to have the least adverse impact on the watercourse, buffer and surrounding environment. Construction shall minimize sedimentation through implementation of best management practices for erosion control.
- f. As a condition of approval, the Director may require water quality monitoring for stormwater discharges to streams, and additional treatment of stormwater if water quality standards are not being met.
- g. Where allowed, piping shall be limited to the shortest length possible as determined by the Director to allow access onto a property.
- h. Where water is piped for an access point, those driveways or entrances shall be consolidated to serve multiple properties where possible, and to minimize the length of piping.
- i. Piping shall not create an entry point for road runoff, create downstream scour, or cause erosion or sedimentation.
- j. Water quality must be as good or better for any water exiting the pipe as for the water entering the pipe, and flow must be comparable.
- k. The project shall comply with Washington Department of Fish and Wildlife in-water work timing restrictions and, prior to construction, shall obtain all required federal and state permits.

C. Mitigation Standards:

1. The following shall be considered the minimum standards for approved mitigation projects and shall ensure the maintenance or improvement of key riparian ecological functions, including bank stability, shade, pollution removal, input of detrital nutrients, and recruitment of large woody debris:
 - a. Maintenance or improvement of stream channel habitat and dimensions such that the fisheries habitat functions of the compensatory stream meet or exceed that of the original stream;
 - b. Bank and buffer configuration restored to an enhanced state;
 - c. Channel, bank and buffer areas replanted with native vegetation that improves upon the original condition in species diversity and density;
 - d. Stream channel bed and biofiltration systems equivalent to or better than in the original stream;

- e. Original fish and wildlife habitat enhanced unless technically not feasible; and
- f. If onsite mitigation is not possible and to ensure there is no net loss of watercourse functions ~~including, but not limited to, shading~~, the applicants may pay into an in-lieu fund, if available, [consistent with the provisions in TMC 18.45.090.D.4](#), to ensure that projects are fully mitigated.

2. Relocation of a watercourse shall not result in the new critical area or buffer extending beyond the development site and onto adjacent property without the written agreement of the affected property owners.

D. Mitigation Timing: Mitigation construction shall be completed before modification of the existing watercourse. The Director may allow activities that permanently disturb a watercourse prior to implementation of the mitigation plan under the following circumstances:

- 1. To allow planting or re-vegetation to occur during optimal weather conditions; or
- 2. To avoid disturbance during critical wildlife periods; or
- 3. To account for unique site constraints that dictate construction timing or phasing.

E. Mitigation Plan Content: All impacts to a watercourse that degrade the functions of the watercourse or its buffer shall be avoided. If alteration to the watercourse or buffer is unavoidable, all adverse impacts resulting from a development proposal or alteration shall be mitigated in accordance with an approved mitigation plan as described below.

- 1. Mitigation plans shall be completed for any proposals of dredging, filling, diverting, piping and rerouting of watercourses or buffer impacts and shall be developed as part of a critical area ~~report~~[study](#) by a qualified professional. The plan must show how water quality, treatment, erosion control, pollution reduction, wildlife and fish habitat, and general watercourse quality would be improved.
- 2. The scope and content of a mitigation plan shall be decided on a case-by-case basis taking into account the degree of impact and extent of mitigation measures needed. As the impacts to the watercourse or its buffer increase, the mitigation plan to offset these impacts will increase in extent and complexity.
- 3. The components of a complete mitigation plan are as follows:

[a. The written report shall be prepared by a qualified professional and contain, at a minimum:](#)

[\(1\) The name and contact information of the applicant; the name, qualifications, and contact information of the primary author\(s\) of the mitigation plan; a description of the development proposal; a summary of the impacts and proposed compensation](#)

concept; identification of all the local, state, and federal wetland-related permits required for the project; and a vicinity map for the project.

(2) Description of how the development project has been designed to avoid, minimize, or reduce adverse impacts to the watercourse consistent with TMC 18.45.075.

(3) Description of the existing watercourse and buffer areas proposed to be altered. Include acreage or square footage, stream length, bank full width, flow characteristics, buffer vegetation, landscape position, fish and other wildlife use, in-stream structures, publicly documented water quality issues, fish barriers and other relevant information.

(4) If utilizing an in-lieu fund, provide a description of the mitigation site, including location and rationale for selection. Include an assessment of the existing conditions, including acreage or square footage, water regime, sources of water, vegetation, soils, functions, landscape position, and surrounding land uses. Estimate future conditions in this location if the compensation action are not undertaken.

(5) Surface and subsurface hydrologic conditions, including an analysis of existing and proposed changes to existing hydrologic conditions.

(6) A description of the proposed actions for compensation of watercourse and buffer areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and expected categories of wetlands.

(7) A description of the proposed mitigation construction activities and timing of activities.

(8) Performance standards (measurable for years post-installation) for watercourse and buffer areas, a monitoring schedule, a maintenance schedule, and actions proposed by year.

(9) A discussion of ongoing management practices that will protect the watercourse after the development project has been implemented, including proposed monitoring and maintenance programs.

(10) A performance security or other assurance device, as described in TMC Section 18.45.210, estimate for the entire compensatory mitigation project, including the following elements: site preparation, plant materials, construction materials, installation and oversight, maintenance at least twice per year for up to ten (10) years, annual monitoring field work and reporting, contingency actions for a maximum of the total required number of years for monitoring, and removal of all non-natural site

implements (e.g., irrigation equipment, construction fencing, plant protectors, weed barrier fabric) by the end of the monitoring period.

(11) Proof of establishment of Notice on Title for the watercourse and buffers on the development project site (if any) and a legal site protection mechanism for the compensatory mitigation areas.

b. The scaled plan sheets shall contain, at a minimum:

(1) Mapped, ground-ground verified edges of the existing watercourse and buffers, proposed areas of watercourse and/or buffer impacts, and location of proposed watercourse and/or buffer compensation actions.

(2) Existing topography at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed in the compensation area(s). Also include existing cross-sections of riparian areas on the development site that are proposed to be altered and of the proposed areas of watercourse and buffer compensation.

(3) Conditions expected from the proposed actions on site, including future vegetation community types, and future hydrologic conditions.

(4) Required watercourse buffers for existing and proposed compensation areas. Also identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter.

(5) A planting plan for the compensation area, including all species by proposed stratum, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species, and timing of installation.

~~a. Baseline information including existing watercourse conditions such as hydrologic patterns/flow rates, stream gradient, bank full width, stream bed conditions, bank conditions, fish and other wildlife use, in-stream structures, riparian conditions, buffer characteristics, water quality, fish barriers and other relevant information.~~

~~b. Environmental goals and objectives that describe the purposes of the mitigation measures. This should include a description of site selection criteria, identification of target evaluation species and functions.~~

~~c. Performance standards for fulfilling environmental goals and objectives and for triggering remedial action or contingency measures. Performance standards may include water quality standards, species richness and diversity targets, habitat diversity indices, creation of fish habitat, or other ecological, geological or hydrological criteria.~~

~~d. Detailed construction plan of the written specifications and descriptions of mitigation techniques. This plan should include the proposed construction sequence and~~

~~construction management, and be accompanied by detailed site diagrams and blueprints that are an integral requirement of any development proposal.~~

~~e. Monitoring and/or evaluation program that outlines the approach for assessing a completed project. At least five years of monitoring is required. An outline shall be included that spells out how the monitoring data will be evaluated by agencies that are tracking the mitigation project's process. For projects that discharge stormwater to a stream, the Director may require water quality monitoring.~~

~~f. Contingency plan identifying potential courses of action and any corrective measures to be taken when monitoring or evaluation indicates project performance standards have not been met.~~

~~g. Performance security or other assurance devices as described in TMC Section 18.45.210.~~

(Ord. 2741 § 4 (part), 2024; Ord. 2765 § 77, 2025)

§ 18.45.120. Geologically Hazardous Areas ~~of Potential Geologic Instability Designations, Ratings and Buffers.~~

A. Designation: ~~Potential areas of geologic instability~~ Geologically hazardous areas include ~~areas of potential~~ erosion hazard areas, ~~and~~ landslide hazards areas, mine hazard areas, and seismic hazard areas. Areas of potential geologic instability are classified as follows:

1. Erosion hazard areas. Those areas in the City underlain by soils identified by the Natural Resources Conservation Service (NRCS) or identified through a site-specific analysis that are subject to severe erosion when disturbed. Erosion susceptibility factors include slope, soil type, vegetation cover, and hydrology.

2. Landslide hazard areas. Those areas potentially subject to risk of mass movement due to a combination of geologic, topographic, and hydrologic factors. Common susceptibility factors include bedrock, slope gradient, slope aspect, groundwater, and other factors. Landslide hazard areas include mapped historic failures mapped by U.S. Geologic Survey, Department of Natural Resources, NRCS or similar agency. Landslide hazard areas include the following:

a1. Class 1 areas, which have a slope of less than 15%;

b2. Class 2 areas, which have a slope between 15% and 40%, and which are underlain by relatively permeable soils;

c3. Class 3 areas, which include areas sloping between 15% and 40%, and which are underlain by relatively impermeable soils or by bedrock, and which also include all areas sloping more steeply than 40%;

d4. Class 4 areas, which include sloping areas with mappable zones of groundwater seepage, and which also include existing mappable landslide deposits regardless of slope.

3. Mine hazard areas. Those areas that include those underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or air shafts. These areas may be designated on City maps or identified by a qualified professional as potentially affected by abandoned mines.

4. Seismic hazard areas. Areas of known faults or Holocene displacement, or areas mapped by Washington Department of Natural Resources as susceptible to liquefaction.

B. Mapping:

1. The approximate location, extent, and designation of geologically hazardous areas ~~areas of potential geologic instability~~ are depicted in the City's Critical Areas Map. Actual boundaries and designations shall be determined by a qualified professional on a site-specific basis.

2. In addition to the City's Critical Areas Map, the following publicly available mapping information may be used to identify geologically hazardous areas ~~determine appropriate designations~~:

a. ~~For historic landslides, areas designated as quaternary slumps, earthflows, mudflows, or landslides on maps published by the~~ U.S. Geological Survey landslide and seismic hazard maps ~~or the WDNR Division of Geology and Earth Resources;~~

b. ~~For potential or historic landslides, those areas mapped by the~~ WDNR slope stability map ~~(slope stability mapping) as unstable (U or Class 3), unstable old slides (UOS or Class 4), or unstable recent slides (URS or Class 5);~~

c. ~~For soil characteristics, the~~ U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) Official Soil Survey Data; ~~and~~

d. For general instability, those areas mapped by the NRCS as having a significant limitation for building site development; and

e. WDNR Geologic Information Portal.

C. Buffers: The following critical area buffers are established and shall be measured from the edges of the geologically hazardous areas below as delineated in the critical areas report by a qualified professional.

1. General geologically hazardous areas buffers.

a. Landslide hazards: 50-feet.

b. Erosion hazard areas: 50-feet.

2. Buffer exemption. An exemption may be requested for any geologic hazard area, created through previous, legal grading activities, to allow the hazard to be altered as part of a development proposal.

3. Buffer modification. Proposed modification to the standard geological hazard area buffer shall be documented in a critical areas report (TMC 18.45.040) and may be approved through the permit process for the project. Minimum buffers for landslide hazard areas and erosion hazard areas in 15-feet if a qualified professional determines risks are minimal and neighboring properties or natural resources will not be adversely affected.

4. The buffers for areas of potential geologic instability are intended to:

a1. Minimize long-term impacts of development on properties containing critical areas;

b2. Protect critical areas from adverse impacts during development;

c3. Prevent loading of potentially unstable slope formations;

d4. Protect slope stability;

e5. Provide erosion control and attenuation of precipitation surface water and stormwater runoff; and

f6. Reduce loss of or damage to property.

D. Geotechnical Reports: Each development proposal containing or threatened by a geologically hazardous area ~~an area of potential geologic instability Class 2 or higher~~ shall be subject to a geotechnical report pursuant to the requirements of TMC Section 18.45.040.E~~C~~. The geotechnical report shall analyze any proposed changes to the general buffer widths listed under TMC 18.45.120.C.1 and make recommendations on the need for and width of any minimum setbacks or buffers necessary to achieve the goals and requirements of this chapter. ~~Development proposals shall then include the buffer distances as defined within the geotechnical report.~~

(Ord. 2741 § 4 (part), 2024; Ord. 2765 § 78, 2025)

§ 18.45.130. Geologically Hazardous Areas ~~of Potential Geologic Instability~~ Uses, Exemptions, Alterations and Mitigation.

A. General: The uses permitted in the underlying zoning district may be undertaken on sites that contain geologically hazardous areas ~~of potential geologic instability~~ subject to the standards of this section and the recommendations of a geotechnical ~~study~~report.

B. Exemptions: The following areas are exempt from regulation as geologically hazardous areas:

1. Temporary stockpiles of topsoil, gravel, beauty bark or other similar landscaping or construction materials;

2. Slopes related to materials used as an engineered pre-load for a building pad;
3. Roadway embankments within right-of-way or road easements; and
4. Slopes retained by approved engineered structures.

C. General Development Standards~~Alterations~~:

1. Prior to permitting alteration of an geologically hazardous area ~~of potential geologic instability~~, the applicant must demonstrate one of the following:
 - a. There is no evidence of past instability or earth movement in the vicinity of the proposed development, and, where appropriate, quantitative analysis of slope stability indicates no significant risk to the proposed development or surrounding properties; or
 - b. The geologically hazardous area ~~of potential geologic instability~~ can be modified or the project can be designed so that any potential impact to the project and surrounding properties is eliminated, slope stability is not decreased, and the increase in surface water discharge or sedimentation shall not decrease slope stability.
2. Where any portion of an geologically hazardous area or its buffer ~~of potential geologic instability~~ is cleared for development, has been damaged by human activity, or is infested by noxious weeds, a landscaping plan for the site shall be required. The plan shall include replanting of ~~preferably~~ native trees (an equal mix of evergreen and deciduous), shrubs and groundcover. The landscaping plan must be approved by the Director. Replacement vegetation shall be sufficient to provide erosion and stabilization protection.
3. Critical facilities shall not be sited within or below an geologically hazardous area ~~of potential geologic instability~~ unless there is no practical alternative (demonstrated by the applicant).
4. Land disturbing activities in an geologically hazardous area ~~of potential geologic instability~~ shall provide for storm water quality and quantity control, including preparation of a TESC and permanent drainage plan prepared by a professional engineer licensed in Washington.
5. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an geologically hazardous area ~~of potential geologic instability~~ or its buffer shall be prohibited. When permitted as part of an approved alteration, vegetation removal shall be minimized to the extent practicable.
6. Surface drainage, including downspouts, shall not be directed across the face of an geologically hazardous area ~~of potential geologic instability~~; if drainage must be discharged from the top of a hazard to its toe, it shall be collected above the top and directed to the toe by tight line drain, and provided with an energy dissipative device at the toe for discharge to a swale or other acceptable natural drainage areas.

7. Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography (minimize grading/cut and fill to amount necessary).

8. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties.

D. Development Standards for Mine Hazard Areas.

1. Development of a site containing an abandoned mine area may be permitted when a geotechnical report shows that significant risks associated with the abandoned mine workings can be eliminated or mitigated so that the site is safe. Approval shall be obtained from the Director before any building or land-altering permit processes begin.

2. Any building setback or land alteration shall be based on the geotechnical report.

E.D. Disclosures, Declarations and Covenants:

1. It shall be the responsibility of the applicant to submit, consistent with the findings of the geotechnical report, structural plans that were prepared and stamped by a structural engineer. The plans and specifications shall be accompanied by a letter from the geotechnical engineer who prepared the geotechnical report stating that in his/her judgment the plans and specifications conform to the recommendations in the geotechnical report, the risk of damage to the proposed development site from soil instability will be minimal subject to the conditions set forth in the report, and the proposed development will not increase the potential for soil movement.

2. Further recommendations signed and sealed by the geotechnical engineer shall be provided should there be additions or exceptions to the original recommendations based on the plans, site conditions or other supporting data. If the geotechnical engineer who reviews the plans and specifications is not the same engineer who prepared the geotechnical report, the new engineer shall, in a letter to the City accompanying the plans and specifications, express his or her agreement or disagreement with the recommendations in the geotechnical report and state that the plans and specifications conform to his or her recommendations.

3. The architect or structural engineer shall submit to the City, with the plans and specifications, a letter or notation on the design drawings at the time of permit application stating that he or she has reviewed the geotechnical report, understands its recommendations, has explained or has had explained to the owner the risks of loss due to slides on the site, and has incorporated into the design the recommendations of the report and established measures to reduce the potential risk of injury or damage that might be caused by any earth movement predicted in the report.

4. The owner shall execute a Critical Areas Covenant and Hold Harmless Agreement running with the land on a form provided by the City. The City will file the completed covenant with

the King County Department of Records and Licensing Services at the expense of the applicant or owner. A copy of the recorded covenant will be forwarded to the owner.

FE. Assurance Devices: Whenever the City determines that the public interest would not be served by the issuance of a permit in an geologically hazardous area ~~of potential geologic instability~~ without assurance of a means of providing for restoration of areas disturbed by, and repair of property damage caused by, slides arising out of or occurring during construction, the Director may require assurance devices pursuant to TMC Section 18.45.210.

GF. Construction Monitoring:

1. Where recommended by the geotechnical report, the applicant shall retain a geotechnical engineer to monitor the site during construction. The applicant shall preferably retain the geotechnical engineer who prepared the final geotechnical recommendations and reviewed the plans and specifications. If a different geotechnical engineer is retained by the owner, the new geotechnical engineer shall submit a letter to the City stating whether or not he/she agrees with the opinions and recommendations of the original geotechnical engineer. Further recommendations, signed and sealed by the geotechnical engineer, and supporting data shall be provided should there be exceptions to the original recommendations.
2. The geotechnical engineer shall monitor, during construction, compliance with the recommendations in the geotechnical report, particularly site excavation, shoring, soil support for foundations including piles, subdrainage installations, soil compaction and any other geotechnical aspects of the construction. Unless otherwise approved by the City, the specific recommendations contained in the soils report must be implemented by the owner. The geotechnical engineer shall make written, dated monitoring reports on the progress of the construction to the City at such timely intervals as shall be specified. Omissions or deviations from the approved plans and specifications shall be immediately reported to the City. The final construction monitoring report shall contain a statement from the geotechnical engineer that based upon his or her professional opinion, site observations and testing during the monitoring of the construction, the completed development substantially complies with the recommendations in the geotechnical report and with all geotechnical-related permit requirements. Occupancy of the project will not be approved until the report has been reviewed and accepted by the Director.

HG. Conditioning and Denial of Use or Developments:

1. Substantial weight shall be given to ensuring continued slope stability and the resulting public health, safety and welfare in determining whether a development should be allowed.
2. The City may impose conditions that address site-work problems which could include, but are not limited to, limiting all excavation and drainage installation to the drier~~drier~~ season, or sequencing activities such as installing erosion control and drainage systems well in advance of construction. A permit will be denied if it is determined by the Director that the

development will increase the potential of soil movement that results in an unacceptable risk of damage to the proposed development, its site or adjacent properties.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.140. ~~Coal Mine Hazard Areas~~ Critical Aquifer Recharge Areas.

~~A. Development of a site containing an abandoned mine area may be permitted when a geotechnical report shows that significant risks associated with the abandoned mine workings can be eliminated or mitigated so that the site is safe. Approval shall be obtained from the Director before any building or land-altering permit processes begin.~~

~~B. Any building setback or land alteration shall be based on the geotechnical report.~~

~~C. The City may impose conditions that address site work problems which could include, but are not limited to, limiting all excavation and drainage installation to the dryer season, or sequencing activities such as installing drainage systems or erosion controls well in advance of construction. A permit will be denied if it is determined that the development will increase the potential of soil movement or result in an unacceptable risk of damage to the proposed development or adjacent properties.~~

~~D. The owner shall execute a Critical Areas Covenant and Hold Harmless Agreement running with the land on a form provided by the City. The City will file the completed covenant with the King County Division of Records and Licensing Services at the expense of the applicant or owner. A copy of the recorded covenant will be forwarded to the owner.~~

~~(Ord. 2741 § 4 (part), 2024)~~

A. Purpose and Intent. Critical aquifer recharge areas (CARA) are classified pursuant to WAC 365-190-100, which are designated as areas with a critical recharging effect on aquifers used for potable water. It is the purpose and intent of the regulations in this section to protect from contamination the areas around wellheads and CARAs serving as sources of potable water, as identified by the water districts operating those wells and CARAs; to limit activities that may adversely affect groundwater resources more generally; and to prevent contaminants from entering the aquifers underlying the City.

B. Designation: Wellhead Protection Areas (WHPA) as delineated on the Department of Health Source Water Assessment Program map and the Highline Water District. The WHPA map is intended as a guide for the City, project applicants and/or property owners and may be updated as new information becomes available.

C. Applicability:

1. The standards in this section apply to all development proposals and land use activities within the WHPA.

2. Existing legally established uses may continue subject to compliance with applicable standards of this section.

3. Modifications, expansions, or intensification of existing uses that increase the potential for groundwater contamination shall be subject to the requirements of this section.

D. Prohibited Uses. The following activities and uses are prohibited in CARAs:

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

2. Underground Injection Wells. All underground injection wells as defined in Chapter 173-218 WAC except for those listed below. All underground injection wells shall comply with the requirements of Chapter 173-218 WAC.

a. Surface water management facilities pursuant to the Surface and Stormwater Management Code (Chapter 14.30 TMC)

b. Drainage wells such as those used to drain stormwater such as a French drain or infiltration trench containing perforated pipe.

c. Heat pump or cooling water return flows wells.

d. Aquifer recharge wells.

e. Septic systems serving an individual residential property, or as otherwise approved by Public Health-Seattle and King County.

f. Injection wells used to control flooding of residential basements or as part of a reclaimed water project as allowed under a permit.

g. Injection wells used for remediation wells receiving fluids intended to clean up, treat or prevent subsurface contamination.

h. Injection wells used as part of a reclaimed water project as allowed under a permit.

i. Injection wells used to inject carbon dioxide for geologic sequestration.

3. Dry cleaning establishments using the solvent perchloroethylene.

4. Storage, Processing, or Disposal of Radioactive Substances. Facilities that store, process, or dispose of radioactive substances. except for:

a. Medical equipment or materials that are used within a medical facility; and

b. Medical waste as defined in RCW 70.390.020 that is generated within a medical facility and held for proper disposal.

E. General Performance Standards. All uses and activities within CARAs shall be designed, constructed, and operated to minimize the risk of groundwater contamination and shall comply with the following:

1. General Protection

- a. Activities shall not result in the discharge of contaminants to the ground, groundwater, or surface water that may degrade groundwater quality.
- b. The proposed activity must be designed and constructed to employ all known, available and reasonable (AKART) methods of prevention, control and treatment of pollutants associated with discharge.

2. Hazardous Materials Management

- a. Hazardous materials shall be stored, handled, and used in a manner that prevents release to the environment.
- b. Facilities shall provide containment, spill control, and security measures appropriate to the type and quantity of materials present.

3. Spill Prevention and Response

- a. Uses and Facilities shall implement measures to prevent spills.
- b. Any release of hazardous materials shall be immediately contained and reported in accordance with applicable laws.

4. Stormwater Management

- a. Stormwater shall be managed in accordance with the Washington State Department of Ecology Stormwater Management Manual for Western Washington.
- b. Best management practices shall be used to minimize infiltration of untreated runoff from high-use areas, including fueling and heavy vehicle areas.

5. Landscaping and Chemical Use

- a. Fertilizers and pesticides shall be applied in accordance with label requirements.
- b. Over-application and application prior to rainfall events shall be avoided.

F. Development within a CARA.

- 1. Any proposed non-residential development located in a CARA areas shall submit a hazardous materials inventory sheet (HMIS) with any permit, land use, or business license application.

2. The City will review the HMIS along with the permit, land use, or business license application to determine whether hazardous substances will be used, stored, transported or disposed of in connection with the proposed activity. The City shall make the following determinations and apply the appropriate measures:

a. No hazardous substances are involved; or

b. Hazardous substances are involved; however, existing laws or regulations adequately mitigate any potential impact, and documentation is provided to demonstrate compliance; or

c. Hazardous substances are involved, and the proposal has the potential to significantly impact wellhead protection areas, critical aquifer recharge areas, or other groundwater resources. The City may require a hydrogeologic assessment meeting the requirements of TMC 18.45.140.F to determine the potential impacts of contamination on aquifers or other groundwater resources. Upon receipt of the hydrogeologic assessment the Department shall forward a copy of the report to the Highline Water District for review and comment.

G. Performance Standards, Specific – Applicable to Specific Uses.

1. Storage Tanks. In addition to the general performance standards all storage tanks must comply with the standards below:

a. Underground Tanks. All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

(1) Prevent releases due to corrosion or structural failure for the operational life of the tank;

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

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

b. Above Ground Tanks. All new above ground storage facilities proposed for use in the storage of hazardous substances or hazardous waste shall be designed and constructed so as to:

(1) Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;

(2) Have a primary containment area enclosing or underlying the tank or part thereof; and

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

2. Vehicle Repair and Servicing. For the purposes of this subsection the term “vehicle repair and servicing” shall include the land use designations "Vehicle Fueling Stations and typical appurtenances, including car washes" and "Vehicle Maintenance Facilities, not including vehicle fueling or major repair".

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

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

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

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

a. Use of reclaimed water for surface percolation must meet the ground water recharge criteria given in RCW 90.46.010(10) and 90.46.080(1). The State Department of Ecology may establish additional discharge limits in accordance with RCW 90.46.080(2).

b. Direct injection must be in accordance with the standards developed by authority of RCW 90.46.042.

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

<u>Activity</u>	<u>Statute – Regulation – Guidance</u>
<u>Above Ground Storage Tanks</u>	<u>WAC 173-303-640</u>
<u>Automobile Washers</u>	<u>Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment</u>

<u>Activity</u>	<u>Statute – Regulation – Guidance</u>
	<u>Discharges (Washington Department of Ecology WQ-R-95-56)</u>
<u>Below Ground Storage Tanks</u>	<u>Chapter 173-360 WAC</u>
<u>Chemical Treatment Storage and Disposal Facilities</u>	<u>Chapter 173-303 WAC</u>
<u>Injection Wells</u>	<u>Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC</u>
<u>Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)</u>	<u>Chapter 173-303 WAC</u>
<u>Junk Yards/Salvage Yards</u>	<u>Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (Washington State Department of Ecology 94-146)</u>
<u>On-Site Sewage Systems (Large Scale)</u>	<u>Chapter 173-240 WAC</u>
<u>On-Site Sewage Systems (< 14,500 gal/day)</u>	<u>Chapter 246-272A WAC, Local Health Ordinances</u>
<u>Pesticide Storage and Use</u>	<u>Chapter 15.58 RCW, Chapter 17.21 RCW</u>
<u>Solid Waste Handling and Recycling Facilities</u>	<u>Chapter 173-304 WAC</u>
<u>Wastewater Application to Land Surface</u>	<u>Chapter 173-216 WAC, Chapter 173-200 WAC, Washington State Department of Ecology Land Application Guidelines,</u>

<u>Activity</u>	<u>Statute – Regulation – Guidance</u>
	<u>Best Management Practices for Irrigated Agriculture</u>
<u>Maintain Groundwater Quality</u>	<u>WAC 173-200-030, Washington Antidegradation Policy</u>

§ 18.45.150. Fish and Wildlife Habitat Conservation Areas Designation, Mapping, Uses and Standards.

A. Designation:

1. Fish and wildlife habitat conservation areas include the habitats listed below:

- a. Areas with which endangered, threatened, and sensitive species have a primary association;
- b. Habitats and species of local importance, including but not limited to bald eagle habitat, heron rookeries, mudflats and marshes, and areas critical for habitat connectivity;
- c. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat;
- d. Waters of the State;
- e. State natural area preserves and natural resource conservation areas; and
- f. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.
- g. State priority habitats and species as designated and mapped by the Washington State Department of Fish and Wildlife with which State priority species have a primary association that are in the City.
- h. Land that is useful or essential for preserving connections between habitat blocks and open spaces on development sites containing streams and/or wetlands with a moderate to high habitat score (≥ 6) under the Washington State Wetland Rating System for Western Washington (Department of Ecology 2014, as amended), and that is located within 200 feet of an on-site or off-site stream and/or wetland with a habitat score of ≥ 6 , shall be protected. Fish and wildlife habitat corridors shall not increase stream buffer widths, except as necessary to provide a connection between qualifying features as described above.

2. Type S watercourses, including the Green/Duwamish River, are regulated under TMC Chapter 18.44 and not under this chapter.

~~3. Wetlands and watercourses are addressed under TMC Sections 18.45.080, 18.45.090, 18.45.100 and 18.45.110, and not under this section.~~

B. Mapping:

1. The approximate location and extent of known fish and wildlife habitat conservation areas are identified by the City's Critical Areas Maps, inventories, open space zones, and Natural Environment Background Report.

2. In addition to the Critical Areas Maps, the following maps are to be used as a guide for the City, but do not provide a final habitat area designation:

- a. Washington State Department of Fish and Wildlife Priority Habitat and Species Maps;
- b. Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors report for the Green/Duwamish and Central Puget Sound Watersheds published by King County and the Washington Conservation Commission; and
- c. NOAA Digital Coast for Washington State.

C. Buffers:

1. Each development proposal on, adjacent to, or with the potential to impact a Fish and Wildlife Habitat Conservation Area ~~other than wetlands and watercourses~~ shall be subject to a habitat assessment report pursuant to the requirements of TMC Section 18.45.040. ~~CB~~. The habitat assessment shall analyze and make recommendations on the need for and width of any setbacks or buffers necessary to achieve the goals and requirements of this chapter, with specific consideration of Priority Habitats and Species Management Recommendations from the Washington Department of Fish and Wildlife. Recommended buffers shall be no less than 100 feet in width.

2. Buffers may be increased by the Director when an area is determined to be particularly sensitive to the disturbance created by a development. Such a decision will be based on a City review of the report as prepared by a qualified biologist and by a site visit.

D. Uses and Standards: Each development proposal on, adjacent, or with the potential to impact a Fish and Wildlife Habitat Conservation Area that is not fully addressed under TMC Sections 18.45.080, 18.45.090, 18.45.100 and 18.45.110 shall be subject to a habitat assessment report pursuant to the requirements of TMC Section 18.45.040. ~~CB~~. The habitat assessment shall analyze potential impacts to Fish and Wildlife Habitat Conservation Areas and make recommendations to minimize such impacts, with specific consideration of Priority Habitats and Species Management Recommendations from the Washington Department of Fish and Wildlife.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.155. Frequently Flooded ~~Special Hazard Flood~~ Areas.

A. Additional Regulations: Regulations governing Frequently Flooded Areas ~~Special Hazard Flood Areas~~ are found in TMC Chapter 16.52, “Flood Plain Management,” and TMC Section 18.45.155.B.

B. Floodplain Habitat Assessment:

1. When development is proposed within a ~~Special Hazard Flood~~frequently flooded area, a floodplain habitat assessment shall be prepared pursuant to the requirements of TMC Section 18.45.040.CB.
2. The floodplain habitat assessment shall address the effects of the development on federally listed salmon, including, but not limited to the following:
 - a. Impervious surfaces,
 - b. Floodplain storage and conveyance,
 - c. Floodplain and riparian vegetation, and
 - d. Stormwater drainage.
3. If the floodplain habitat assessment concludes that the project is expected to have an adverse effect on listed species as evaluated under the guidance issued for ESA compliance under the National Flood Insurance Program in Puget Sound, the applicant shall mitigate those impacts. Such mitigation shall be consistent with, or in addition to, any mitigation required by this chapter and shall be incorporated into the approved project plans.

C. Activities Exempt from Floodplain Habitat Assessment: A floodplain habitat assessment is not required under the following circumstances:

1. Projects that are undergoing or have undergone consultation with the National Marine Fisheries Service under the Endangered Species Act.
2. Repair or remodeling of an existing structure, if the repair or remodeling is not a substantial improvement.
3. Expansion of an existing structure that is no greater than 10 percent beyond its existing footprint; provided that the repairs or remodeling are not a substantial improvement, or a repair of substantial damage. This measurement is counted cumulatively from September 22, 2011. If the structure is in the floodway, there shall be no change in the dimensions perpendicular to flow.

4. Activities with the sole purpose of creating, restoring, or enhancing natural functions provided the activities do not include construction of structures, grading, fill, or impervious surfaces.
5. Development of open space and recreational facilities, such as parks and trails, that do not include structures, fill, impervious surfaces or removal of more than 5 percent of the native vegetation on that portion of the property in the regulatory floodplain.
6. Repair to on-site septic systems provided the ground disturbance is the minimum necessary.
7. Other minor activities considered to have no effect on listed species, as interpreted using ESA guidance issued by the National Flood Insurance Program in Puget Sound and confirmed through City review of the development proposal.

(Ord. 2741 § 4 (part), 2024; Ord. 2765 § 79, 2025)

§ 18.45.158. Vegetation Protection and Management.

A. Purpose: The purpose of this section is to:

1. Regulate the protection of existing trees and native vegetation in the critical areas and their buffers;
2. Establish requirements for removal of invasive plants at the time of development or re-development of sites;
3. Establish requirements for the long-term maintenance of native vegetation to prevent establishment of invasive species and promote ecosystem processes.
- [4. Establish replacement requirements for tree and vegetation removal such that optimal native plant density and strata diversity occurs.](#)

B. Applicability: This chapter sets forth rules and regulations to control maintenance and clearing of trees [and vegetation](#) within the City of Tukwila for properties located within a critical area or its associated buffer. For properties located within the Shoreline jurisdiction, the maintenance and removal of vegetation shall be governed by TMC Chapter 18.44, “Shoreline Overlay.” TMC Chapter 18.54, “Urban Forestry and Tree Regulations,” shall govern tree removal on any undeveloped land and any land zoned Community Residential (CR) that is developed with a residential use. TMC Chapter 18.52, “Landscape Requirements,” shall govern the maintenance and removal of landscaping on developed properties zoned commercial, industrial, or multifamily, and on properties located in the CR zone that are developed with a non-residential use. The most stringent regulations shall apply in case of a conflict.

C. Vegetation Retention and Replacement:

1. Retention:

- a. ~~V~~Native vegetation in critical areas and their buffers, particularly native vegetation, must be protected and maintained. No removal of ~~native~~ vegetation is allowed without prior approval by the City except as allowed under removal criteria 18.45.158(C)(3) 18.45.#### and #####. ~~in cases of emergency where an imminent hazard to public life, safety or property exists. Vegetation may be removed from the buffer as part of an enhancement plan approved by the Director. Enhancements will ensure no net loss of ecological functions and that slope stability and/or critical area functions and values are maintained or improved Enhancements will ensure that slope stability and wetland quality will be maintained or improved.~~ Any vegetative ~~temporary~~ disturbance of the buffer, including temporaries shall be replanted with a diverse plant community of native ~~northwest~~ Western Washington species ~~such that all strata are present~~ per the requirements set forth in this section. ~~See section #### for requirments to retain portions of defective trees as snags, leaving downed wood in the buffer and replacement. The use of chemicals such as herbicides, pesticides, etc. shall comply with TMC Section 18.45.158.E.3.~~
- b. ~~Invasive vegetation (blackberry, ivy, laurel, etc.) may be removed from a critical area or its buffer except geologically hazardous areas steep slopes without a permit if removal does not utilize heavy equipment. The use of herbicide by a licensed contractor with certifications as needed from the Washington Department of Ecology and the Washington Department of Agriculture is permitted but requires notification prior to application to the City and shall comply with TMC Section 18.45.158.E.3. Invasive vegetation removal on within geologically hazardous areas steep slopes requires prior City approval.~~
- c. ~~Hazardous or defective trees, as defined in TMC Chapter 18.06, that are within critical areas, may be removed trimmed or cut from a critical area if the threat hazard posed by the tree is imminent. If the hazard is not obvious, an assessment by a certified professional, as defined in TMC Chapter 18.06, may be required by the Director. Dead and hazardous trees should remain standing or be cut and placed within the critical area to the extent practicable to maximize habitat. Tree replacement in accordance with this chapter is required when any portion of a for any hazardous tree is cut and removed from a critical area.~~
- d. ~~In the case of development or re-development, as many significant trees and as much native vegetation as possible are to be retained on a site, taking into account the condition and age of the trees. As part of a permit application including, but not limited to, subdivision, design review, or building permit review, the Director may require alterations in the arrangement of buildings, parking or other elements of proposed development in order to retain significant vegetation. The Director shall have the authority to waive or alter setbacks or parking requirements standards if a permit application demonstrates that strict application of such standards would necessitate the~~

~~removal of significant trees, waiving or altering those standards would result in the preservation of significant trees, and the waiver or alteration is the minimum necessary to achieve significant tree retention.~~

2. Permit Requirements: Prior to any tree removal or site clearing, unless it is part of Special Permission approval for interrupted buffer, buffer averaging, or other critical areas deviation, a Type 2 Critical Area Tree Removal and Vegetation Clearing Permit application that meets the application requirements of TMC Chapter 18.104 must be ~~submitted to~~ approved by the Department. ~~Tree/vegetation Removals that meet the following criteria do not require a ### permit but are still subject to mitigation sequencing (+more sections?):~~

~~ab.~~ A restoration or enhancement strategy, approved by the Director, that demonstrably results in net ecological gain through vegetation or /tree removal in the buffer, using BMP's, maintaining density per Table 18.45.158-2 and meeting the remaining standards set forth in this chapter; examples include but are not limited to: thinning over-dense stands, species diversification, etc., including ###, Plant Materials Standards, Tree and vegetation replacement is not required for removals if the remaining critical area vegetation meets the density table per ###. If significant uncertainty arises about the proposed ecological gain, a permit may be required.

~~be.~~ Maintenance activities of existing landscaping and gardens in a critical area buffer including, but not limited, to mowing lawns, weeding, harvesting and replanting of garden crops and pruning and planting of vegetation if these activities do not cause the non-conformance to increase per the requirements and intent of this chapter. This provision does not apply to removal of and established native trees and/or shrubs that are native, or to the excavation, filling, and construction of new landscaping features, such as concrete work, berms and walls.

3. Criteria for Vegetation or Tree Removal in a Critical Area or its Buffer: A Type 2 Critical Area Tree Removal and Vegetation Clearing Permit or Type 2 Special Permission Permit application shall only be approved if the proposal complies with the following criteria, ~~as applicable:~~

a. The proposal demonstrates ~~d~~ mitigation sequencing and complies with -tree retention, replacement, maintenance and monitoring requirements of this chapter; and-

b. Replacement will be implemented as if required in TMC Section ###; -unless no replacement is required per TMC Section ###; and

c. Tree protection will be implemented as required in TMC Section ###; and

d. The site is undergoing development or redevelopment resulting in permitted critical area alterations, and ;tree/vegetation retention is maximized to the extent feasible; the Director may require alterations in the arrangement of buildings, parking or other

elements of proposed development as such. The Director shall have the authority to waive or alter setbacks or parking requirements standards if a permit application demonstrates that strict application of such standards would necessitate the removal of significant trees, waiving or altering those standards would result in the preservation of significant trees, and the waiver or alteration is the minimum necessary to achieve significant tree retention-; or-

~~eb. Tree poses a risk to structures; or-~~ Trees are defective, as defined in TMC Chapter 18.06. If the risk is not obvious, as deemed by the City's arborist, an assessment by a Qualified Tree Risk Assessor~~certified professional, as defined in TMC Chapter 18.06,~~ shall be required. If the risk posed by the tree is imminent, ~~e~~Emergency actions necessary to remedy an immediate threat to people or property, or public health, safety or welfare by a high-risk or extreme-risk tree, as rated by a Qualified Tree Risk Assessor~~, as defined in ###,~~ may be undertaken in advance of receiving a permit. Any person, utility or public entity undertaking such an action shall submit a Tree Permit application within one week of the emergency action and replace tree(s) if required by this chapter. Additional time to apply for a Tree Permit may be granted at the discretion of the Director~~it may be removed and a tree permit filed within one week of the removal;~~ or

~~ed. There is imminent potential for root or canopy interference with utilities; or-~~

~~ee. Tree interferes with the access and passage on public trails; or-~~

~~ef. Tree condition and health is poor; the City may require an evaluation by an International Society of Arborists (ISA)-certified arborist; or-~~

~~fg. Trees present an imminent hazard to the public. If the hazard is not readily apparent, the City may require an evaluation by an International Society of Arborists (ISA)-certified arborist.~~

~~g. The proposal complies with tree retention, replacement, maintenance and monitoring requirements of this chapter.~~

4. Tree and Vegetation Replacement and Snag -Requirements: This section applies to ~~any~~all new? removals or plantings in a Critical Area.

a. Trees removed~~als~~ in critical areas or their buffers shall be left standing in place as habitat snags, using naturalistic coronet cuts, unless ~~they present~~it would create a current or likely future ~~hazard to a target~~defective tree that poses a risk to a target or is ecologically contraindicated; See ### for woody debris retention requirements.

b. ~~If not part of an approved landscape plan, t~~Tree and vegetation replacement is ~~not~~ required for removals ~~if~~when the removal causes tree and/or vegetation density in the

critical root zone (CRZ) ~~CRZ~~ of the removal to drop below table 18.45.158-2, see ### for removals covered by an approved commercial landscape plan.

~~b. Where remaining critical area vegetation and/or trees in the critical root zone (CRZ) of the removal falls short of the related densities listed in table ###, permitted table, significant vegetation and/or trees that are not part of an approved landscape plan that are removed, illegally topped, or pruned by more than 25% within a critical area shall be replaced in-kind pursuant to the Tree Replacement Requirements Table 18.45.158-1—Tree Replacement Requirements (below) or the density table; tree replacement to must start with comprise replacing as many overstory trees as fit in the removed CRZ, and secondarily both, overstory and understory trees, up to a density of 100 trees per acre (including existing trees). The replacement Replacement species shall meet or exceed the functional value of the removed species, as required. Locations alternate to the CRZ of the removal may be proposed CRZ if, and shall be in the same buffer may be proposed for replanting and approvable only if of equal or greater ecological value.~~

In order to document the relevant tree and vegetation density, the applicant shall submit sufficient photographic evidence or, approve a site visit from City staff or, if required by the Director, submit an arborist or critical area report documenting the density condition.

~~If the required quantity of replacement trees cannot be accommodated on the site without exceeding a tree density of 100 trees per acre, an amount equal to the number of required trees that cannot be accommodated, multiplied by the In-Lieu Tree Replacement Fee (in accordance with the Consolidated Permit Fee Schedule adopted by resolution of the City Council), shall be paid by the applicant.~~

<u>Table 18.45.158-1—Tree Replacement Requirements</u>	
<u>Diameter* of Tree Removed</u> <u>(*measured at height of 4.5 feet from the ground)</u>	<u>Number of Replacement Trees Required</u>
<u><4—6 inches (single trunk);</u> <u>2 inches (any trunk of a multi-trunk tree)</u>	<u>3</u>
<u>Over 6—8 inches</u>	<u>4</u>
<u>Over 8—20 inches</u>	<u>6</u>
<u>Over 20 inches</u>	<u>8</u>
<u>Over 30 inches</u>	<u>10</u>
<u>Over 40 inches</u>	<u>12</u>

~~b. Significant trees that are part of an approved landscape plan on the developed portion of the site are subject to replacement per TMC Chapter 18.52.~~

~~c. Dead or dying t~~rees removed that are part of an approved commercial landscape plan on the developed portion of the site shall be replaced at a 1:1 ratio in the next appropriate planting season per TMC Chapter 18.52.

~~d. Dead or dying trees located within the critical area or its buffer shall be left in place as wildlife snags, unless they present a hazard to structures, facilities or the public.~~

~~e. Removal of dead, dying or otherwise hazardous trees in materials from non-developed areas are is subject to the replacement requirements of TMC 18.45.158.C.4.a. listed in the “Tree Replacement Requirements” Table below.~~

~~e. The Director may require additional trees or shrubs to be installed to mitigate any potential impact from the loss of this trees or vegetation as a result of new development.~~

Table 18.45.158-1—Tree Replacement Requirements	
Diameter* of Tree Removed (*measured at height of 4.5 feet from the ground)	Number of Replacement Trees Required
4–6 inches (single trunk); 2 inches (any trunk of a multi-trunk tree)	3
Over 6–8 inches	4
Over 8–20 inches	6
Over 20 inches	8

~~5. If all required replacement trees cannot be reasonably accommodated on the site, the applicant shall pay into a tree replacement fund in accordance with the Consolidated Permit Fee Schedule adopted by resolution of the City Council.~~

~~65. Topping of trees is prohibited. Actions that illegally top trees shall be subject to the violations section of this chapter, and will be regulated as removal subject to the Tree Replacement Requirements Table listed above.~~

~~67. Pruning of non-hazardous trees shall not exceed 25% of canopy in a 36-month period. Actions that illegally prune non-hazardous trees in excess of 25% within a 36-month period shall be subject to the violations section of this chapter. Pruning in excess of 25% canopy shall be regulated as removal with tree replacement required per the Tree Replacement Requirements Table listed above. Non-hazardous trees may shall only be pruned to lower their height to prevent interference with an overhead utility line with prior approval by the Director as part of Type 2 Critical Area Tree Removal and Vegetation Clearing Permit. The pruning must shall be carried out under the direction of a Qualified Tree Professional or performed by the utility provider under the direction of a Qualified Tree Professional. The crown shall be maintained to at least 2/3 the height of the tree prior to pruning.~~

D. Vegetation Replacement: (create requirements)

D. Tree Protection: All trees not proposed for removal as part of a project or development shall be protected using Best Management Practices per TMC 18.54.060## and the standards below.

~~1. The Critical Root Zones (CRZ) for all trees designated for retention, on-site or on adjacent property as applicable, shall be identified on all construction plans, including demolition, grading, civil and landscape site plans.~~

~~2. Any roots within the CRZ exposed during construction shall be covered immediately and kept moist with appropriate materials. The City may require a third-party Qualified Tree Professional to review long-term viability of the tree.~~

~~3. Physical barriers, such as 6-foot chain link fence₂ or plywood₂ or other approved equivalent, shall be placed around each individual tree or grouping at the CRZ.~~

~~4. Minimum distances from the trunk for the physical barriers shall be based on the approximate age of the tree (height and canopy) as follows:~~

~~a. Young trees (trees which have reached less than 20% of life expectancy): 0.75 per inch of trunk diameter.~~

~~b. Mature trees (trees which have reached 20-80% of life expectancy): 1 foot per inch of trunk diameter.~~

~~c. Over mature trees (trees which have reached greater than 80% of life expectancy): 1.5 feet per inch of trunk diameter.~~

~~5. Alternative protection methods may be used that provide equal or greater tree protection if approved by the Director.~~

~~6. A weatherproof sign shall be installed on the fence or barrier that reads:~~

~~“TREE PROTECTION ZONE—THIS FENCE SHALL NOT BE REMOVED OR ENCROACHED UPON. No soil disturbance, parking, storage, dumping₂ or burning of materials is allowed within the Critical Root Zone. The value of this tree is \$ [insert value of tree as determined by a Qualified Tree Professional here]. Damage to this tree due to construction activity that results in the death or necessary removal of the tree is subject to the Violations section of TMC Chapter 18.45.”~~

~~7. All tree protection measures installed shall be inspected by the City and, if deemed necessary a Qualified Tree Professional, prior to beginning construction or earth moving.~~

~~8. Any branches or limbs that are outside of the CRZ and might be damaged by machinery shall be pruned prior to construction by a Qualified Tree Professional.~~

~~9. The CRZ shall be covered with 4 to 6 inches of wood chip mulch. Mulch shall not be placed directly against the trunk. A 6-inch area around the trunk shall be free of mulch. Additional measures, such as fertilization or supplemental water, shall be carried out prior to the start of construction if deemed necessary by the Qualified Tree Professional's report to prepare the trees for the stress of construction activities.~~

~~10. No storage of equipment or refuse, parking of vehicles, dumping of materials or chemicals, or placement of permanent heavy structures or items shall occur within the CRZ.~~

~~11. No grade changes or soil disturbance, including trenching, shall be allowed within the CRZ. Grade changes within 10 feet of the CRZ shall be approved by the City prior to implementation.~~

~~12. The applicant is responsible for ensuring that the CRZ of trees on adjacent properties are not impacted by the proposed development.~~

~~13. A pre-construction inspection shall be conducted by the City to finalize tree protection actions.~~

~~14. Post-construction inspection of protected trees shall be conducted by the City and, if deemed necessary by the City, a Qualified Tree Professional. All corrective or reparative pruning will be conducted by a Qualified Tree Professional.~~

E. Site Preparation, Invasives Removal and Planting Materials Standards: This section applies to For any new development, redevelopment or restoration new planting in a Critical Area. Land in critical areas, and/or their buffers, and is not to be left bare of both vegetation and mulch, if appropriate unless otherwise appropriate to the habitat.; invasive vegetation must be removed, and native vegetation planted and maintained in the Critical Area and its buffer.

1. A planting plan prepared by a qualified professional per the requirements in TMC 18.45.040.B.2 biologist shall be submitted to the City for approval that shows plant species, size, number, spacing, soil preparation, mulch, irrigation, and invasive species removal. The requirement for a qualified professional biologist may be waived by the Director when the mitigation area is less than 3,01,500 square feet.

2. Invasive vegetation must be removed, including roots, -as part of site preparation ~~and when native~~ vegetation is planted in the Critical Area ~~and or~~ its buffer ~~per ### where impacts occur. See 18.45.158(EF)(12) ### for herbicide and heavy equipment requirements.~~

~~3. Removal of invasive species shall be done by hand or with hand-held power tools. The use of herbicide by a licensed contractor with certifications as needed from the Washington Department of Ecology and the Washington Department of Agriculture is permitted but requires notification prior to application to the City and shall comply with this TMC Section 18.45.158.E.3. Where removal is not feasible by hand or with hand-held power tools and mechanized equipment is needed, the use of mechanized equipment for invasive species removal must be reviewed and approved under either the associated critical area permit or a Type 2 permit prior to work being conducted. the applicant must obtain a Type 2 permit prior to work being conducted.~~

~~54.~~ Removal of invasive vegetation must be conducted so that the slope stability, if applicable, will be maintained and native vegetation is protected. A pPlans must ~~be submitted~~

indicating how the work will be done and what erosion control and tree protection features will be utilized. ~~Federal and State permits may be required for vegetation removal with mechanized equipment.~~

~~45.~~ Removal of invasive vegetation may be phased over several years prior to planting, if such phasing is provided for by a plan approved by the Director ~~to allow~~ing for alternative approaches, such as sheet mulching and goat grazing if native vegetation is protected. ~~The method selected shall not destabilize the bank or cause erosion.~~

~~56.~~ A multi-strata combination of native overstory and understory trees, shrubs and groundcovers (including but not limited to grasses, sedges, rushes and vines), including each category, shall be planted such that a healthy native habitat existsoccurs,- in accordance withto the vegetative standards in TMC 18.45.080.D.2 (wetlands) or TMC 18.45.100.C.1 (watercourses)-. Site conditions, such as topography, exposure, and hydrology shall be taken into account for plant selection. Other species may be approved if there is adequate justification.in order to compose a heal

~~67.~~ Non-native trees may be used as street trees in cases where conditions are not appropriate for native trees (for example where there are space or height limitations, planting space cannot be made larger or unavoidable conflicts with utilities exist).

~~78.~~ Plants shall meet the current American Standard for Nursery Stock (American Nursery and Landscape Association – ANLA).

~~89.~~ Smaller plant sizes (generally one gallon, bareroot, plugs, or stakes, depending on plant species) are preferred for buffer plantings. Willow stakes must be at least 1/2-inch in diameter. For existing developed areas refer to TMC Chapter 18.52, “Landscape Requirements,” for plant sizes in required landscape areas.

~~910.~~ Site preparation, ~~-and~~planting and maintenance of vegetation shall be in accordance with Best Management Practices for ensuring the vegetation’s long-term health and survival. Irrigation is required for all plantings for the first three years as approved by the Director.

~~110.~~ Plants may be selected and placed to allow for public and private view corridors with approval by the Director if the derivation from the densities table is minor.

~~121.~~ Native vegetation in critical areas and their buffers installed in accordance with the preceding standards shall be maintained by the property owner to promote healthy growth and prevent establishment of invasive species. Invasive plants (such as blackberry, ivy, knotweed, bindweed) shall be removed on a regular basis, according to the approved maintenance plan.

~~132.~~ Critical areas, including steep slopes disturbed by removal of invasive plants or development, shall be replanted with native vegetation where necessary to maintain the density shown in the Critical Area Buffer Vegetation Planting Densities Table below, and

must be replanted in a timely manner except where a long-term removal and re-vegetation plan, as approved by the City, is being implemented.

Table 18.45.158-2 – Critical Area Buffer Vegetation Planting Densities Table	
Plant Material Type	Planting Density <u>(see footnote 1)</u>
Stakes/cuttings along streambank (willows, red osier dogwood, <u>etc.</u>)	1 - 2 feet on center or per bioengineering method
Shrubs	3 - 5 feet on center, depending on species
<u>Overstory</u> Trees	15 – 25 0 feet on center <u>from other overstory trees</u> , depending on species
<u>Understory</u> Trees	<u>10 – 15 feet on center</u>
<u>Herbaceous Species (including</u> Groundcovers, grasses, sedges, rushes, <u>ferns, vines, etc.</u> other herbaceous plants	1 – 1.5 feet on center, depending on species
Native seed mixes <u>(no non-native species)</u>	5 – 25 lbs. per acre, depending on species

(1) Non-tree strata may occur in proportions representative of native forest for the region, such as drifts of alternating strata in selective locations versus full overlap everywhere.

~~143. The Director, in consultation with the City's environmentalist, may approve the use of shrub planting and installation of willow stakes to be counted toward the tree replacement standard in the buffer if space on site for larger trees has been exhausted.~~

~~proposed as a measure to control invasive plants and increase buffer function.~~

F. Vegetation and Tree Management in Critical Areas: The requirements of this section apply to all existing and new development within critical areas.

1. Work shall be done by hand or with hand-held power tools. Where removal is not feasible by hand or with hand-held power tools and mechanized equipment is needed, the use of mechanized equipment for invasive species removal must be reviewed and approved under either the associated critical area permit or a Type 2 permit prior to work being conducted.

1. Trees and shrubs may only be pruned for safety, to maintain access corridors and trails by pruning up or on the sides of trees, to maintain clearance for utility lines, and/or for improving critical area ecological function. Trees shall not be pruned in excess of the definition of Tree Removal for pruning limits. ~~No more than 25% may be pruned from a tree within a 36-month period without prior City review. This type of pruning is exempt from any permit requirements.~~

2. Prunings and wood shall be left in the buffer, and in the largest sizes feasible, to provide valuable habitat complexity.

~~1132.~~ Plant debris from removal of invasive plants is encouraged to be composted on site through BMP's such as drying rafts; for unsuitable species such as knotweed or species with seed present, etc., debris of concern must be properly disposed of per King County Noxious

Weeds BMP's. ~~or pruning shall be removed from the site and disposed of properly unless on-site storage is approved by the Director. Per King County Noxious Weed Control Program guidelines, regulated noxious weeds shall be disposed of in the landfill/trash and non-regulated noxious weeds may be disposed of in green waste or composted on site.~~

1243. Use of Herbicides, Pesticides and Similar:

a. ~~Pesticides~~ Herbicides (including ~~herbicides~~ pesticides, insecticides, ~~and~~ fungicides, adjuvants and the like) shall not be used in the critical area or its buffer except where the City pre-approves a digital submittal demonstrating the following:

(1) Alternatives such as manual removal, biological control, and cultural control are not feasible given the size of the infestation, site characteristics, or the characteristics of the invasive plant species and herbicide is determined to be least ecologically impactful;

(2) The use of ~~pesticides~~ herbicide has been approved by the City through a comprehensive vegetation or pest management and monitoring plan, or a King County Noxious Weed Control Program Best Management Practices document;

(3) The ~~pesticide~~ herbicide is to be applied in accordance with the FIFRA labels, with state regulations, and;

(4) The proposed herbicide is demonstrated to be approved for aquatic use by the U.S. Environmental Protection Agency; and for use in, Washington State by the the Washington State Department of Agriculture, refer to the using Washington State UniversitySU's Pesticide Information Center OnLine (PICOL) Database for verification of to verify and document that the specific product formulation is approved in WAa as variations occur; and

~~(5) The use of pesticides in the critical area jurisdiction is approved by the City and the applicant presents a copy of the Aquatic Pesticide Permit issued by the Department of Ecology or Washington Department of Agriculture, if required.~~

(5) Applicant to present a copy of a valid WSDA Commercial Applicator license with an Aquatic Pest Control category endorsement . or as updated and hereby adopted.

(6) Applicant to present a copy of the Aquatic Noxious Weed Control General Permit issued by the Department of Ecology or as updated and hereby adopted.

Note that Department of Ecology's Aquatic Noxious Weed Control General Permit (ANWCGP) lists indirect-aquatic-approved herbicides and adjuvants, which shall guide the City's approval consideration.

b. Self-contained rodent bait boxes designed to prevent access by other animals are allowed.

c. Sports fields, parks, golf courses and other outdoor recreational uses that involve maintenance of extensive areas of turf shall implement an integrated turf management program or integrated pest management plan designed to ensure that water quality in the critical area is not adversely impacted.

~~4. Restoration Project Plantings: Restoration projects may overplant the site as a way to discourage the re-establishment of invasive species. Thinning of vegetation without a separate Type 2 Critical Area or Tree Permit may be permitted five to ten years after planting if this approach is approved as part of the restoration project's maintenance and monitoring plan and with approval by the City prior to thinning work.~~

G. Maintenance and Monitoring: The property owner is required to ensure the viability and long-term health of vegetation planted for replacement or mitigation through proper care and maintenance for the life of the project subject to permit requirements as follows:

1. Tree Replacement and Vegetation Clearing Permit Requirements:

a. Schedule an inspection with the City of Tukwila's Urban Environmentalist to document planting of the correct number and type of plants.

b. Submit annual documentation of tree and vegetation health for three (3) years.

2. Restoration and Mitigation Project Requirements:

a. A five (5) year monitoring and maintenance plan must be approved by the City prior to permit issuance. The monitoring period will begin when the restoration is accepted by the City and as-built plans have been submitted.

b. Monitoring reports shall be submitted annually for City review up until the end of the monitoring period. Reports shall measure ecological success and survival rates against ~~project goals~~performance standards and present contingency plans to meet project goals.

c. Mitigation will be complete after project goals have been met and accepted by the City of Tukwila's Urban Environmentalist.

d. A financial assurity device is required pursuant to TMC 18.45.210. ~~performance bond or financial security equal to 150% of the cost of labor and materials required for implementation of the planting, maintenance and monitoring shall be submitted prior to City acceptance of project.~~

(Ord. 2741 § 4 (part), 2024; Ord. 2765 § 80, 2025)

§ 18.45.160. Critical Area Master Plan Overlay.

A. ~~The purpose of t~~This section ~~previously is to~~ provided an alternative to preservation of existing individual wetlands, watercourses and their buffers in situations where an area-wide plan for alteration and mitigation ~~would~~will result in improvements to water quality, fish and wildlife habitat and hydrology beyond those that would occur through the strict application of the provisions of TMC Chapter 18.45.

B. The City Council ~~may~~designated certain areas within the Tukwila South Overlay Zone as a Critical Area Master Plan Overlay Districts for the purpose of allowing and encouraging a comprehensive approach to critical area protection, restoration, enhancement and creation in appropriate circumstances utilizing best available science. ~~Designation of Critical Area Master Plan Overlay Districts shall occur through the Type 4 decision process established by TMC Chapter 18.104.~~

~~C. Criteria for designating a Critical Area Master Plan Overlay District shall be as follows:~~

~~1. The overlay area shall be at least 10 acres.~~

~~2. The City Council shall find that preparation and implementation of a Critical Area Master Plan is likely to result in net improvements in critical area functions when compared to development under the general provisions of TMC Chapter 18.45.~~

~~D. Within a Critical Area Master Plan Overlay District, only those uses permitted under TMC Sections 18.45.070, 18.45.090 and 18.45.110 shall be allowed within a Category I wetland or its buffer.~~

~~E. Within a Critical Area Master Plan Overlay District, the uses permitted under TMC Sections 18.45.070, 18.45.090 and 18.45.110 and other uses as identified by an approved Critical Area Master Plan shall be permitted within Category III and Category IV wetlands and their buffers; and within Type F, Np and Ns watercourses and their buffers, provided that such uses are allowed by the underlying zoning designation.~~

~~F. A Critical Area Master Plan shall be prepared under the direction of the Director of Community Development. Consistent with subsection A, the Director may approve development activity within a Critical Area Overlay District for the purpose of allowing and encouraging a comprehensive approach to critical areas protection, creation, and enhancement that results in environmental benefits that may not be otherwise achieved through the application of the requirements of TMC Chapter 18.45.~~

~~G. The Director shall consider the following factors when determining whether a proposed Critical Areas Overlay and Master Plan results in an overall net benefit to the environment and is consistent with best available science:~~

~~1. Whether the Master Plan is consistent with the goals and policies of the Natural Environment Element and the Shorelines Element (if applicable) of the Tukwila Comprehensive Plan.~~

~~2. Whether the Master Plan is consistent with the purposes of TMC Chapter 18.45 as stated in TMC Section 18.45.010.~~

~~3. Whether the Master Plan includes a Mitigation Plan that incorporates stream or wetland restoration, enhancement or creation meeting or exceeding the requirements of TMC Section 18.45.090 and/or TMC Section 18.45.110, as appropriate.~~

~~4. Whether proposed alterations or modifications to critical areas and their buffers and/or alternative mitigation results in an overall net benefit to the natural environment and improves critical area functions.~~

~~5. Whether the Mitigation Plan gives special consideration to conservation and protection measures necessary to preserve or enhance anadromous fisheries.~~

~~6. Mitigation shall occur on-site unless otherwise approved by the Director. The Director may approve off-site mitigation only upon determining that greater protection, restoration or enhancement of critical areas could be achieved at an alternative location within the same watershed.~~

~~7. Where feasible, mitigation shall occur prior to grading, filling or relocation of wetlands or watercourses.~~

~~8. At the discretion of the Director, a proposed Master Plan may undergo peer review, at the expense of the applicant. Peer review, if utilized, shall serve as one source of input to be utilized by the Director in making a final decision on the proposed action.~~

~~H. A Critical Area Master Plan shall be subject to approval by the Director of Community Development. Such approval shall not be granted until the Master Plan has been evaluated through preparation of an Environmental Impact Statement (EIS) under the requirements of TMC Chapter 21.04. The EIS shall compare the environmental impacts of development under the proposed Master Plan relative to the impacts of development under the standard requirements of TMC Chapter 18.45. The Director shall approve the Critical Area Master Plan only if the evaluation clearly demonstrates overall environmental benefits, giving special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.~~

C.I. The critical area buffer widths for those areas that were altered, created or restored as mitigation (Wetland 10, 1, Johnson Creek and the Green River off-channel habitat), at the time of approval of the Sensitive Area Master Plan (SAMP) Permit No. L10-014 (revised Notice of Decision issued under L10-062) shall be vested as shown on Map A to be codified as Figure 18-59; provided the adjacent land was cleared and graded pursuant to a City-approved grading permit; and provided further that those mitigation measures required by the SAMP were performed and meet the ecological goals, in accordance with the terms of the SAMP.

D. Critical Area Designation (CAD) permits are not required for areas covered by a critical area master plan.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.170. Critical Area Tracts and Easements.

A. In development proposals for planned residential or ~~mixed-use~~mixed-use developments, short subdivisions, ~~or~~long subdivisions, ~~and~~-boundary line adjustments, and binding site plans, applicants shall create critical areas tracts or easements, in lieu of an open space tract, per the standards of the Planned Residential Development District chapter of this title.

B. Applicants proposing development involving uses other than those listed in TMC Section 18.45.170.A, on parcels containing critical areas or their buffers, may elect to establish a critical areas tract or easement which shall be:

1. If under one ownership, owned and maintained by the owner;
2. If held in common ownership by multiple owners, maintained collectively; or
3. Dedicated for public use if acceptable to the City or other appropriate public agency.

C. A notice shall be placed on the property title or plat map that critical area tracts or easements shall remain undeveloped in perpetuity.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.180. Exceptions.

A. Reasonable Use Exceptions:

1. If application of TMC Chapter 18.45 would deny all reasonable use of the property containing designated critical areas or their buffers, the property owner or the proponent of a development proposal may apply for a reasonable use exception.
2. Applications for a reasonable use exception shall be a Type 3 decision and shall be processed pursuant to TMC Chapter 18.104.
3. If the applicant demonstrates to the satisfaction of the Hearing Examiner that application of the provisions of TMC Chapter 18.45 would deny all reasonable use of the property, development may be allowed that is consistent with the general purposes of TMC Chapter 18.45 and the public interest.
4. The Hearing Examiner, in granting approval of the reasonable use exception, must determine that:

- a. There is no feasible on-site alternative to the proposed activities, including reduction in size or density, modifications of setbacks, buffers or other land use restrictions or requirements, phasing of project implementation, change in timing of activities, revision of road and lot layout, and/or related site planning that would allow a reasonable economic use with fewer adverse impacts to the critical area.
- b. As a result of the proposed development there will be no unreasonable threat to the public health, safety or welfare on or off the development proposal site.
- c. Alterations permitted shall be the minimum necessary to allow for reasonable use of the property.
- d. The proposed development is compatible in design, scale and use with other development with similar site constraints in the immediate vicinity of the subject property if such similar sites exist.
- e. Disturbance of critical areas and their buffers has been minimized to the greatest extent possible.
- f. All unavoidable impacts are fully mitigated and the proposal achieves no net loss of critical area functions and values.
- g. The inability to derive reasonable use of the property is not the result of:
 - (1) A segregation or division of a larger parcel on which a reasonable use was permissible after the effective date of Sensitive Areas Ordinance No. 1599, June 10, 1991;
 - (2) Actions by the owner of the property (or the owner's agents, contractors or others under the owner's control) that occurred after the effective date of the critical areas ordinance provisions that prevents or interferes with the reasonable use of the property; or
 - (3) A violation of the critical areas ordinance.
- h. The Hearing Examiner, when approving a reasonable use exception, may impose conditions, including but not limited to a requirement for submission and implementation of an approved mitigation plan designed to ensure that the development:
 - (1) Complies with the standards and policies of this chapter to the extent feasible; and
 - (2) Does not create a risk of damage to other property or to the public health, safety and welfare.
- i. Approval of a reasonable use exception shall not eliminate the need for any other permit or approval otherwise required for a project, including but not limited to design review.

B. Public Agency and Utility Exceptions:

1. If application of TMC Chapter 18.45 would prohibit public facilities such as utilities or transportation within a critical area and/or critical area buffer due to a specific service provision or design constraint, the agency or utility may apply for an exception.

2. Applications for a public agency and utility exception shall be a Type 2 decision and shall be processed pursuant to TMC Chapter 18.104.

3. As part of the public agency and utility exception request application, the applicant shall submit a critical area report pursuant to TMC 18.45.040, which must address mitigation sequencing and include information addressing the following decisional criteria:

a. There is no other practicable alternative to the proposed development with less impact on the critical areas;

b. The proposal achieves no net loss of critical area functions and values;

c. The application of the critical area regulations would unreasonably restrict the ability to provide utility or transportation services to the public;

d. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;

e. The proposal is consistent with other applicable regulations and standards.

~~B. Emergencies: Alterations in response to an emergency that poses an immediate threat to public health, safety or welfare, or that poses an immediate risk of damage to private property may be excepted. Any alteration undertaken as an emergency shall be reported within one business day to the Community Development Department. The Director shall confirm that an emergency exists and determine what, if any, mitigation and conditions shall be required to protect the health, safety, welfare and environment and to repair any damage to the critical area and its required buffers. Emergency work must be approved by the City. If the Director determines that the action taken, or any part thereof, was beyond the scope of an allowed emergency action, then the enforcement provisions of TMC Section 18.45.195 shall apply.~~

(Ord. 2741 § 4 (part), 2024)

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§ 18.45.190. Time Limitation, Appeals and Vesting.

A. Time Limitation: Type 2 Critical Area Permit decisions for interrupted buffer, buffer averaging or other alterations shall expire one year after the decision unless a complete development or site work permit has been submitted to the City or an extension is granted by the

Director. Type 1 Tree Permits for tree removal within critical areas or their buffers shall expire one year after the permit is issued, unless [the permit has been finalized or](#) an extension is granted by the Director. Extensions of a Type 2 Special Permission or Type 1 tree permit may be granted if:

1. Unforeseen circumstances or conditions necessitate the extension of the permit; and
2. Termination of the permit would result in unreasonable hardship to the applicant; and the applicant is not responsible for the delay; and
3. The extension of the permit will not cause substantial detriment to existing uses, critical areas, or critical area buffers in the immediate vicinity of the subject property.

B. Appeals: Any appeal of a final decision made by the Department pursuant to TMC Chapter 18.45 shall be an appeal of the underlying permit or approval. Any such appeal shall be processed pursuant to TMC Chapter 18.116.

C. In considering appeals of decisions or conditions, the following shall be considered:

1. The intent and purposes of this chapter;
2. Technical information and reports considered by the Department; and
3. Findings of the Director, which shall be given substantial weight.

D. Vesting: Projects are vested to the critical areas ordinance in effect at the time a complete permit is submitted except for [long](#) subdivisions, binding site plans, and shoreline permits. [Long](#) ~~S~~ubdivisions or binding site plans are vested to the critical area ordinance in effect at the time complete application is submitted for preliminary [long](#) subdivision or for the binding site plan. The final [long](#) subdivision and all future building permits on the lots remain vested to that same critical areas ordinance in effect for the preliminary [long](#) subdivision or preliminary binding site plan application, so long as building permits are applied for within five (5) years of the final [long](#) subdivision. Vesting provisions for shoreline permits are provided in TMC Chapter 18.44.

(Ord. 2741 § 4 (part), 2024; Ord. 2765 § 81, 2025)

§ 18.45.195. Violations.

A. Violations: Failure to comply with any requirement of this chapter shall be deemed a violation subject to enforcement pursuant to this chapter and TMC Chapter 8.45. The following actions shall be considered a violation of this chapter:

1. To use, construct or demolish a structure or to conduct clearing, earth-moving, construction or other development not authorized under a Special Permission, Reasonable Use or other permit where such permit is required by this chapter.

2. Any work that is not conducted in accordance with the plans, conditions, or other requirements in a permit approved pursuant to this chapter, provided the terms or conditions are stated in the permit or the approved plans.
3. To remove or deface any sign, notice, complaint or order required by or posted in accordance with this chapter.
4. To misrepresent any material fact in any application, plans or other information submitted to obtain any critical area use, buffer reduction or development authorization.
5. To fail to comply with the requirements of this chapter.

B. Penalties:

1. Except as provided otherwise in this section, any violation of any provision of this chapter, or failure to comply with any of the requirements of this chapter, shall be subject to the penalties prescribed in TMC Chapter 8.45, "Enforcement".
2. It shall not be a defense to the prosecution for failure to obtain a permit required by this chapter that a contractor, subcontractor, person with responsibility on the site, or person authorizing or directing the work erroneously believed a permit had been issued to the property owner or any other person.

3. Penalties for Tree Removal:

- a. In addition to any other penalties or other enforcement allowed by law, any person who fails to comply with the provisions of this chapter also shall be subject to a civil penalty assessed against the property owner as set forth herein. Each unlawfully removed or damaged tree shall constitute a separate violation.
- b. Removal or damage of tree(s) without applying for and obtaining required City approval is subject to a fine of \$1,000 per tree, or up to the marketable value of each tree removed or damaged as determined by a Qualified Tree Professional, whichever is greater.
- c. Any fines paid as a result of violations of this chapter shall be allocated as follows: 75% paid into the City's Tree Fund; 25% into the General Fund.
- d. The Director may elect not to seek penalties or may reduce the penalties if he/she determines the circumstances do not warrant imposition of any or all of the civil penalties.
- e. Penalties are in addition to the restoration of removed trees through the remedial measures listed in TMC Section 18.54.200.
- f. It shall not be a defense to the prosecution for a failure to obtain a permit required by this chapter that a contractor, subcontractor, person with responsibility on the site or

person authorizing or directing the work erroneously believes a permit was issued to the property owner or any other person.

C. Remedial Measures Required: In addition to penalties assessed, the Director shall require any person conducting work in violation of this chapter to mitigate the impacts of unauthorized work by carrying out remedial measures.

1. Any illegal removal of required trees shall be subject to obtaining a Tree Permit and replacement with trees that meet or exceed the functional value of the removed trees.
2. To replace the tree canopy lost due to the tree removal, additional trees must be planted on-site. Payment shall be made into the City's Tree Fund if the number of replacement trees cannot be accommodated on-site. The number of replacement trees required will be based on the size of the tree(s) removed as stated in Table 18.45.158-1, Tree Replacement Requirements.
3. The applicant shall satisfy the permit provisions as specified in this chapter.
4. Remedial measures must conform to the purposes and intent of this chapter. In addition, remedial measures must meet the standards specified in this chapter.
5. Remedial measures must be completed to the satisfaction of the Director within 6 months of the date a Notice of Violation and Order is issued pursuant to TMC Chapter 8.45, or within the time period otherwise specified by the Director.
6. The cost of any remedial measures necessary to correct violation(s) of this chapter shall be borne by the property owner and/or applicant. Upon the applicant's failure to implement required remedial measures, the Director may redeem all or any portion of any security submitted by the applicant to implement such remedial measures, pursuant to the provisions of this chapter.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.197. Enforcement.

A. General: In addition to the Notice of Violation and Order measures prescribed in TMC Chapter 8.45, the Director may take any or all of the enforcement actions prescribed in this chapter to ensure compliance with, and/or remedy a violation of this chapter; and/or when immediate danger exists to the public or adjacent property, as determined by the Director.

1. The Director may post the site with a "Stop Work" order directing that all vegetation clearing not authorized under a Tree Permit cease immediately. The issuance of a "Stop Work" order may include conditions or other requirements which must be fulfilled before clearing may resume.

2. The Director may, after written notice is given to the applicant, or after the site has been posted with a "Stop Work" order, suspend or revoke any Tree Permit issued by the City.

3. No person shall continue clearing in an area covered by a "Stop Work" order, or during the suspension or revocation of a Tree Permit, except work required to correct an imminent safety hazard as prescribed by the Director.

B. Injunctive Relief. Whenever the Director has reasonable cause to believe that any person is violating or threatening to violate this chapter or any provision of an approved Special Permission or Tree Permit, the Director may institute a civil action in the name of the City for injunctive relief to restrain the violation or threatened violation. Such civil action may be instituted either before or after, and in addition to, any other action, proceeding or penalty authorized by this chapter or TMC Chapter 8.45.

C. Inspection Access:

1. The Director may inspect a property to ensure compliance with the provisions of a Tree Permit or this chapter, consistent with TMC Chapter 8.45.

2. The Director may require a final inspection as a condition of permit issuance to ensure compliance with this chapter. The permit process is complete upon final approval by the Director.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.200. Recording Required.

The property owner receiving approval of a use or development permit pursuant to TMC Chapter 18.45 shall record the City-approved site plan, clearly delineating the wetland, watercourse, areas of potential geologic instability or abandoned mine and their buffers designated by TMC Sections 18.45.080, 18.45.090, 18.45.100, 18.45.120, 18.45.140 and 18.45.150 with the King County Division of Records and Licensing Services. The face of the site plan must include a statement that the provisions of TMC Chapter 18.45, as of the effective date of the ordinance from which TMC Chapter 18.45 derives or is thereafter amended, control use and development of the subject property, and provide for any responsibility of the property owner for the maintenance or correction of any latent defects or deficiencies. Additionally, the applicant shall provide data (GPS or survey data) for updating the City's critical area maps.

(Ord. 2741 § 4 (part), 2024)

§ 18.45.210. Assurance Device.

A. In appropriate circumstances, such as when mitigation is not completed in advance of the project, the Director may require a letter of credit or other security device acceptable to the City to guarantee performance and maintenance requirements of TMC Chapter 18.45. All assurances

shall be on a form approved by the City Attorney and be equal to 150% of the cost of the labor and materials for implementation of the approved mitigation plan.

B. When alteration of a critical area is approved, the Director may require an assurance device, on a form approved by the City Attorney, to cover the cost of monitoring and maintenance costs and correction of possible deficiencies for five years. If at the end of five years performance standards are not being achieved, an increase in the security device may be required by the Director. When another agency requires monitoring beyond the City's time period, copies of those monitoring reports shall be provided to the City.

C. The assurance device shall be released by the Director upon receipt of written confirmation submitted to the Department from the applicant's qualified professional, and confirmed by the City, that the mitigation or restoration has met its performance standards and is successfully established. Should the mitigation or restoration meet performance standards and be successfully established in the third or fourth year of monitoring, the City may release the assurance device early. The assurance device may be held for a longer period, if at the end of the monitoring period, the performance standards have not been met or the mitigation has not been successfully established. In such cases, the monitoring period will be extended and the bond held until the standards have been met.

D. Release of the security does not absolve the property owner of responsibility for maintenance or correcting latent defects or deficiencies or other duties under law.

[E. State agencies and local governments are exempt from bonding requirements pursuant to RCW 35.21.470.](#)

(Ord. 2741 § 4 (part), 2024)

§ 18.45.220. Assessment Relief.

A. Fair Market Value: The King County Assessor considers critical area regulations in determining the fair market value of land under RCW 84.34.

B. Current Use Assessment: Established critical area tracts or easements, as defined in the Definitions chapter of this title and provided for in TMC Section 18.45.170, may be classified as open space and owners thereof may qualify for current use taxation under RCW 84.34; provided, such landowners have not received density credits, or setback or lot size adjustments as provided in the Planned Residential Development District chapter of this title.

C. Special Assessments: Landowners who qualify under TMC Section 18.45.220.B shall also be exempted from special assessments on the critical area tract or easement to defray the cost of municipal improvements such as sanitary sewers, storm sewers and water mains.

(Ord. 2741 § 4 (part), 2024)

CHAPTER 18.70

NONCONFORMING LOTS, STRUCTURES AND USES

18.70.055. Nonconforming Uses and Structures in Critical Areas.

A. Applicability:

1. Uses, buildings, or structures lawfully established in a critical area or its buffer prior to the adoption of this chapter that no longer conform to the provisions of this chapter shall be considered nonconforming structures and are subject to the following, superseding the provisions of TMC Chapter 18.70, Nonconforming Lots, Structures and Uses.

B. Discontinuance:

1. If the use of a nonconforming structure is discontinued for a period of twelve (12) months, any subsequent modification shall thereafter conform to the regulations of this part. Discontinuance of the use of a nonconforming structure for a period of twelve (12) months or greater constitutes prima facie evidence of an intention to abandon.

C. Damage or Destruction:

1. If a legal nonconforming structure is partially or fully damaged or destroyed due to accident, act of nature, or similar involuntary occurrence, the structure may be repaired or reconstructed if:

a. The casualty was not intentionally caused by the applicant or owner of the structure;

b. A complete permit application for repair or reconstruction is submitted within one (1) year of the occurrence of damage or destruction, unless otherwise approved by the City;

c. Areas of temporary disturbance resulting from the reconstruction shall be restored pursuant to a vegetative management plan approved by the Director.

D. Continuation:

1. If no modifications to a nonconforming structure are proposed, the structure may continue without coming into compliance with the regulations of this chapter.

E. Expansion or Modification:

1. Expansion or modification of a nonconforming structure may only be allowed if the following conditions are met:

- a. The expansion is located outside of critical areas and associated buffers;
- b. The expansion does not extend further into the buffer than the existing structure; or
- c. The expansion is vertical (adding additional upper stories).