CHAPTER 18.45 ENVIRONMENTALLY ~~SENSITIVE AREA~~CRITICAL AREAS

Sections:

18.45.10 Purpose

A. The purpose of TMC Chapter 18.45 is to protect the environment, human life and property~~;~~, to designate and classify ecologically ~~sensitive~~critical areas including but not limited to~~such as~~ 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.

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

1. Minimize developmental impacts on the natural functions of these areas.
2. Protect quantity and quality of water resources.
3. Minimize turbidity and pollution of wetlands and fish- bearing waters and maintain wildlife habitat.
4. Prevent erosion and the loss of slope and soil stability caused by the removal of trees, shrubs, and root systems of vegetative cover.
5. Protect the public against avoidable losses, public emergency rescue and relief operations cost, and subsidy cost of public mitigation from landslide, subsidence, erosion and flooding.
6. Protect the community's aesthetic resources and distinctive features of natural lands and wooded hillsides.
7. Balance the private rights of individual property owners with the preservation of environmentally

~~sensitive~~critical areas.

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

9. Give special consideration to conservation or protection measures necessary to protect or enhance ana~~-~~dromous fisheries.

10. Incorporate the use of best available science in the regulation and protection of ~~sensitive~~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.

(Ord. 2301 §1 (part), 2010)

18.45.20 Best Available Science

A. Policies, regulations and decisions concerning ~~sensitive~~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 ~~sensitive~~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 ~~sensitive~~critical areas or replace their functions.

(Ord. 2301 §1 (part), 2010)

18.45.30 ~~Sensitive~~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 ~~sensitive~~critical area or a ~~sensitive~~critical area buffer as defined in the "Definitions" chapter of this title. The provisions of TMC Chapter apply whether or not a permit or authorization is required within the City of Tukwila. No person, company, agency, or applicant shall alter a ~~sensitive~~critical area or buffer except as consistent with the purposes and requirements of TMC Chapter 18.45. The following are ~~sensitive~~critical areas regulated by TMC Chapter 18.45:

1. Coal Mine Hazard Areas~~Abandoned coal mines~~;
2. Areas of potential geologic instability: Class 2, 3, 4 areas (as defined in the Definitions chapter of this title and TMC 18.45.120.A);
3. Wetlands;
4. Watercourses;
5. Fish and Wildlife Habitat Conservation Areas; and
~~5.~~6. Special Hazard Flood Areas. (See TMC 16.52 for additional regulations)

~~B.~~ ~~B.~~The Growth Management Act also identifies ~~frequently flooded areas and~~ areas of seismic instability as critical areas.

~~C.~~B. ~~Regulations governing frequently flooded areas are found in TMC Chapter 16.52, Flood Zone Management.~~ Areas of seismic instability are defined and regulated through the Washington State Building Code. ~~See maps for designated areas of seismic instability.~~

~~C.The City shall not approve any permit or otherwise issue any authorization to alter the condition of sensitive~~critical ~~area land, water or vegetation or to construct or alter any structure or improvement in, over, or on a sensitive~~critical ~~area or its buffer, without first ensuring compliance with the requirements of TMC Chapter 18.45.~~

~~D. Approval of a permit or development proposal pursuant to the provisions of TMC Chapter 18.45 does not release the applicant from any obligation to comply with the provisions of TMC Chapter 18.45.~~

C. In the event of a conflict between this~~When~~ TMC Chapter 18.45 and any other laws, regulations, ordinances or restrictive covenants, the provision which imposes greater restrictions or higher standards upon the

development or use of land ~~than other laws, ordinances or restrictive covenants, the provisions of TMC Chapter 18.45~~ shall prevail.

~~E. It is the obligation of the property owner to comply with all relevant provisions of this Code.~~

~~F.~~D. ~~*SENSITIVE*~~*CRITICAL AREAS MAPS AND INVENTORIES*

1. The distribution of many ~~sensitive~~critical areas and potential critical areas in Tukwila is displayed on the ~~Sensitive~~ Critical Areas Maps, on file with the Department of Community Development (DCD). These maps are based on site assessment of current conditions and review of the best available scientific data and are hereby adopted by reference. Not all ~~sensitive area~~critical areas are shown on the map.~~,~~ Thus it is the responsibility of property owners and applicant~~'~~s ~~responsibility~~ to verify 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 wetland based on methodology required under TMC 18.45.80 and verifying that watercourse typing and location is consistent with TMC 18.45.100.
2. Studies, preliminary inventories and ratings of potential ~~sensitive area~~critical areas are on file with the Department of Community Development.
3. As new environmental information related to ~~sensitive area~~critical areas becomes available, the Director is hereby designated to periodically add, remove, or alter new information to the ~~Sensitive Area~~Critical Areas Maps. Removal of any information from the ~~sensitive area~~critical area maps is a Type 1 decision.
4. ~~Regardless of whether a sensitive area is shown on the sensitive areas map, the actual presence or absence of the features defined in the code as sensitive areas shall govern. The Director may require the applicant to submit technical information to indicate whether sensitive areas actually exist on or adjacent to the applicant's site, based on the definitions of sensitive areas in this code.~~
5. ~~All revisions, updates and reprinting of sensitive area~~critical areas maps, inventories, ratings and ~~buffers shall conform to TMC Chapter 18.45.~~

(Ord. 2301 §1 (part), 2010)

18.45.40 ~~Sensitive Area~~Critical Areas Special Studies

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

1. A required ~~sensitive area~~critical area study shall be prepared by a person with experience and training in the scientific discipline appropriate for the relevant ~~sensitive area~~critical area as outlined below, 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, ~~engineering,~~ environmental studies, fisheries, geotechnical or related field, and two years of related work experience.

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

c. A qualified professional for a geological hazard 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 hydrologist, ~~geologist,~~ fisheries biologist, engineer or other scientist with experience in preparing watercourse assessments.

2. The ~~sensitive area~~critical area study shall use scientifically valid methods and studies in the analysis of ~~sensitive area~~critical area data and shall use field reconnaissance and reference the source of science used. The ~~sensitive area~~critical area study shall evaluate the proposal and all probable impacts to ~~sensitive area~~critical areas. ~~in accordance with the provisions of TMC Chapter 18.45.~~

B. Wetland and Watercourse ~~Sensitive Area~~Critical Area Studies. The ~~sensitive area~~critical area study 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. A copy of the site plan for the development proposal showing: ~~sensitive area~~critical areas and buffers and the development proposal with dimensions, clearing limits, 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;

~~4.~~ Identification and characterization of all ~~sensitive area~~critical areas, water bodies, and buffers on or adjacent to the proposed project

~~5.~~

~~6.~~4. area or potentially impacted by the proposed project as described in the following sections:

a. Characterization of wetlands must include:

(1) 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, 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) ~~Functional a~~Assessment. For proposed wetland filling or proposed projects that will impact buffers the Washington Wetland Classification System (2014 or most current) shall be used as a functional assessment.

~~(7)~~

~~(8) Classification of the wetland under Tukwila's rating system.~~

b. Characterization of the watercourses on site, ~~or~~ adjacent to, ~~areas~~ or potentially impacted by the proposed project ~~to the site~~ 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.

~~7.~~5. A statement specifying the accuracy of the study and assumptions used in the study.

~~8.~~6. Determination of the degree of hazard and risk from the proposal both on the site and on adjacent properties.

~~9.~~7. An assessment of the probable cumulative impacts to ~~sensitive area~~critical areas, their buffers and other properties resulting from the proposal.

~~10.~~8. A description of reasonable efforts made to apply mitigation sequencing to avoid, minimize and mitigate impacts to ~~sensitive area~~critical areas.

~~11.~~9. Plans for adequate mitigation to offset any impacts.

~~12.~~10. Recommendations for maintenance, short-term and long-term monitoring, contingency plans and bonding measures.

11. Any technical information required by the Director to assist in determining compliance with this Chapter~~TMC Chapter 18.45~~.

~~13.~~12. Wetland and Watercourse special studies are valid for five years following the date of the study, unless otherwise determined by the Director.

C. *GEOTECHNICAL REPORT –*

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. ~~unless waived pursuant to TMC Section 18.45.040 E.~~

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 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 report shall be reviewed and approved by a geotechnical engineer.

D. *~~SENSITIVE AREA~~CRITICAL AREA STUDY - MODIFICATIONS TO REQUIREMENTS –*

~~a.~~ 1. The Director may limit the required geographic area of the ~~sensitive area~~critical area study as appropriate if :

t~~T~~he applicant, with assistance from the City, cannot obtain permission to access properties adjacent to the project area~~; or~~.

~~b. The proposed activity will affect only a limited part of the site.~~

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 ~~sensitive area~~critical area impacts and required mitigation.

E. *WAIVER* – A waiver to the sensitive area study may be granted by the Director if the following conditions have been met:

1. A wetland has been classified and delineated, or the Ordinary High Water Mark (OHWM) has been determined in watercourses and confirmed by the City within the last two years, in accordance with the requirements of this chapter.

2. The classification and location of wetland boundaries or OHWM have been confirmed by the City, and the proposed development or action will avoid all impacts to the sensitive area(s).

3. There is substantial evidence there will be no detrimental impact to the sensitive areas or buffers, and that the goals, purposes, objectives and requirements of TMC Chapter 18.45 will be followed.

F. *REVIEW OF STUDIES* – The Department of Community Development will review and verify the information submitted in the sensitive areacritical area study to verify the information, to confirm the nature and type of the sensitive areacritical area, and ensure the study is consistent with TMC Chapter 18.45. Public Works Department shall seek a peer review of the geotechnical report on Class 3 and 4 slopes; 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 aAt the discretion of the Director, sensitive areacritical area studies may undergo peer review, at the expense of the applicant. *(Ord. 2368 § 47, 2012; Ord. 2301 §1 (part), 2010)*

G.E.

18.45.050 Interpretation

The provisions of TMC Chapter 18.45 shall be held to be minimum requirements in their interpretation and application and shall be liberally construed to serve the purposes of TMC Chapter 18.45.

(Ord. 2301 §1 (part), 2010)

18.45.060 Procedures

When an applicant submits an application for any building permit, subdivision, short subdivision or any other land use review which approves a use, development or future construction, the location and dimensions of all sensitive areas and buffers on the site shall be indicated on the plans submitted. When a sensitive area is identified, the following procedures apply. The Director

A. may waive item numbers 1, 2, 4 and 5 of the following if the size and complexity of the project does not warrant that step in the procedures and the following are required unless the Director grants a waiver pursuant to TMC Section 18.45.040 E. Approval by the Department of a sensitive area alteration is contingent upon the applicant granting the City the right of continuous entry upon proper notice to observe sensitive area conditions.

B. The applicant shall grant the City the right of continuous entry upon proper notice to observe critical area conditions.

C. *Sensitive areas study and geotechnical report:*

D. The applicant shall submit the relevant study as required in TMC Section 21.04.140 and TMC Chapter 18.45

E. It is intended that sensitive areas studies and information be utilized by applicants in preparation of their proposals and therefore shall be undertaken early in the design stages of a project.

F. Planned residential development permit: Any new residential subdivision or multiple family residential proposal that includes a wetland or watercourse or its buffer on the site may apply for a planned residential development permit and meet the requirements of the Planned Residential Development District chapter of this title.

G. Denial of use or development: A use or development will be denied if the Director determines the applicant cannot ensure that potential dangers and costs to future inhabitants of the development, adjacent properties, and Tukwila are minimized and mitigated to an acceptable level.

H. Preconstruction meeting: The applicant, specialistqualified professional(s) of record, contractor, and department representatives will be required to attend pre-construction meetings prior to any work on the site.

I. Construction monitoring: The specialistqualified professional(s) of record shall be retained to monitor the

~~site during construction.~~

~~J. On-site identification: The Director may require the boundary between a sensitive areacritical area and its buffer and any development or use to be permanently identified with fencing, and/or with a wood, plastic or metal sign mounted on a treated wood, concrete or metal post. Sign size will be determined at the time of permitting; however, the minimum size shall be 10 x 12 inches. It shall be permanently affixed to the post by bolts and the wording shall be as follows:~~

~~K. "Protection of this natural area is in your care. Alteration, dumping or disturbance is prohibited pursuant to TMC Chapter 18.45. Please call the City of Tukwila at 206-431-3670 for more information."~~

~~L. .~~

(Ord. 2301 §1 (part), 2010)

18.45.70 ~~Sensitive Area~~Critical Area Permitted ~~Uses~~Activities

A. Outright Permitted ~~General Uses~~Activities. ~~The uses set forth in this entire section, including subsections A. through D, and the~~ The following ~~general uses, may be located within a sensitive area or buffer,~~activities are outright permitted ~~generally exempt from TMC Chapter 18.45. These activities are still~~ subject to the provisions of TMC Chapter 21.04 and of the mitigation requirements of ~~TMC Chapter 18.45~~this chapter, if applicable:

~~1.~~ Maintenance and repair of existing ~~uses and~~ facilities provided no alteration or additional fill materials will be

~~2.~~

~~3.~~1. placed or heavy construction equipment used in the ~~sensitive area~~critical area or buffer.

~~4.~~ Site exploration or research that does not include use of heavy equipment or native vegetation removal~~Nondestructive education and research.~~

~~5.~~2. ~~Passive recreation and open space.~~

~~6.~~3. Maintenance 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 road.

~~7.~~4. Actions to remedy the effects of emergencies that threaten the public health, safety or welfare.

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

~~8.~~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 18.45.158.E.3

B. PERMITTED ~~USES~~ ACTIVITIES SUBJECT TO ADMINISTRATIVE REVIEW. The following uses may be permitted only after administrative review and approval of a Type 2 Special Permission application by the Director:

1. Maintenance 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.

2. New surface water discharges to ~~sensitive area~~critical areas or their 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 173.201 as amended, and does not adversely affect wetland hydrology or watercourse flow~~water level fluctuations in the wetland or adversely affect watercourse habitat and watercourse flow conditions relative to the existing rate~~. Water quality monitoring may be required as a condition of use.

3. Construction of ~~B~~bioswales and dispersion trenches~~outfalls~~ are the only storm water facilities allowed in wetland or watercourse buffers. Water quality monitoring may be required as a condition of use

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

5. Construction or maintenance of Essential Utilities if designed to~~.~~

~~a. Essential utilities must be constructed to minimize, or where possible avoid, disturbance of the sensitive areacritical area and its buffer.~~

~~All construction must be designed to~~ protect the ~~sensitive area~~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.

~~b. Upon completion of installation of essential utilities, sensitive areacritical areas and their buffers must be restored to pre- project configuration, replanted as required and provided with maintenance care until newly planted vegetation is established. In addition, mitigation to offset impacts to sensitive areacritical areas or their buffers must be carried out in accordance with the standards and mitigation ratios of this chapter.~~

~~c. All crossings must be designed for shared facilities in order to minimize adverse impacts and reduce the number of crossings.~~

6. Construction or maintenance of Essential Public Streets, Roads and Rights-of-Way as defined by TMC 18.06.285, provided the following criteria are met:

~~For construction of new essential public streets, roads and rights-of-way, as defined by TMC Section 18.06.285, where avoidance of sensitive areacritical areas is not possible, impacts to the sensitive areacritical area and its buffer must be kept to the absolute minimum.~~

a. ~~Essential public streets, roads and rights-of-way, as defined by TMC Section 18.06.285, must be~~Are designed and maintained to prevent erosion and avoid restricting the natural movement of groundwater.

b. ~~Essential public streets, roads and rights-of-way, as defined by TMC Section 18.06.285, must be~~ 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. ~~Essential public streets, roads and rights-of-way, as defined by TMC Section 18.06.285, must be~~ 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.

~~Upon completion of construction, the area affected must be restored to an appropriate grade, replanted according to a plan approved by the Director, and provided with care until newly planted vegetation is established, at least 5 years. In addition, mitigation to offset impacts to sensitive areacritical areas or their buffers must be carried out in accordance with the standards and mitigation ratios set forth in this chapter.~~

7. 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 sensitivity to human disturbance or alteration. Access features shall be the minimum dimensions necessary to avoid adverse impacts to the ~~sensitive area~~critical area. Trails shall be no wider than 5 feet and are only allowed in the outer ~~half~~ 25 percent of the buffer, except for allowed wetland or stream crossings. ~~For proposed wetland or watercourse crossings or trails, an assessment of impacts to wet- land/watercourse and buffer function (especially where the sensitive areacritical area provides habitat function for wildlife) will be required and must be prepared by a qualified biologist, except for minor crossings, such as foot bridges or stepping stones, for access to contiguous property.~~ Crossings and trails must be designed to avoid adverse impacts to ~~sensitive area~~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).

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

c. No motorized vehicle is allowed within a ~~sensitive area~~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 ~~sensitive area~~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 ~~sensitive area~~critical areas and their buffers by limiting access to 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.

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.

8. 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 18.45.90 (alteration of wetland), TMC 18.45.110 (alteration of watercourse), or TMC 18.45.100 (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.

~~a. Dredging, digging or filling within a sensitive area~~critical area ~~or its buffer may occur only with the permission of the Director and only for the following purposes:~~

~~(1) Uses permitted by TMC Sections 18.45.080, 18.45.090, 18.45.110, 18.45.130;~~

~~(2) Maintenance of an existing watercourse;~~

~~(3) Enhancement or restoration of habitat in conformance with an approved mitigation plan identified in a sensitive area~~critical area ~~study;~~

~~(4) Natural system interpretation, education or research when undertaken by, or in cooperation with, the City;~~

~~(5) Flood control or water quality enhancement by the City;~~

~~(6) Maintenance of existing water quality controls, for normal maintenance needs and for any diversion, rerouting, piping or other alteration permitted by TMC Chapter 18.45;~~

~~(7) Filling of abandoned mines.~~

~~b. Any dredging, digging or filling shall be performed in a manner that will minimize sedimentation in the water. Every effort will be made to perform such work at the time of year when the impact can be lessened.~~

~~c. Upon completion of construction, the area affected must be restored to an appropriate grade, replanted according to a plan approved by the Director, and provided with care until newly planted vegetation is established.~~

~~Removal of Hazardous . Only hazardous trees, as defined in Chapter 18.06.395, may be removed from a sensitive area~~critical area. ~~In cases where the hazard is not obvious, an assessment by an arborist certified by the International Society of Arborists may be required by the Director. Tree replacement in accordance with TMC Chapter 18.54 is required for any hazardous tree removed from a sensitive area~~critical area. ~~Dead trees~~Any other vegetation (dead or living) may not be removed, unless they present a hazard to public safety or structures.

~~C. Permitted Uses Subject to Exception Approval. Other uses may be permitted upon receiving a reasonable use exception pursuant to TMC Section 18.45.180. A use permitted through a reasonable use exception shall conform to the procedures of TMC Chapter 18.45 and be consistent with the underlying zoning.~~

~~D. Uses allowed under a Sensitive Area Master Plan prepared and approved under the provisions of TMC Section 18.45.160.~~

(Ord. 2301 §1 (part), 2010)

18.45.075 Mitigation Sequencing

A. Applicants shall demonstrate that reasonable efforts have been 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.

18.45.80 Wetlands Designations, Ratings and Buffers

A. *WETLAND DESIGNATIONS*.

1. For the purposes of TMC Chapter 18.45, "wetlands" and "regulated wetlands" are defined in the Definitions chapter of this title. A wetland boundary is the line delineating the outer edge of a wetland established ~~by using the Washington State Wetland and Delineation Manual, as required by RCW 36.70A.175 (Ecology Publication #96-94) and consistent with the 1987 Corps of Engineers Wetland Delineation Manual~~in accordance with the 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 or wetland boundaries must be conducted within no more than five years prior to the date of permit application.

~~3 Wetland areas within the City of Tukwila have certain characteristics and functions and have been influenced by urbanization and related disturbances. Wetland functions include, but are not limited to, the following:~~

~~Improving water quality;~~

~~Maintaining hydrologic functions (reducing peak flows, decreasing erosion, groundwater recharge, flood storage); and~~

~~Providing habitat for plants, mammals, fish, birds, and amphibians.~~

B. *WETLAND RATINGS* –

Wetlands shall be designated in accordance with the Washington State Wetlands Rating System for Western Washington, (Washington State Department of Ecology, ~~August 2004, Publication #04-06-025~~2014, Publication # 14-06-029); or as otherwise amended by Ecology as Category I, II, III, or IV. ~~as listed below:~~

~~1. Category I wetlands are those that: i) represent a unique or rare wetland type; or ii) are more sensitive to disturbance than most wetlands; or iii) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or iv) provide a high level of functions. The following types of wetlands listed by Washington Department of Ecology and potentially found in Tukwila are Category I:~~

~~a. Estuarine Relatively undisturbed estuarine wetlands (deepwater tidal habitats with a range of fresh-brackish-marine water chemistry and daily tidal cycles, salt and brackish marshes, intertidal mudflats, bays, sounds, and coastal rivers);~~

~~b. Wetlands that perform many functions well and score at least 70 points in the Western Washington Wetlands Rating System.~~

~~2. Category II wetlands are difficult, though not impossible, to replace and provide high levels of some~~

~~functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection. The following types of wetlands listed by Washington Department of Ecology and potentially found in Tukwila are Category II wetlands:~~

~~a. The wetland is documented as regionally significant waterfowl or shorebird areas by the State Department of Fish and Wildlife.~~

~~b. Wetlands that perform functions well. Wetlands scoring between 51-69 points (out of 100) on the questions related to the functions present.~~

~~3. Category III wetlands have a moderate level of functions (scores between 30 and 50 points). Wetlands scoring between 30-50 points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.~~

~~4. Category IV wetlands have the lowest levels of functions (scores less than 30 points) and are often heavily disturbed. While these are wetlands that should be able to be replaced or improved, they still need protection because they may provide some important functions. Any disturbance of these wetlands will be considered on a case by case basis.~~

C. *WETLAND BUFFERS* –

~~5.~~1. Purpose. ~~A buffer area shall be established adjacent to designated wetland areas.~~ 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 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 ~~sensitive area~~critical area from human and domestic animal disturbances.

~~D. An undisturbed sensitive area or buffer may substitute for the yard setback and landscape requirements of the TMC Chapter~~

~~E. 18.50 and 18.52.~~

D. ~~*WETLAND BUFFER WIDTHS*~~ *BUFFER REQUIREMENTS*–

~~i.~~ 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. ~~The following standard buffers shall be established from the wetland edge:~~

~~a. Category I and II Wetland: 100-foot buffer.~~

~~b. Category III Wetland: 80-foot buffer.~~

~~c. Category IV Wetland: 50-foot buffer.~~

Table 18.45.080-1 Wetland Buffer Widths

Category	Wetland buffer width (ft), Ecology 2014, high-intensity land use impact					
	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 1)	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 1)
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**

(1)~~i.~~ 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

Disturbance	Required Measures to Minimize Impacts
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' 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

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 (see TMC Figure 18-2).

F. VARIATION –OF –STANDARD- WETLAND –BUFFER WIDTH –

~~2. The Director may reduce the standard wetland buffers only where the buffer conditions are currently degraded (due to existing development within the prescribed buffer width, the presence of significant amount of invasive vegetation that impairs buffer function, and/or lack of native vegetation) on a case- by-case basis, provided the remaining buffer is enhanced and the buffer does not contain slopes 15% or greater. Where a buffer has a variable topography that includes Class I slopes on the landward half of the buffer, a buffer reduction may be allowed if the proposed reduction is in the area with the Class I slopes, and a 10-foot planted setback from the top of the slope is maintained. Further, a geotechnical review of the proposed buffer enhancement plan must determine the buffer enhancement can be implemented without destabilizing the slope. The approved buffer width shall not result in greater than a 50% reduction in width.~~

1. Buffer ~~reduction with enhancement~~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 ¾ 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:~~-~~

~~with an approved buffer enhancement plan prepared by a qualified wetland biologist, if:~~

~~Additional protection to wetlands will be provided through the implementation of a buffer enhancement plan;~~

~~The existing condition of the buffer is degraded;~~
~~and~~
~~Buffer enhancement includes, but is not limited to the following:~~
~~Planting vegetation that would increase value for fish and wildlife habitat or improve water quality or hydrology;~~
~~Enhancement of wildlife habitat by in- corporating structures that are likely to be used by wildlife, including wood duck boxes, bat boxes, snags, root wads/stumps, birdhouses and heron nesting areas; or~~

~~Removing non-native plant species and noxious weeds from the buffer area and replanting the area subject to 2.c. (1) above.~~

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.

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.

d. Compliance with TMC 18.45 Vegetation Protection and Management section.

e. Submittal of buffer enhancement plan, mitigation monitoring and maintenance plan along with financial guarantee in accordance with TMC 18.45.

2. Interrupted Buffer: Waiver for interrupted buffer may be allowed by the Director as a Type 2 permit if the following criteria is met:

i) The buffer is interrupted by a paved public or private road; legally constructed buildings; or legally approved parking lots. This waiver does not apply to accessory structures such as sheds and garages;
j) The existing legal improvement creates a substantial barrier to the buffer function;
ii) The interrupted buffer does not provide additional protection of the critical area from the proposed development; and
iii) The interrupted buffer does not provide significant hydrological, water quality and wildlife functions. This waiver does not apply if large trees or other significant native vegetation exists.
iv) Enhancement of remaining buffer is required if feasible.

~~1.~~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 by a qualified wetlands ~~specialist~~ 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 habitat for endangered, threatened, sensitive or monitor species listed by the federal government or the State.

~~Every reasonable effort shall be made to maintain the existing viable native plant life in the buffers. Vegetation may be removed from the buffer as part of an enhancement plan approved by the Director. Enhancements will ensure that slope stability and wetland quality will be maintained or improved. Any disturbance of the buffers for wetlands shall be replanted with a diverse plant community of native northwest species that are appropriate for the specific site as determined by the Director. If the vegetation~~

~~must be removed, or because of the alterations of the landscape the vegetation becomes damaged or dies, then the applicant for a permit must replace existing vegetation along wetlands with comparable specimens, approved by the Director, which will restore buffer functions within five years~~

~~The Director shall require subsequent corrective actions and long-term monitoring of the project if adverse impacts to regulated wetlands or their buffers are identified.~~

(Ord. 2368 §48, 2012; Ord. 2301 §1 (part), 2010)

18.45.90 Wetlands Uses, Alterations and Mitigation

A. No use or development may occur in a ~~Category I, Category II, Category III or Category IV~~ 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. Where required, a mitigation plan must be developed and must comply with the standards of mitigation required in TMC Chapter 18.45. Where unauthorized alterations occur within a critical area or its buffer, the City will require the applicant to submit a critical area study, 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* –

1. Alterations to wetlands are discouraged and are limited to the minimum necessary for 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.

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; ~~and~~

g. The alteration will not have adverse effects on any other ~~sensitive area~~critical area~~s.~~; and

~~g.~~h. Complies with the maintenance and monitoring section.

2. Alterations are not permitted to Category I and II wetlands unless specifically exempted under the provisions of TMC Chapter 18.45.

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 IV wetlands less than 1,000 square feet in size that meet all of the following conditions are allowed~~, only~~ where ~~unavoidable and~~ adequate mitigation is carried out in accordance with the standards of ~~TMC Section 18.45.090~~this section.~~5.Wetland that are less than 1000 square feet may be exempted where it has been shownby the applicant that~~

a. T~~t~~hey are not associated with a riparian corridor,

b. They are not associated with shorelines of the state or their associated buffers,

c. T~~t~~hey are not part of a wetland mosaic;

d. They~~,~~ do not contain habitat identified as essential for local populations of priority species identified by the Washington State Department of Fish and Wildlife, and

~~a.~~e. They do not score ~~20~~ 6 points or greater for habitat in the Western Washington Wetland Rating System.

~~6Mitigation plans shall be completed for any proposals for dredging, filling, alterations and relocation of wetland habitat allowed in TMC Chapter 18.45.~~

~~*MITIGATION SEQUENCING* – Applicants shall demonstrate that reasonable efforts have been examined with the intent to avoid and minimize impacts to wetlands and wetland buffers. When an alteration to a wetland or its required buffer is proposed, such alteration shall be avoided, minimized or compensated for in the following order of preference:~~

~~Avoiding the impact altogether by not taking a certain action or parts of an action;~~
~~Minimizing wetland and wetland 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;~~
~~Rectifying the impact by repairing, rehabilitating or restoring the affected environment;~~
~~Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;~~
~~Compensating for the impact by replacing, en- hancing, or providing substitute resources or environments; and/or~~
~~Monitoring the impact and taking appropriate corrective measures.~~
~~quality;~~

~~WETLAND MITIGATION PLAN CONTENT.~~
~~The mitigation plan shall be developed as part of a sensitive area study by a specialist approved by the Director. Wetland and/or buffer alteration or relocation may be allowed only when a mitigation plan clearly demonstrates that the changes would be an improvement of wetland and buffer quantitative and qualitative functions. The plan shall follow the performance standards of TMC Chapter 18.45 and show how water quality, wildlife and fish habitat, and general wetland quality would be improved.~~
~~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 sensitive area increase, the mitigation measures to offset these impacts will increase in number and complexity.~~
~~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).~~
~~The components of a complete mitigation plan are as follows:~~
~~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.~~
~~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.~~
~~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.~~
~~A detailed construction plan of the written specifications and descriptions of mitigation techniques. This plan should include the proposed construction sequence, and construction management, and tree protection and be accompanied by detailed site diagrams and blueprints that are an integral requirement of any development proposal.~~
~~A monitoring and/or evaluation program that outlines the approach for assessing a completed project for the specified monitoring period, at least 5 years. 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.~~
~~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.~~

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

~~E~~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. ~~1.~~Restoration:
   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;
   b. Rehabilitation. The manipulation of the physical, chemical or biological characteristics of a site with the goal of repairing historic functions and processes of a degraded wetland, resulting in a gain in wetland functions but not acreage;
2. Creation (establishment). 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. Enhancement. The manipulation of the physical, chemical or biological characteristics to heighten, intensify, or improve specific functions (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.
4. A combination of the three types.

b) Required mitigation ratios are described in TMC Section 18.45.090.E.1.b.(1). 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.

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.

~~3.~~4. Mitigation for alteration to wetland buffers will be 1:1.

2) 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~~Acreage~~ 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 of mitigation shall be done by the property owner for a period of no less than five years and for ten 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 must be submitted to the City for review with the frequency specified in the approved mitigation plan.

~~4. The Community Development Director may approve, through a Type 2 decision, the transfer of wetland mitigation to a wetland mitigation bank using the criteria in 4.a. through 4.f. below. The Director must determine approve the number of wetland mitigation bank credits required to meet the mitigation ratios established in TMC Chapter 18.45.~~

~~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~~

~~The mitigation achieved through the number of credits required meets the intent of TMC Chapter 18.45; and~~

~~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~~

~~The applicant provides a copy of the wetland bank ledger demonstrating that the approved number of credits has been removed from the bank.~~

~~F.~~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 ~~reducing a~~ buffer ~~by more than 50%~~alterations, ~~additional~~ 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. 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 or as amended, for potential offsite mitigation locations.

3. Purchase of mitigation credits through mitigation banks and in lieu fee programs is preferred over permittee responsible offsite mitigation.

4. The Community Development Director may approve, through a Type 2 decision, the transfer of wetland mitigation to a wetland mitigation bank or in-lieu fee program using the criteria in 4~~3~~.a. through 4~~3~~.f. below. Wetland mitigation bank credits~~required to meet the mitigation ratios established in TMC Chapter 18.45~~ 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.

~~Off-site mitigation shall occur within the same watershed where the wetland loss occurred.~~

~~.~~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.
~~However, t~~
6.The Director may approve permittee-responsible offsite mitigation sites outside the city upon finding that:
i)Adequate measures have been taken to ensure the non-development and long-term viability of the mitigation site; and
ii)Adequate coordination with the other affected local jurisdiction has occurred.
iii)~~In selecting permittee-responsible offsite mitigation sites,~~ The applicant~~s shall~~ has selected a site in a location where the targeted functions can reasonably be performed and sustained and has~~shall~~ pursued sites in the following order of preference:
Sites within the immediate drainage sub-basin;
Sites within the next higher drainage sub-basin; and
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.

~~G~~*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.

(Ord. 2301 §1 (part), 2010)

F. WETLAND MITIGATION PLAN CONTENT.

1. The mitigation plan shall be developed as part of a critical area 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 be an improvement of wetland and buffer 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. 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.

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 (~~noted in parentheses after each category~~WAC 222-16-030) or as amended, which are based on the existing habitat functions and ~~are rat~~classified as follows:

1. Type ~~1 (~~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 ~~2 (~~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 222-16-031(3) or as amended) and that have perennial (year-round) or seasonal flows.

3. Type ~~3 (~~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.

4. Type ~~4 (~~Ns~~)~~ Watercourse: Those watercourses that have intermittent flows (do not have surface flow during at least some portion of the year) ~~and~~ ; 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.

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 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 ~~sensitive area~~critical area from human and domestic animal disturbance.

An undisturbed and high quality ~~sensitive area~~critical area or buffer may substitute for the yard setback and landscape requirements of TMC Chapter 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:

1. Type ~~1 (~~S~~)~~ Watercourse: Regulated under TMC Chapter 18.44, Shoreline Overlay.

2. Type ~~2 (~~F~~)~~ Watercourse: 100-foot-wide buffer.
3. Type ~~3 (~~Np~~)~~ Watercourse: Standard 80-foot-wide buffer~~.~~; alternate buffer in the 50-65 range allowed with buffer enhancement.
4. Type ~~4 (~~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 (see TMC Figure 18-2).

E. *VARIATION OF STANDARD WATERCOURSE BUFFER WIDTH* –

~~1. The Director may reduce the standard watercourse buffers on a case-by-case basis, only where the buffer is significantly degraded (due to existing development within the prescribed buffer width, the presence of significant amount of invasive vegetation that impairs buffer function, and/or lack of native vegetation), provided the remaining buffer is enhanced in accordance with an approved buffer enhancement plan, prepared by a qualified professional, and does not contain slopes 15% or greater. Where a buffer has a variable topography that includes Class I slopes on the landward portion of the buffer, a buffer reduction may be allowed if the proposed reduction is in the area with the Class I slopes, and a 10 foot planted setback from the top of the slope is maintained. Further, a geotechnical review of the proposed buffer enhancement plan must determine that the buffer enhancement can be implemented without destabilizing the slope. The approved buffer width shall not result in greater than a 50% reduction in width. Any buffer reduction proposal must demonstrate to the satisfaction of the Director that it will not result in direct, indirect or long-term adverse impacts to watercourses, and that:~~

~~a. The buffer is vegetated and includes an on-site buffer enhancement plan prepared by a qualified professional, to retain existing native vegetation and install additional native vegetation in order to improve the buffer function; or~~

~~If there is no significant vegetation in the buffer, a buffer may be reduced only if an on-site buffer enhancement plan is provided. The plan must include using a variety of native vegetation that improves the functional attributes of the buffer and provides additional protection for the watercourse functions. At least five years monitoring will be required.~~

1 Buffer averaging may be allowed by the Director as a Type 2 decision 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 ¾ of the required width; 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.

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.

d. Compliance with TMC 18.45 Vegetation Protection and Management section.

e. Submittal of buffer enhancement plan, mitigation monitoring and maintenance plan along with financial guarantee in accordance with TMC 18.45.

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

i) The buffer is interrupted by a paved public or private road; legally constructed buildings; or legally approved parking lots. This waiver does not apply to accessory structures such as sheds and garages.

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

iii) The interrupted buffer does not provide additional protection of the critical area from the proposed development; and

iv) The interrupted buffer does not provide significant hydrological, water quality and wildlife functions. This waiver does not apply if large trees or other significant native vegetation exists.

v) Enhancement of remaining buffer is required if feasible.

~~2.~~

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 ~~specialist~~ 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 habitat for endangered, threatened, sensitive or monitor species listed by the federal government or the State.

~~3. Every reasonable effort shall be made to maintain the existing viable native plant life and non-invasive significant trees in the buffers. Vegetation may be removed from the buffer as part of an enhancement plan approved by the Director. Enhancements will ensure that slope stability and watercourse quality will be maintained or improved. Any disturbance of the buffers for watercourses shall be replanted with a diverse plant community of native northwest species that are appropriate for the specific site as determined by the Director. If the vegetation must be removed, or because of the alterations of the landscape the vegetation becomes damaged or dies, then the applicant for a permit must replace existing vegetation along watercourses with comparable specimens, approved by the Director, that will restore buffer functions within five years.~~

~~4. The Director shall require subsequent corrective actions and long-term monitoring of the project if adverse impacts to regulated watercourses or their buffers are identified.~~

(Ord. 2301 §1 (part), 2010)

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 TMC Chapter 18.45. Any use or development allowed is subject to the standards of TMC Chapter 18.45.

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, ~~D~~diverting or rerouting is discouraged. Culverts are piped segments of streams which flow under a road, trail or driveway. Daylighting of a stream refers to taking a stream out of a pipe which 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. 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 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 or as amended.

2. 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), shall be upgraded to meet the standards in the Washington Department of Fish and Wildlife Water Crossing Design Guidelines manual 2013 or as amended 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 or as amended.

~~1.~~3. 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~~ requires an approved mitigation plan; and shall meet the following criteria:~~.~~

a) ~~Any watercourse that has critical wildlife habitat, or is necessary for the life cycle or spawning of salmonids, shall not be rerouted unless it can be shown that the habitat will be improved for the benefit of the species.~~ The watercourse alteration shall comply with the standards in current use and the standards of the Washington Department of Fish and Wildlife in the "Water Crossing Design Guidelines" manual (2013 or as amended).

b) The ~~-~~watercourse alteration shall not cause adverse impacts to fish, confine the channel or floodplain, or adversely affect riparian habitat (including downstream habitat).

~~a)~~ 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.~~.~~

c)

~~b)~~ Stormwater runoff shall be detained and infiltrated to preserve the existing hydrology of the watercourse. ~~channel's dominant discharge.~~

d) 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.

All watercourse alterations shall be carried out or constructed during periods of low flow, or as specified by the State Department of Fish and Wildlife in accordance with an approved Hydraulic Project Approval (HPA).

c)

d) A watercourse may be rerouted or day lighted as a mitigation measure to improve watercourse function.

e) 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.

a. Permanent piping of any watercourse should be avoided. Relocation of a watercourse or installation of a bridge is preferred to piping. If piping occurs in a watercourse sensitive areacritical area, it shall be limited to requirements the degree necessary for stream crossings for access and shall require approval of the Director.

b. Piping of Type 1 S watercourses shall not be permitted.

c. Piping may be allowed in watercourses if it is necessary for access purposes. In all watercourses, it must be demonstrated that the piping will not cause adverse impacts to fish, confine the channel or floodplain, create an entry point for road run-off, create downstream scouring, cause erosion or sedimentation, or adversely impact riparian habitat (including downstream habitat).

d. Piping projects shall be performed pursuant to the following applicable standards:

(1). The conveyance system shall be designed to comply with the standards in current use and recommended by the Department of Public Works and the standards of the Washington Department of Fish and Wildlife in the "Design of Road Culverts for Fish Passage" manual (2003 or as amended).

(21).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

b) When required by the Director, watercourses under drivable surfaces shall be contained in an arch culvert using oversize or super span culverts for rebuilding of a streambed. These shall be provided with check dams to reduce flows, and shall be replanted and enhanced according to a plan approved by the Director.

c) All watercourse crossings shall be de- signed to accommodate fish passage, unless technically not feasible.

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.

d)b) 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.

e.a. Stormwater runoff shall be detained and infiltrated to preserve the watercourse channel's dominant discharge.

f. All construction shall be designed to have the least adverse impact on the watercourse, buffer and surrounding environment.

g. All piping or other alterations shall be carried out or constructed during periods of low flow, or as specified by the State Department of Fish and Wildlife in accordance with an approved Hydraulics PermitHydraulic Project Approval (HPA).

h. On properties 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), shall be upgraded to meet the standards in the WDFW manual "Design of Road Culverts for Fish Passage" (2003 or as updated) if technically feasible.

C. *MITIGATION PLAN CONTENT.* All impacts to a water- course 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.~~

~~a) 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 sensitive area study by a specialist approved by the Director. The plan must show how water quality, treatment, erosion control, pollution reduction, wildlife and fish habitat, and general watercourse quality would be improved.~~

~~b) 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.~~

~~c) The components of a complete mitigation plan are as follows:~~

~~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 envi- ronmental 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.~~

~~D.~~C. *MITIGATION STANDARDS*–

~~a) The Washington "Stream shore Program, Washington Department of Ecology, US Fish and Wildlife Service, Washington Department of Fish and Wildlife, 2004 or as amended) shall be used as Best Available Science for the development of watercourse and buffer mitigation techniques.~~

1) The following shall be considered the minimum standards for approved ~~stream alterations~~mitigation projects:

a. Maintenance or improvement of stream channel habitat and dimensions such that the fisheries habitat functions of the compensatory stream ~~reach~~ 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 ~~(in the case of public drainage maintenance projects) and~~ better than in the original stream ~~(in the case of other kinds of projects)~~;

e. Original fish and wildlife habitat enhanced unless technically not feasible;and ~~.~~

~~e.~~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 to ensure that projects are fully mitigated.

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

~~E.~~D. *MITIGATION TIMING* – Department of Community Development-approved plans as Type 2 decision must have the mitigation construction completed before the existing watercourse can be modified. The Director may allow activities that permanently disturb a watercourse prior to implementation of the mitigation plan under the following circumstances:

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

E. MITIGATION PLAN CONTENT. All impacts to a water- course 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.

a. 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 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.

b. 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.

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

i. 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.

ii. 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.

iii. Performance standards for fulfilling envi-ronmental 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.

iv. 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.

v. 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.

vi. 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.

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

(Ord. 2301 §1 (part), 2010)

18.45.120 Areas of Potential Geologic Instability Designation, Rating and Buffers

A. *DESIGNATION* – Potential areas of geologic instability include areas of potential erosion and landslide hazards. Areas of potential geologic instability are classified as follows:

1. Class 1 area, ~~where landslide potential is low, and~~ which has a slope of~~is~~ less than 15%;
2. Class 2 areas, ~~where landslide potential is moderate,~~ which has a slope ~~is~~ between 15% and 40%, and which are underlain by relatively permeable soils;
3. Class 3 areas, ~~where landslide potential is high,~~ 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%;
4. ~~4.~~ Class 4 areas, ~~where landslide potential is very high,~~ which include sloping areas with mappable zones of groundwater seepage, and which also include existing mappable landslide deposits

regardless of slope.~~;~~

4.

B. Mapping.

1. The approximate location, extent, and designation of 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 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 or the WDNR Division of Geology and Earth Resources;
b. For potential or historic landslides, those areas mapped by the WDNR (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.

C. *BUFFERS* –

~~5.~~1. The buffers for areas of potential geologic instability are intended to:

a. Minimize long-term impacts of development on properties containing ~~sensitive area~~critical areas;
b. Protect ~~sensitive area~~critical areas from adverse impacts during development;
c. Prevent loading of potentially unstable slope formations;
d. Protect slope stability;
e. Provide erosion control and attenuation of pre- cipitation surface water and stormwater runoff; and
f. Reduce loss of or damage to property.

~~6. An undisturbed sensitive area or buffer may substitute for the yard setback and landscape requirements of TMC Section 18.50 and 18.52.~~

~~B.~~D. Each development proposal containing or threatened by an area of potential geologic instability Class 2 or higher shall be subject to a geotechnical report pursuant to the requirements of TMC Chapter 18.45.040 C, and 18.45.060. The geotechnical report 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 ~~TMC Chapter 18.45~~. Development proposals shall then include the buffer distances as defined within the geotechnical report.

~~C.~~E. ~~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 geotechnical engineer and by a site visit~~.

(Ord. 2368 §49, 2012; Ord. 2301 §1 (part), 2010)

18.45.130 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 areas of potential geologic instability subject to the standards of this section and the recommendations of a geotechnical study.

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. Any temporary slope that has been created through legal grading activities under an approved permit may be re- graded without application of TMC Chapter 18.45 under an approved permit;~~

~~4.~~3. Roadway embankments within right-of-way or road easements; and

~~5.~~4. Slopes retained by approved engineered structures.

C. *ALTERATIONS –*

1. Prior to permitting alteration of an 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 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 area of potential geologic instability is cleared for development, a landscaping plan for the site shall include tree replanting with an equal mix of evergreen and deciduous trees, shrubs and groundcovers, preferably native, and 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 area of potential geologic instability unless there is no practical alternative (demonstrated by the applicant)

4. Land disturbing activities in an 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 WA.

5. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an 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 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 & fill to amount necessary)

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

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,

~~3.~~

~~4.~~2. 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.

~~5.~~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.

~~6.~~4. The owner ~~–~~shall execute a ~~Sensitive Area~~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 Elections at the expense of the applicant or owner. A copy of the recorded covenant will be forwarded to the owner.

E. *ASSURANCE DEVICES* – Whenever the City determines that the public interest would not be served by the issuance of a permit in an 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.

F. *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.

G. *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 dryer 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. 2301 §1 (part), 2010)

18.45.140 Coal Mine Hazard~~Abandoned Mine~~ 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 ~~Sensitive Area~~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 Elections at the expense of the applicant or owner. A copy of the recorded covenant will be forwarded to the owner.

(Ord. 2301 §1 (part), 2010)

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. Commercial and recreational shellfish areas;~~
   ~~d. Kelp and eelgrass beds;~~
   ~~e. Mudflats and marshes;~~
   ~~f.~~c. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat;
   ~~g.~~d. Waters of the State;
   e. State natural area preserves and natural resource conservation areas; and
   ~~h.~~f. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity
   ~~i. Areas critical for habitat connectivity.~~
2. Type S watercourses, including the Green/Duwamish River, are regulated under TMC 18.44 and not under this section.
3. Wetlands and watercourses are addressed under 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 ~~Sensitive Area~~Critical Areas Maps, inventories, open space zones, and Natural Environment Background Report. ~~The City designates 1, 2, 5, 6, 7, and 9 above as known fish and wildlife habitats within its current limits.~~

2. ~~Fish and wildlife habitat conservation areas correlate closely with the areas identified as regulated watercourses and wetlands and their buffers in Tukwila. The Green/Duwamish River is recognized as the most significant fish and wildlife habitat corridor, as well as off-channel habitat areas created in the river to improve salmon habitat (shown on the Sensitive Areas Map) in the Shoreline jurisdiction. Gilliam Creek, Riverton Creek, Southgate Creek, Johnson Creek, and Hamm Creek (in the north PAA) all provide salmonid habitat. In addition, the Native Growth Protection Area in the Tukwila South project area provides an important upland wildlife habitat corridor. Tukwila Pond and its associated wetlands also meet the definition of a fish and wildlife habitat for waterfowl and other birds during all seasons of the year.~~ In addition to the ~~Sensitive Area~~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~~s~~ for the Green/Duwamish and Central Puget Sound Watersheds published by King County and the Washington Conservation Commission; and

   ~~Washington State~~NOAA Digital Coast~~al~~ for Washington State~~and Coastal Zone Management Program~~.

C. BUFFERS ~~–~~

1. Each development proposal on, adjacent to, or with the potential to impact a Fish and Wildlife Habitat Conservation Area~~s shall have buffers no less than 100 feet in width. s~~other than wetlands and watercourses shall be subject to a habitat assessment report pursuant to the requirements of TMC Chapter 18.45.040.B and 18.45.060. 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 b~~shall have b~~uffers shall be no less than 100 feet in width.~~-~~

~~1. Buffer reductions approved for an underlying wetland or watercourse shall also apply to the related~~

~~Conservation Area.~~

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.

~~A.~~ *D. USES AND STANDARDS* – ~~Fish and wildlife habitat conservation areas will be regulated through TMC Chapter 18.44, Shoreline Overlay District, and the regulations in TMC Chapter related to wetlands and watercourses. No additional use regulations apply specifically to Conservation Areas.~~ Each development proposal on, adjacent, or with the potential to impact a Fish and Wildlife Habitat Conservation Area that is not fully addressed under 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 Chapter 18.45.040.B and 18.45.060. 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. 2301 §1 (part), 2010)

18.45.155 Special Hazard Flood Areas

A. Regulations governing Special Hazard Flood areas are found in TMC Chapter 16.52, Flood Zone Management and 18.45.155.B.

B. Floodplain Habitat Assessment.

1. When development is proposed within a Special Hazard Flood areas~~.~~, a floodplain habitat assessment shall be prepared pursuant to the requirements of TMC Chapter 18.45.040 B and 18.45.060.

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.

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

    a. Projects that are undergoing or have undergone consultation with the National Marine Fisheries Service under the Endangered Species Act.

    b. Repair or remodeling of an existing structure, if the repair or remodeling is not a substantial improvement.

    c. Expansion of an existing structure that is no greater than 10 percent beyond its existing footprint; provided, that the repairs or remodeling is 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.

d. 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.

e. 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.

f. Repair to on-site septic systems provided the ground disturbance is the minimum necessary.

g. 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.

18.45.158 Vegetation Protection and Management

A. Purpose, ~~Objectives and Applicability~~.

1.The purpose of this section is to:

a. Regulate the protection of existing trees and native vegetation in the critical areas and their buffers;

b. Establish requirements for removal of invasive plants at the time of development or re-development of sites;

c. Establish requirements for the long-term maintenance of native vegetation to prevent establishment of invasive species and promote ecosystem processes.

B. Applicability

This chapter sets forth rules and regulations to control maintenance and clearing of trees 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 18.54 Urban Forestry and Tree chapter shall govern tree removal on any undeveloped land and any land zoned Low Density Residential (LDR) that is developed with a single family residence. TMC Chapter 18.52 "Landscape Requirements" shall govern the maintenance and removal of landscaping on developed properties that are zoned commercial, industrial, or multifamily, and on properties located in the LDR zone that are developed with a non-single family residential use. The most stringent regulations shall apply in case of a conflict.

~~B~~C. Vegetation Retention and Replacement.

1. Retention

~~2. The tree protection and retention requirements and the vegetation management requirements apply to existing uses as well as new or re-development.~~

a.~~2.~~ Native vegetation in critical areas and their buffers must be protected and maintained. No removal of native vegetation is allowed without prior approval by the City except 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 that slope stability and wetland quality will be maintained or improved. Any temporary disturbance of the buffers shall be replanted with a diverse plant community of native northwest species.

b. Invasive vegetation (blackberry, ivy, laurel, etc.) may be removed from a critical area or its buffer except steep slopes without a permit if removal does not utilize heavy equipment ~~or herbicide~~. 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 18.45.158.E.3. Invasive vegetation removal on steep slopes requires prior City ~~A~~approval

c. Hazardous or defective trees, as defined in TMC 18.06, may be removed from a critical area if threat posed by the tree is imminent. If the hazard is not obvious, an assessment by a certified professional, as defined in TMC 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 for any hazardous tree 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 land use application, including, ~~such as~~ but not limited to, subdivision or short plat, design review or building permit ~~project~~ review, the Director of Community Development or the Board of Architectural Review may require alterations in the arrangement of buildings, parking or other elements of proposed development in order to retain significant vegetation.

~~To protect the ecological functions that trees, and native vegetation provide to critical areas, removal of any significant tree or native vegetation in a critical area or its buffer requires a Critical Area Tree Removal and Vegetation Clearing Permit and is generally only allowed on sites undergoing development or re-development. Only trees that interfere with access and passage on public trails or trees that present an imminent hazard to existing structures or the public may be removed from sites without an issued building permit, or Federal approval.~~the , ~~Factors that will be considered in approving tree removal include but are not limited to: tree condition and health, age, risks to structures, and potential for root or canopy interference with utilities.~~

~~7~~2. Permit Requirements. Prior to any ~~hazardous~~ 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 must be submitted to the Department of Community Development (DCD) containing the following information:

a. A vegetation survey on a site plan that shows the diameter, species and location of all significant trees and all existing native vegetation.

b. A site plan that shows trees and native vegetation to be retained and trees to be removed and provides a table showing the number of significant trees to be removed and the number of replacement trees required.

c. Tree protection zones and other measures to protect any trees or native vegetation that are to be retained for sites undergoing development or re-development.

d. Location of the OHWM, stream buffer, wetland, wetland buffer, steep slope or any other critical areas with their buffers.

e. A landscape plan that shows diameter, species name, spacing and planting location for any required replacement trees and other proposed vegetation.

f. An arborist evaluation justifying the removal of hazardous trees if required by DCD.

g. An application fee per the current Land Use Permit Fee resolution.

3. Criteria for Tree Removal in a Critical Area or its buffer

A Type 2 Critical Area Tree Removal and Vegetation Clearing Permit shall only be approved if the proposal complies with the following criteria as applicable:

a. The site is undergoing development or redevelopment;

b. Tree poses a risk to structures;

c. There is imminent potential for root or canopy interference with utilities;

d. Trees interferes with the access and passage on public trails;

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

f. 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; and

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

~~8~~4. Tree Replacement Requirements .Where permitted, significant trees that are removed, illegally topped, or pruned by more than 25% within a ~~from~~ critical areas shall be replaced pursuant to the tree replacement requirements shown below, up to a density of 100 trees per acre (including existing trees). Significant trees that are part of an approved landscape plan on the developed portion of the site are subject to replacement per TMC 18.52. Dead or dying trees removed that are part of an approved landscape plan on the developed portion of the site shall be replaced at 1:1 ratio in the next appropriate planting season. 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. Removal of dead, dying or otherwise hazardous trees in non-developed areas are subject to the replacement requirements listed in the Table below. The Director may require additional trees or shrubs to be installed to mitigate any potential impact from the loss of this vegetation as a result of new development.

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

~~9. 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. Mitigation or restoration projects that fail to meet pre-determined performance standards must be replanted in the next appropriate season for planting or per requirements of approved Mitigation Plan.~~

~~10.~~ If all required replacement trees cannot be reasonably accommodated on the site, the applicant shall pay into a tree replacement fund per the adopted . ~~The fee shall be determined on an annual basis as part of the F~~fee resolution.

~~11.Dead or dying trees located within a of a critical area or its buffer shall be left in place as wildlife snags, unless they present a hazard to structures, facilities or the public. Dead or dying trees within developed or landscaped areas shall be replaced 1:1 in the next appropriate season for planting.~~

~~12.~~Topping of trees is prohibited and will be regulated as removal subject to ~~with~~ tree replacement requirements listed above~~d~~.

~~13.~~Pruning of trees shall not exceed 25% of canopy in a ~~three-year~~36 month period. Pruning in excess of 25% canopy shall be regulated as removal with tree replacement required ~~.~~per Table listed above.~~-~~ Trees may 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 Permit. The pruning must 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.

~~C~~D. Tree Protection

All trees not proposed for removal as part of a project or development shall be protected using Best Management Practices 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 fence or plywood 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, dumping 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. ~~No construction personnel shall prune affected limbs except under the direct supervision of 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.

~~D~~E. Plant Materials Standards

For any new development, redevelopment or restoration in a Critical Area, 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 biologist shall be submitted to the City for approval that shows plant species, size, number, spacing, soil preparation irrigation, and invasive species removal. The requirement for a biologist may be waived by the Director for single family property owners when the mitigation area is less than 1500 sq. ft.

2. Invasive vegetation must be removed as part of site preparation and native vegetation planted in the Critical Area and its buffer where impacts occur.

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 TMC 18.45.158.E.3 Where not feasible and mechanized equipment is needed, the applicant must obtain a Type 2 permit prior to work being conducted. Removal of invasive vegetation must be conducted so that the slope stability, if applicable, will be maintained and native vegetation is protected. A plan 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.

4. 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 for alternative approaches, such as sheet mulching and goat grazing. The method selected shall not destabilize the bank or cause erosion.

5. A combination of native trees, shrubs and groundcovers (including but not limited to grasses, sedges, rushes and vines) shall be planted. 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.

6.. 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 or conflicts with utilities).

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

8. 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 landscaping chapter TMC 18.52 for plant sizes in required landscape areas.

9. Site preparation and planting 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.

10. Plants may be selected and placed to allow for public and private view corridors with approval by Director.

11. 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.

12. 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 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.

Critical Area Buffer Vegetation Planting Densities Table

Plant Material Type	Planting Density
Stakes/cuttings along streambank (willows, red osier dogwood)	1 - 2 feet on center or per bioengineering method
Shrubs	3 - 5 feet on center, depending on species

Trees	15 – 20 feet on center, depending on species
Groundcovers, grasses, sedges, rushes, other herbaceous plants	1 – 1.5 feet on center, depending on species
Native seed mixes	5 - 25 lbs. per acre, depending on species

13.The Department 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 proposed as a measure to control invasive plants and increase buffer function.

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

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~~shoreline~~ ecological function. 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.Plant debris from removal of invasive plants 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 need to be disposed of in the landfill/trash and non-regulated noxious weeks can be disposed of in green waste or composted on site.

3.Use of pesticides.

a. Pesticides (including herbicides, insecticides, and fungicides) shall not be used in the critical area or its buffer except where:

(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 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 is applied in accordance with state regulations;

(4) The proposed herbicide is approved for aquatic use by the U.S. Environmental Protection Agency; and

(5) The use of pesticides in the critical area~~shoreline~~ jurisdiction is approved ~~in writing~~ 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.

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 Special Permission or critical area 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.

~~F~~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: ~~Mitigation or restoration projects that fail to meet pre-determined performance standards must be replanted in the next appropriate season for planting or per requirements of approved Mitigation Plan.~~

1. Tree Replacement and Vegetation Clearing Permit Requirements

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

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

2. Restoration and Mitigation Project Requirements.

a. A five-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 survival rates against project goals and present contingency plans to meet project goals.

c. Mitigation will be complete after project goals have been met and accepted by the City environmentalist.

d. A 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.

18.45.160 ~~Sensitive Area~~Critical Area Master Plan Overlay

A. The purpose of this section is to provide an alternative to preservation of existing individual wetlands, watercourses and their buffers in situations where an area-wide plan for alteration and mitigation 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 designate certain areas as ~~Sensitive Area~~Critical Area Master Plan Overlay Districts for the purpose of allowing and encouraging a comprehensive approach to ~~sensitive area~~critical area protection, restoration, enhancement and creation in appropriate circumstances utilizing best available science. Designation of ~~Sensitive Area~~Critical Area Master Plan Overlay Districts shall occur through the Type 5 decision process established by TMC Chapter 18.104.

C. Criteria for designating a ~~Sensitive Area~~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 ~~Sensitive Area~~Critical Area Master Plan is likely to result in net improvements in ~~sensitive area~~critical area functions when compared to development under the general provisions of TMC Chapter 18.45.

D. Within a ~~Sensitive Area~~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, ~~a Type 1 (S) watercourse,~~ or ~~their~~ its buffer~~s~~.

E. Within a ~~Sensitive Area~~Critical Area Master Plan Overlay district, the uses permitted under TMC 18.45.070, 18.45.090 and 18.45.110 and other uses as identified by an approved ~~Sensitive Area~~Critical Area Master Plan shall be permitted within Category III and Category IV wetlands and their buffers; and within Type ~~2, (~~F, ~~) 3 (~~Np, ~~)~~ and 4 ~~(~~Ns~~)~~ watercourses and their buffers, provided that such uses are allowed by the underlying zoning designation.

F. A ~~Sensitive Area~~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 ~~Sensitive Area~~Critical Area Overlay District for the purpose of allowing and encouraging a comprehensive approach to ~~sensitive area~~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 ~~Sensitive Area~~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 ~~sensitive area~~critical areas and their buffers and/or alternative mitigation results in an overall net benefit to the natural environment and improves ~~sensitive area~~critical area functions.

5. Whether the Mitigation Plan gives special con~~-~~sideration 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 ~~sensitive area~~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 ~~Sensitive Area~~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~~Sensitive 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.

(Ord. 2301 §1 (part), 2010)

18.45.170 ~~Critical Area~~~~Sensitive Areas~~Critical Areas Tracts and Easements

A. In development proposals for planned residential or mixed use developments, short subdivisions or subdivisions, and boundary line adjustments and binding site plans, applicants shall create ~~sensitive area~~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 18.45.170A, on parcels containing ~~sensitive area~~critical areas or their buffers, may elect to establish a ~~sensitive area~~critical areas tract or easement which shall be:

1. If under one ownership, owned and maintained by the owner~~ship~~;
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 ~~sensitive area~~critical area tracts or easements shall remain undeveloped in perpetuity.

(Ord. 2301 §1 (part), 2010)

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 ~~wetlands, watercourses, 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 ~~sensitive area~~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 ~~sensitive area~~critical areas and their buffers has been minimized ~~by locating any necessary alterations in the buffers~~ to the greatest extent possible.

~~e.~~f. All unavoidable impacts are fully mitigated.

~~f.~~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 permittable 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 ~~sensitive area~~critical areas ordinance provisions that prevents or interferes with the reasonable use of the property; or

(3) a violation of the critical~~sensitive~~ areas ordinance;

~~g.~~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~~e sensitive area ordinance~~ to the extent feasible; and

(2) does not create a risk of damage to other property or to the public health, safety and welfare.

~~h.~~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. *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 ~~sensitive area~~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. 2368 §50, 2012; Ord. 2301 §1 (part), 2010)

18.45.190 Time Limitation, Appeals and Vesting

A. Time Limitation: Type 2 Special Permission decision for interrupted buffer, buffer averaging or other alterations shall expire in one year unless the applicant submits a complete building permit or other construction permit within one year. Type 1 tree permit for tree removal within sensitive areas or their buffers shall expire in one year unless an extension is granted by the Director.

The Director may grant an extension 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.

~~A.~~

B. Appeals: Any appeal of a final decision made by the Community Development 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 Section 18.108.020 and TMC Chapter 18.116.
In considering appeals of decisions or conditions, the following shall be considered:
1. The intent and purposes of this Chapter~~e sensitive area s ordinance~~;
2. Technical information and reports considered by the Community Development Department; and
3. Findings of the Director, which shall be given substantial weight.

C. Vesting: Projects are vested to critical area ordinance in effect at the time a complete building permit is submitted except for short plats, subdivisions, binding site plans and shoreline permits. Short plats or subdivisions or binding site plans are vested to the critical area ordinance in effect at the time complete application is submitted for preliminary plats or for the binding site plan. The final plat and all future building permits on the lots remain vested to that same critical areas ordinance in effect for the preliminary plat or preliminary binding site plan application, so long as building permits are applied for within five years of the final plat. For short plats and subdivisions which received preliminary plat approval prior to the adoption of this ordinance, building permits on the lots shall be considered under the critical areas ordinance in effect on the date of the preliminary plat application provided complete building or construction permits are submitted within five years of the final plat approval. Vesting provisions for shoreline permits are provided in TMC 18.44

(Ord. 2301 §1 (part), 2010)

18.45.195 Violations~~Appeals~~

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 ~~p~~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 ~~sensitive area~~critical area use, buffer reduction or development authorization.

5. To ~~-~~fail ~~-~~to ~~-~~comply~~-~~ with ~~-~~the ~~-~~requirements ~~-~~of ~~-~~this chapter.

~~B. *ENFORCEMENT*. It shall be the duty of the Community Development Director to enforce this chapter pursuant to the terms and conditions of TMC Chapter 8.45.~~

~~C. INSPECTION ACCESS.~~

~~1. For the purposes of inspection for compliance with the provisions of a permit or this chapter, authorized representatives of the Community Development Director may enter all sites for which a permit has been issued.~~

~~2. Upon completion of all requirements of a permit, the applicant shall request a final inspection by contacting the planner of record. The permit process is complete upon final approval by an authorized representative of the Community Development Director.~~

~~D.~~B. *PENALTIES.*

~~1. Except as provided otherwise in this section~~A 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~~,~~" ~~and shall be imposed pursuant to the procedures and conditions set forth in that chapter~~.

1.

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.

~~E.~~C. *REMEDIAL MEASURES REQUIRED*. In addition to penalties assessed~~provided in TMC Chapter 8.45~~, the Director shall~~may~~ require any person conducting work in violation of this chapter to mitigate the impacts of unauthorized work by carrying out remedial measures.

1. ~~Remedial measures must conform to the policies and guidelines of this chapter.~~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 B.
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.

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 a Special Permission or Tree Permit issuance to ensure compliance with this chapter. The permit process is complete upon final approval by the Director.

~~F. INJUNCTIVE RELIEF.~~

~~1. Whenever the City has reasonable cause to believe that any person is violating or threatening to violate the sensitive areacritical areas regulations or any rule or other provisions adopted or issued pursuant to these regulations, it may either before or after the institution of any other action or proceeding authorized by this ordinance, institute a civil action in the name of the City for injunctive relief to restrain the violation or threatened violation. Such action shall be brought in King County Superior Court.~~

~~2. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of these regulations.~~

~~G. *ABATEMENT*. Any use, structure, development or work that occurs in violation of these regulations, or in violation of any lawful order or requirement of the Director pursuant to this section, shall be deemed to be a public nuisance and may be abated in the manner provided by the Tukwila Municipal Code, Section 8.45.105.~~

(Ord. 2301 §1 (part), 2010)

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 Elections. 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. 2301 §1 (part), 2010)

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 ~~sensitive area~~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. ~~In the event that more than five years monitoring and maintenance is required, the amount of security required will be for the first five years and years 7 and 10.~~ 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 and confirmed by the City to the Department from the applicant's qualified professional 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.

(Ord. 2301 §1 (part), 2010)

18.45.220 Assessment Relief

A. *FAIR MARKET VALUE* – The King County Assessor considers ~~sensitive area~~critical area regulations in determining the fair market value of land under RCW 84.34.

B. *CURRENT USE ASSESSMENT* – Established ~~sensitive area~~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 18.34; 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 ~~sensitive area~~critical area tract or easement to defray the cost of municipal improvements such as sanitary sewers, storm sewers and water mains.

(Ord. 2301 §1 (part), 2010)

TMC 18.70.050 Nonconforming Structures

Where a lawful structure exists at the effective date of adoption of this title that could not be built under the terms of this title by reason of restrictions on area, development area, height, yards or other characteristics of the structure, it may be continued so long as the structure remains otherwise lawful subject to the following provisions:

1. No such structure may be enlarged or altered in such a way that increases its degree of nonconformity. Ordinary maintenance of a nonconforming structure is permitted, pursuant to TMC Section 18.70.060, including but not limited to painting, roof repair and replacement, plumbing, wiring, mechanical equipment repair/replacement and weatherization. These and other alterations, additions or enlargements may be allowed as long as the work done does not extend further into any required yard or violate any other portion of this title. Complete plans shall be required of all work contemplated under this section.

2. Should such structure be destroyed by any means to an extent of more than 50% of its replacement cost at time of destruction, in the judgment of the City's Building Official, it shall not be reconstructed except in conformity with provisions of this title, except that in the LDR zone, structures that are nonconforming in regard to yard setbacks or sensitive area buffers, but were in conformance at the time of construction may be reconstructed to their original dimensions and location on the lot.

3. Should such structure be moved for any reason or any distance whatsoever, it shall thereafter conform to the regulations for the zone in which it is located after it is moved.

4. When a nonconforming structure, or structure and premises in combination, is vacated or abandoned for 24 consecutive months, the structure, or structure and premises in combination, shall thereafter be required to be in conformance with the regulations of the zone in which it is located. Upon request of the owner, the City Council may grant an extension of time beyond the 24 consecutive months.

5. Residential structures and uses located in any single-family or multiple-family residential zoning district and in existence at the time of adoption of this title shall not be deemed nonconforming in terms of bulk, use, or density provisions of this title. Such buildings may be rebuilt after a fire or other natural disaster to their original dimensions and bulk, but may not be changed except as provided in the non-conforming uses section of this chapter.

6. Single-family structures in single- or multiple-family residential zone districts that have legally nonconforming building setbacks, shall be allowed to expand the ground floor only along the existing building line(s), so long as the existing distance from the nearest point of the structure to the property line is not reduced, and the square footage of new intrusion into the setback does not exceed 50% of the square footage of the current intrusion.

7. In wetlands, watercourses and their buffers, existing structures that do not meet the requirements of the Critical~~Sensitive~~ Areas Overlay District chapter of this title may be remodeled, reconstructed or replaced, provided that:

a. The new construction does not further intrude into or adversely impact an undeveloped critical~~sensitive~~ area or the required buffer except where an interrupted buffer waiver has been granted by the Director. However, legally constructed buildings, other than accessory structures may:

i) Expand vertically to add upper stories in exchange for buffer enhancement; provided no significant tree is removed.

ii) Expand laterally along the building side that is opposite of critical area up to a maximum of 1000 sq. ft; provided that expansion is outside 75 percent of the required buffer; buffer enhancement is proposed; and no significant tree is removed.

iii) Expand laterally along the existing building lines in exchange for buffer enhancement; provided the expansion into the buffer is less than 50 percent of the current encroachment or 500 sq. ft, whichever is less, expansion is outside 75 percent of the required buffer, and no significant tree is removed.

iv) Enclose within existing footprint in exchange for buffer enhancement; provided no significant tree is removed.

b. The new construction does not threaten the public health, safety or welfare; and

c. The structure otherwise meets the requirements of this chapter.

8. In areas of potential geologic instability, coal mine hazard areas, and buffers, as defined in the Critical ~~Sensitive~~ Areas Overlay District chapter of this title, existing structures may be remodeled, reconstructed or replaced, provided that:

a. The new construction is subject to the geotechnical report requirements and standards of TMC Sections 18.45.120B and 18.45.120C;

b. The new construction does not threaten the public health, safety or welfare;

c. The new construction does not increase the potential for soil erosion or result in unacceptable risk or damage to existing or potential development or to neighboring properties; and

d. The structure otherwise meets the requirements of this chapter.

~~9. A nonconforming use, within a nonconforming structure, shall not be allowed to expand into any other portion of the nonconforming structure~~

CHAPTER 18.54

URBAN FORESTRY AND TREE REGULATIONS

Sections:

18.54.010 Purpose

A. The purpose of this chapter is to implement the Urban Forestry Comprehensive Plan goals; to maintain and increase tree canopy throughout the City; and to provide requirements for tree maintenance, tree retention and protection. Trees and their canopy act to improve air quality, promote the public health, reduce human-related stress, increase property values, reduce heat islands, and reduce storm water flows. The tree regulations also support the Low Impact Development goals of the Comprehensive Plan and the City's National Pollution Discharge Elimination System permit.

B. In particular, the purpose of this chapter is to:

1. Protect existing trees prior to and during development;
2. Establish protections for the long-term maintenance of trees and vegetation;
3. Moderate the effects of wind and temperature;
4. Minimize the need for additional storm drainage facilities;
5. Stabilize and enrich the soil and minimize surface water and ground water run-off and diversion which may contribute to increased instability, sedimentation, or turbidity in streams, lakes, or other water bodies;
6. Protect fish, wildlife and their habitats by promoting tree retention and improving water quality;
7. Ensure tree replacement after removal to provide erosion control and to achieve canopy coverage goals;
8. Recognize the importance of Heritage and Exceptional Trees to the history of the community; and
9. Establish procedures for penalties and violations of the tree code.

(Ord. 2570 §2, 2018; Ord. 1758 §1 (part), 1995)

18.54.020 ~~Scope~~Applicability

This chapter sets forth rules and regulations to control maintenance and clearing of trees within the City of Tukwila on any undeveloped land and any land zoned Low Density Residential (LDR) that is developed with a single family residence~~,~~ For properties located within the Shoreline jurisdiction, ~~-~~maintenance and removal of vegetation shall be governed by TMC Chapter 18.44, "Shoreline Overlay.". For properties located within a critical area or its associated buffer, the maintenance and removal of vegetation shall be governed by TMC Chapter 18.45 "Critical Areas". TMC Chapter 18.52 "Landscape Requirements" shall govern the maintenance and removal of landscaping on developed properties that are zoned commercial, industrial, or multifamily; and on properties located in the LDR zone that are developed with a non-single family residential use. The most stringent regulations shall apply in case of a conflict.

(Ord. 2570 §3, 2018; Ord. 1758 §1 (part), 1995)

18.54.030 Tree Permit Required

A. Permit Required.

1. A Tree Permit is required prior to work within the Critical Root Zone of any Significant, Exceptional or Heritage Tree or prior to the removal or destruction of any these trees within the City, unless the action is exempt from this chapter.

2. A Tree Permit is required when any person wishes to prune a Heritage Tree in excess of 20% of the existing crown in a two-year period.

3. A request for an exception to the requirements of the chapter shall be processed under a Tree Exception Permit.

~~B. Tree removal on undeveloped lots is prohibited.~~

~~C~~B. Tree Removal Exemptions. The following activities are exempt from the permit requirements of this chapter except as noted below:

1. ~~1.~~The removal of trees that are less than 6 inches in Diameter at Breast Height (DBH) on a property zoned Low Density Residential and improved with a single-family dwelling.
2. Removal of no more than four trees that are 6-8" DBH on a property zoned Low Density Residential and improved with a single-family dwelling in any 36 month period so long as the property owner submits a tree inventory survey, which includes the following:
   a. Number of and size of trees to be removed.
   b. The location of any affected utility lines within the overhead "fall zone" or other built infrastructure.
   c. Photos of the tree(s) to be removed;
   d. The method of removal and identification of contractor; and
   e. Time schedule of tree removal.

~~2~~3. The removal of Dead Trees outside of the shoreline jurisdiction or a sensitive area or its buffer.

~~4~~3. Routine maintenance of trees necessary to maintain the health of cultivated plants, or to contain noxious weeds or invasive species as defined by the City of Tukwila or King County, and routine maintenance within rights-of-way related to Interference, Sight Distance, Emergencies or Topping, as codified in TMC Chapter 11.20. Routine maintenance includes the removal of up to 2~~5~~0% of the existing tree crown in a 36 month ~~two-year~~ period.

~~4~~5. 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 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.

~~6~~5. The removal of trees in the right-of-way related to a capital project that has a landscaping component that includes trees, where there is adequate room in the right-of-way.

~~6~~7. Removal of trees as allowed with a Class I-IV forest practices permit issued by the Washington State Department of Natural Resources.

(Ord. 2570 §4, 2018; Ord. 1758 §1 (part), 1995)

18.54.040 Permit Submittal Requirements

~~A. Single-family Tree Removal – Up to Four Trees. Except for Heritage Trees, the removal of 1-4 Significant Trees within any 36-month period on a property zoned Low Density Residential and improved with a single-family~~

~~dwelling is permitted, subject to the requirements of Table A below and possible tree replacement. Information to be submitted as part of a Tree Inventory Survey shall include the following:~~

~~1. Number of and size of trees to be removed.~~

~~2. The location of any affected utility lines within the overhead "fall zone" or other built infrastructure.~~

~~3. Photos of the tree(s) to be removed;~~

~~4. The method of removal and identification of contractor; and~~

~~5. Time schedule of tree removal.~~

~~Table A~~

~~Single Family Tree Removal Requirements~~

~~Trees (DBH)~~	~~# of Trees in 36 month period that can be removed~~	~~Tree Permit?~~	~~Qualified Tree Professional Report?~~
~~6-8"~~	~~4~~	~~Inventory Survey~~	~~No~~
~~>8-12"~~	~~2~~	~~Yes~~	~~No~~
~~>12-18"~~	~~2~~	~~Yes~~	~~No~~
~~>18"~~	~~1~~	~~Yes~~	~~No~~

~~B~~A. Permit Application. Prior to any tree removal, site clearing or work within the Critical Root Zone, a Tree Permit application must be submitted to the Department of Community Development containing the following information:

1. Site Plan of the proposal showing:
   a. Diameter, species name, location and canopy of existing Significant Trees in relation to proposed and existing structures, utility lines, and construction limit line;
   b. Identification of all Significant Trees to be removed and/or relocated;
   c. Existing and proposed topography of the site at 2-foot contour intervals; and
   d. Limits of any sensitive area and sensitive area buffer and/or shoreline jurisdiction.
2. Landscape Plan for the proposal showing:
   a. Diameter, species name, spacing and location of replacement trees to be planted;
   b. Diameter, species name and location of all Significant Trees to be retained; and
   c. Vegetation protection measures consistent with the criteria in TMC Section 18.54.060.
3. Professional review or recommendation~~.~~ for removal of Heritage Trees or as otherwise required. A Qualified Tree Professional report is not required for the permitted removal of trees, other than Heritage Trees, on a lot zoned Low Density Residential and improved with a single-family dwelling. ~~All Tree Permits shall require a Qualified Tree Professional report unless otherwise stated in this chapter, or when the Director determines that tree clearing, site clearing or work within the Critical Root Zones may result in adverse impacts requiring remedial measures. A Qualified Tree Professional report is not required for the permitted removal of trees, other than Heritage Trees, on a lot zoned Low Density Residential and improved with a single-family dwelling.~~ The Director may require a report from a Qualified Tree Professional if replacement trees are required~~.~~ or when the Director determines that tree removal, site clearing, or work within the Critical Root Zone may result in adverse impacts requiring remedial measures. Third party review of the report or recommendation may be required. The report or recommendation shall address the following:
   a. The anticipated effects of proposed construction or tree removal on the viability of Significant Trees to remain on-site;
   b. Recommendations on replacement trees, spacing and maintenance of proposed replacement trees once installed;
   c. Post-construction site inspection and evaluation; and
   d. Estimated cost of maintenance of replacement trees for the purposes of calculation of financial assurance, if required.
4. A photo of the tree(s) to be impacted or removed.

5. Time schedule. Proposed time schedule of vegetation removal, relocation and/or replacement, and other construction activities that may affect on-site vegetation, sensitive area, sensitive area buffer, and/or shoreline zone.

~~C. See Table B for the number of replacement trees required, if any.~~

B~~D~~. Permit Materials Waiver. The Director may waive the requirement for any or all plans or permit items specified in this section upon finding that the information on the application is sufficient to demonstrate that the proposed work will meet the approval criteria detailed in this chapter and other City ordinances. Such waiver of a requirement shall not be construed as waiving any other requirements of this chapter or related regulations.

C~~E~~. Permit Application Fee. A Tree Permit fee shall be paid at the time an application or request is filed with the department, pursuant to TMC Section 18.88.010, except as otherwise noted in this chapter. All fees shall be paid according to the Land Use Fee Schedule in effect at the time of application. There is no permit fee for submittal of the Tree Inventory Survey.

(Ord. 2570 §5, 2018)

18.54.050 Permit Approval Criteria, General

All Tree Permit applications shall meet the criteria outlined below for approval.

1. Existing trees will be retained on-site to the maximum extent possible as required by TMC Section 18.54.060 and as recommended in the Qualified Tree Professional report, if applicable.
2. Tree protection will be implemented as required in TMC Section 18.54.070.
3. Tree replacement will be implemented as required in TMC Section 18.54.080; unless no replacement is required per TMC 18.54.080 Table A.
4. Tree replacement funds will be deposited into the City of Tukwila Tree Fund, as described in TMC Section 18.54.100, if required.
5. A performance assurance will be submitted as required in TMC Section 18.54.110.

(Ord. 2570 §6, 2018; Ord. 1758 §1 (part), 1995)

18.54.060 Tree Retention Standards

A. As many Significant, Exceptional and Heritage Trees as possible are to be retained on a site proposed for development or re-development, particularly to provide a buffer between development, taking into account the condition and age of the trees. As part of a land use application such as, but not limited to, subdivision or short plat review, design review or building permit review, the Director of Community Development or the Board of Architectural Review may require reasonable alterations to the arrangement of buildings, parking or other elements of the proposed development in order to retain Significant, Exceptional or Heritage non-invasive Trees.

B. Topping and pruning of more than 25 percent of the canopy of trees is prohibited and considered removal and subject to replacement requirements of TMC 18.54.080.

C. Trees located on undeveloped~~vacant~~ properties is prohibited except:~~shall not be removed except:~~

1. Those that interfere with access and/or passage on public trails; or
2. When trees, including alders and cottonwoods, have been determined to be one of the following by a Tree Risk Assessment prepared by a Tree Risk Assessor, and where the risk cannot be reduced to Low with mitigation, such as pruning:
    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.
3. Factors that will be considered in approving such tree removal include, but are not limited to, tree condition and health, age, risks to life or structures, and potential for root or canopy interference with utilities.

~~D. If the number of trees to be removed exceeds the permitted amount in a 36-month period on a property zoned Low Density Residential and improved with a single family dwelling, those trees shall be replaced based on the replacement requirements set forth in TMC Section 18.54.080 and Table B. The Director or Planning Commission may require additional trees or shrubs to be installed to mitigate any potential impact from the tree removal.~~

E. Protection of trees shall be a major factor in the location, design, construction and maintenance of streets and utilities. Removal or significant damage that could lead to tree death of Significant, Exceptional or Heritage Trees shall be mitigated with on- or off-site tree replacement as required by this chapter.

F. A Qualified Tree Professional shall provide an assessment of any tree proposed for retention in a proposed development to ensure its survivability during construction.

G. The Department shall conduct a tree canopy assessment every five years from the date of the adoption of this chapter to ensure the tree canopy goals of the Comprehensive Plan are being met.

(Ord. 2570 §7, 2018; Ord. 1758 §1 (part), 1995)

18.54.070 Tree Protection Standards

All trees not proposed for removal as part of a project or development shall be protected using Best Management Practices 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 fence or plywood 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, dumping 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 18.54."

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. No construction personnel shall prune affected limbs except under the direct supervision of 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.

(Ord. 2570 §8, 2018; Ord. 1758 §1 (part), 1995)

18.54.080 Tree Replacement ~~Standards~~

~~When tree replacement is required, the site shall be planted with trees to meet the following minimum requirements:~~

A. Replacement exemption for Single-family Tree Removal. Except for Heritage Trees, the removal of Significant Trees depending on the size within any 36-month period on a property zoned Low Density Residential and improved with a single-family dwelling is permitted, subject to the requirements of Table A below.

Table A

Single Family Tree Removal without Replacement Limits

Trees (DBH)	# of Trees in 36 month period that can be removed without replacement (1)
>6-8"	4
>8-18"	2
>18"	1 and no other trees

(1) A combination of trees of different sizes may be removed without replacement so long as the total number of trees removed does not exceed the number allowed for the largest tree removed in a 36 month period. See Tree Permit Application for additional details.

B. Replacement Standards

1. Each existing Significant Tree removed, including removal of trees in easements and rights-of-way for the purposes of constructing public streets and utilities, shall be replaced with new tree(s), based on the size of the existing tree as shown below, up to a maximum density of 100~~70~~ new trees per acre, generally 12-15 feet apart. If the number of required replacement trees exceeds site capacity, payment is required into the City's Tree Fund.

2. Tree Replacement Ratios. Table B establishes tree replacement ratios when Significant, Exceptional or Heritage Trees are removed. For properties zoned Low Density Residential and improved with a single-family dwelling, when the number of trees permitted to be removed in a 36-month period, as shown in Table A, has been exceeded, the replacement ratios set forth in Table B apply. Trees damaged due to natural disasters, such as wind storms, hail, ice or snow storms, and earthquakes, are not required to be replaced. Trees determined to be Defective by the City or a Qualified Tree Professional, are not required to be replaced. ~~-~~Any tree removal on undeveloped properties is subject to replacement ratios in Table B. Illegal topping and pruning more than 25% in a 36 month period is subject to replacement ratios in Table B.

3. The property owner is required to ensure the viability and long-term health of trees planted for replacement through proper care and maintenance for the life of the site's improvement. Replaced trees that do not survive must be replanted in the next appropriate season for planting.

4. If all required replacement trees cannot be accommodated reasonably on the site, the applicant shall pay into the Tree Fund as adopted by Fee Resolution. ~~The fee shall be based on the value of the replacement trees and their delivery, labor for site preparation and plant installation, soil amendment, mulch, and maintenance costs for three years. In some circumstances, off-site tree replacement may be allowed, subject to additional maintenance fees.~~

TABLE B Tree Replacement Requirements

Trees (DBH)	~~Amount of Mature Tree Canopy Removed~~	~~Equivalent Stature Tree~~	Replacement ratio for trees that are subject to replacement	~~Number of Replacement Trees~~
6-8"	~~Up to 500 sq. ft.~~	~~Small Canopy Tree~~	1:1	~~1~~
>8-18"	~~501-1,000 sq. ft.~~	~~Medium Canopy Tree~~	1:2	~~2~~
>18"	~~>1,001 sq. ft.~~	~~Large Canopy Tree~~	1:3	~~3~~

5. Tree replacement shall also meet the standards in TMC Section 18.54.160.

(Ord. 2570 §9, 2018; Ord. 1758 §1 (part), 1995)

18.54.090 Tree Relocation

Tree relocation shall be carried out according to Best Management Practices, and trees proposed for relocation shall have a reasonable chance of survival.

(Ord. 2570 §10, 2018; Ord. 1758 §1 (part), 1995)

18.54.100 Tree Fund

A. When trees are topped or removed without a permit, or if the number of replacement trees required by Table B cannot be accommodated on-site, the Director shall require payment into the Tree Fund. The fee will be based on the current cost of the following:

1. The cost of purchasing and delivering a 2-inch caliper deciduous or 6-foot evergreen tree;
2. The cost of labor to install a tree;
3. The cost of supplies needed for the installation of a tree, including but not limited to, soil amendments, mulch, stakes, ~~-~~etc.; and
4. The cost of maintenance of a new tree for at least three years, including but not limited to, watering, weeding, and pruning.

B. The cost of a replacement tree shall be updated annually in the Land Use Fee Schedule.

C. The money in this fund shall be used by the City or its contractor to purchase, plant and maintain trees on sites in the City.

D. Tree funds may be used by a single-family property owner to plant one or more street trees if approved by the Director and by the Public Works Department. The tree species must be approved by the City and be appropriate to the site conditions. The property owner is responsible for the site preparation and maintenance of the street tree, pursuant to TMC Section 18.54.160.

(Ord. 2570 §11, 2018; Ord. 1758 §1 (part), 1995)

18.54.110 Performance Assurance

To mitigate potential damages that may result from unauthorized tree removal or maintenance, the Director may require the applicant to submit a bond, letter of credit, or other means of assurance acceptable to the City prior to issuance of a Tree Permit, subject to the following provision:

1. *Tree Protection Assurance.* The applicant may be required to post a three year performance bond or other acceptable security device to ensure the installation, maintenance and adequate performance of tree protection measures during the construction process. The amount of this bond shall equal 150 percent of the City's estimated cost of replacing each replacement tree. The estimated cost per tree shall be the fair market value of the tree. ~~fee established by the City.~~ Prior to DCD final inspection, any protected tree found to be irreparably damaged, severely stressed or dying shall be replaced according to the standards identified in this chapter. The City may release all or part of the bond prior to the conclusion of the bonding period if the applicant demonstrates that the requirements of this section have been satisfied and there is evidence that the protected trees will survive. If trees designated for retention are damaged, they shall be subject to replacement.

2. *Tree Maintenance Assurance.* Where replacement trees are required, the applicant may be required to post a one-year replacement tree maintenance bond or other acceptable security device to ensure the survival of replacement trees. The amount of the maintenance bond shall equal 150 percent of the cost of plant material, periodic fertilizing and pruning, and labor until tree survival is ensured. In the event a required replacement tree becomes irreparably damaged, severely stressed or dies, the tree shall be replaced according to the standards in this chapter. The City may release all or part of the bond prior to the conclusion of the bonding period if the applicant demonstrates that the requirements of this section have been satisfied and there is evidence that the protected trees will survive. ~~The requirement for tree maintenance shall be recorded on the title of the property and if the property is sold prior to the expiration of the one-year replacement tree maintenance bond, the developer shall assign the bond to the purchaser.~~ Submission of annual photos for three years documenting that the tree is in good health will satisfy this requirement for properties zoned Low Density Residential and improved with a single-family dwelling. Trees that do not survive the three year maintenance period shall be replanted and the three year maintenance period shall restart at the time of replanting.

~~3. Replacement trees damaged due to natural disasters, such as wind storms, hail, ice or snow storms, and earthquakes, shall be exempt from further replacement.~~

34. The applicant shall provide an estimate of the costs associated with the required performance bond or other security as described above. In lieu of an applicant's estimate, the performance assurance shall be equal to City staff's best estimate of possible costs to meet the above requirements. In no case shall the performance-assurance exceed an amount equal to two and one-half times the current cost of replacing the plants in accordance with the tree replacement provisions of this chapter.

45. The performance assurances shall not be fully released without final inspection and approval of completed work by the City, submittal of any post-construction evaluations or following any prescribed trial maintenance period required in the permit.

56. Performance assurances provided in accordance with this chapter may be enforced in whole or in part by the City upon determination by the Director that the applicant has failed to fully comply with approved plans and/or conditions.

(Ord. 2570 §12, 2018; Ord. 1758 §1 (part), 1995)

18.54.120 Liability

A. Liability for any adverse impacts or damages resulting from work performed in accordance with a Tree Permit, will be the sole responsibility of the owner of the site for which the permit was issued.

B. Issuance of a Tree Permit and/or compliance with permit provisions or conditions shall not relieve an applicant from any responsibility otherwise imposed by law for damage to persons or property in an amount greater than the insured amount required by this chapter.

C. Nothing contained in this chapter shall be deemed to relieve any property owner from the duty to keep any tree or vegetation upon his or her property or under his or her control in such condition as to prevent it from constituting a hazard or a nuisance pursuant to TMC Chapter 8.28.

D. The amount of any security shall not serve as a gauge or limit to the compensation collected from a property owner as a result of damages associated with any vegetation clearing.

E. The applicant shall at all times protect improvements to adjacent properties and public rights-of-way or easements from damage during clearing. The applicant shall restore to the standards in effect at the time of the issuance of the permit any public or private improvements damaged by the applicant's operations.

(Ord. 2570 §13, 2018; Ord. 1758 §1 (part), 1995)

18.54.130 Permit Processing and Duration

A. All Tree Permits shall be processed as Type 1 decisions. Exceptions to the requirements of this chapter shall be processed as a Type 2 decision.

B. If the Tree Permit or Tree Exception Permit application is not approved, the Director shall inform the applicant in writing of the reasons for disapproval.

C. Tree permits expire one year after the date the permit is issued.

(Ord. 2570 §14, 2018; Ord. 1770 §32, 1996; Ord. 1758 §1 (part), 1995)

18.54.140 Permit Exceptions

A. Exception Procedures. An applicant seeking an exception from this chapter shall submit a Tree Exception Permit application in addition to the Tree Permit application. Such application shall fully state all substantiating facts and evidence pertinent to the exception request~~,~~ and include supporting maps or plans. The exception shall not be granted unless and until sufficient reasons justifying the exception are provided by the applicant *and verified by the City*. Approval of the exception is subject to the exception criteria outlined below.

B. Exception Criteria:

1. The Director may grant exceptions from the requirements of this chapter when undue hardship may be created by strict compliance with the provisions of this chapter. Any authorization for an exception may prescribe conditions deemed necessary or desirable for the public interest, or necessary to meet the intent of this chapter.

2. An exception to this chapter shall not be granted unless all of the following criteria are met:

a. Strict compliance with the provisions of this code may jeopardize project feasibility or reasonable use of property.

b. Proposed tree removal, replacement, and any mitigative measures proposed, are consistent with the purpose and intent given in this chapter.

c. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity.

3. In addition to the above criteria, the Director may also require review of an exception request by a third party Qualified Tree Professional at the expense of the applicant.

(Ord. 2570 §15, 2018; Ord. 1758 §1 (part), 1995)

18.54.150 Permit Conformance

All work must be performed in accordance with approved Permit plans specified in this chapter or revised plans as may be determined by the Director. The applicant shall obtain permission in writing from the Director prior to modifying approved plans.

(Ord. 2570 §16, 2018; Ord. 1758 §1 (part), 1995)

18.54.160 Soil Preparation, Plant Material and Maintenance Standards

A. Soil Preparation.

1. Soils must be prepared for planting by incorporating compost and/or topsoil to a depth of 12 inches throughout the planting area.

2. An inspection of the planting areas prior to planting may be required to ensure soils are properly prepared.

3. Installation of plants must comply with Best Management Practices including, but not limited to:

a. Planting holes that are the same depth as the size of the root ball and two to three times wider than the root ball.

b. Root balls of potted and balled and burlapped (B&B) plants must be loosened and pruned as necessary to ensure there are no encircling roots prior to planting. All burlap and all straps or wire baskets must be removed from B&B plants prior to planting.

c. The top of the root flare, where the roots and the trunk begin, should be placed at grade. The root ball shall not extend above the soil surface and the flare shall not be covered by soil or mulch. For bare root plants, ensure soil beneath roots is stable enough to ensure correct height of the tree.

d. If using mulch around trees and shrubs, maintain at least a 4-inch mulch-free ring around the base of the tree trunks and woody stems of shrubs. If using mulch around groundcovers until they become established, mulch shall not be placed over the crowns of perennial plants.

B. Plant Material Standards.

1. Plant material shall be healthy, vigorous and well-formed, with well-developed, fibrous root systems, free from dead branches or roots. Plants shall be free from damage caused by temperature extremes, pre-planting or on-site storage, lack of or excess moisture, insects, disease, and mechanical injury. Plants in leaf shall show a full crown and be of good color. Plants shall be habituated to outdoor environmental conditions (i.e. hardened-off).

2. Evergreen trees shall be a minimum of 6 feet in height at time of planting.

3. Deciduous trees shall have at least a 2-inch caliper at time of planting as measured 4.5 feet from the ground, determined according to the American Standard for Nursery Stock as it now reads and as hereafter amended.

4. Smaller plant stock may be substituted on a case-by-case basis with approval of the City's environmental specialist.

5. Tree spacing shall take into account the location of existing and new trees as well as site conditions.

6. Where there are overhead utility lines, the tree species selected shall be of a type which, at full maturity, will not interfere with the lines or require pruning to maintain necessary clearances.

C. Tree Maintenance and Pruning.

1. Pruning of trees should be (1) for the health of the plant material, (2) to maintain sight distances or sight lines, or (3) if interfering with overhead utilities. All pruning must be done in accordance with American National Standards Institute (ANSI) A300 specifications, as it now reads and as hereafter amended. No more than 25% of the tree canopy shall be pruned in any two-year period, except for fruit trees that are being pruned to increase harvest potential. Any tree pruned in excess of 25% of the canopy shall be subject to replacement ratios listed under TMC 18.54.080.

2. All protected and replacement trees and vegetation shown in approved Tree Permit shall be maintained in a healthy condition by the property owner throughout the life of the project, unless otherwise approved by the Director in a subsequent Tree Permit.

3. Trees may only be pruned to lower their height to prevent interference with an overhead utility line with prior approval by the Director. The pruning must 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.

(Ord. 2570 §17, 2018; Ord. 1758 §1 (part), 1995)

18.54.170 Heritage Trees and Heritage Groves

A. Heritage Trees or a Heritage Grove must be nominated for designation by, or approved for nomination by, the owner of the property on which the tree or grove is located.

B. Designation Criteria. A tree or grove that meets the basic definition of Heritage Tree or Heritage Grove must also meet one or more of the following criteria:

1. Has exceptional national, state or local historical significance including association with a historical figure, property, or significant historical event; or
2. Has an exceptional size or exceptional form for its species; or
3. Has an exceptional age for its species; or
4. Is the sole representative of its species in the area; or
5. Has exceptional botanical or ecological value.

C. Once approved, the Heritage Tree or Heritage Grove shall be identified by signage that provides information as to the tree's or grove's significance.

D. Heritage Tree or Heritage Grove Development Review.

1. When development is proposed for property that contains a Heritage Tree or Grove, and the Director determines that the proposed development may affect a Heritage Tree, the property owner must have a tree preservation plan prepared by a Qualified Tree Professional as approved by the Director demonstrating how the Heritage Tree will be protected and preserved. A Heritage Tree shall be preserved using the tree protection and retention criteria of this chapter.

2. A tree preservation plan shall be composed of the following:
   a. A site plan indicating the location of Heritage Tree(s).
   b. The methods to be used to preserve the Heritage Tree(s).
   c. A mitigation plan indicating the replacement trees or additional new trees to be placed on the site. The mitigation plan should demonstrate, to the extent possible, that the character of the site will not substantially change as a result of development.

3. Site design adjustments may be approved in some cases for the subject property or an affected adjacent parcel, as follows:
   a. Up to a 20% variance to front, side, and/or rear yard setback standards to retain a Heritage Tree(s) or Grove may be reviewed and granted as part of the underlying land use or construction permit. The adjustment shall be the minimum necessary to accomplish preservation of the Heritage Tree(s) or Grove on site and shall not conflict with other adopted ordinances or conditions placed on the property.
   b. Up to a 10% variance to the lot size and/or the lot width requirements in approving any land division if necessary to retain Heritage Tree(s) or Grove.

4. Removal of a Heritage Tree. No person may cut or remove a Heritage Tree without approval of a Type 2 permit. The Tree Permit may be approved if one or more of the criteria below is met:
   a. Retention of the tree would make reasonable use of the property allowed under the current zoning impractical or impossible; or
   b. The removal is necessary to accommodate a new improvement, structure or remodeled structure, and no alternative exists for relocation of the improvement on the site, or that variances to setback provisions will not allow the tree to be saved or will cause other undesirable circumstances on the site or adjacent properties; or
   c. The tree is hazardous, diseased or storm damaged and poses a threat to the health, safety or welfare of the public; or

d. The tree has lost its importance as a Heritage Tree due to damage from natural or accidental causes, or is no longer of historic or natural significance; or

e. The tree needs to be removed to accomplish a public purpose and no practical alternative exists.

5. The limb structure or crown of a Heritage Tree may be pruned in any one-year period without obtaining a Type 2 permit provided that at least 80% of the existing tree crown remains undisturbed.

6. Any person who wishes to prune a Heritage Tree or Grove in excess of 20% of the existing crown shall apply for a Tree Permit and meet the following criteria.

a. The protected tree shall be pruned following acceptable arboricultural standards; and

b. The tree shall be pruned in a manner that ensures safety to public and private property and shall be carried out by a Qualified Tree Professional; and

c. Any other conditions necessary to ensure compliance with the goals and policies of the Comprehensive Plan.

(Ord. 2570 §18, 2018; Ord. 1758 §1 (part), 1995)

18.54.180 Approved and Prohibited Trees

The City will maintain on file, and provide upon request, a list of approved trees for planting and trees that are prohibited from being planted in the City. These lists will be updated as new information becomes available.

(Ord. 2570 §19, 2018; Ord. 1758 §1 (part), 1995)

18.54.190 Violations

A. 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.

B. Penalties.

1. 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.

2. 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 ~~three times~~ the marketable value of each tree removed or damaged as determined by a Qualified Tree Professional, whichever is greater.

3. 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.

4. 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.

5. Penalties are in addition to the restoration of removed trees through the remedial measures listed in TMC Section 18.54.200.

6. 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.

(Ord. 2570 §20, 2018; Ord. 1758 §1 (part), 1995)

18.54.200 Remedial Measures

In addition to the 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 B.

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. 2570 §21, 2018; Ord. 1758 §1 (part), 1995)

18.54.210 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 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 a Tree Permit issuance to ensure compliance with this chapter. The permit process is complete upon final approval by the Director.

(Ord. 2570 §22, 2018)

CHAPTER 18.52
LANDSCAPE REQUIREMENTS

Sections:

18.52.010 Purpose

The purpose of this chapter is to establish minimum requirements for landscaping to:

- Implement the Urban Forestry Comprehensive Plan goals and policies by increasing tree canopy throughout the City to improve air quality; promote the health of residents, visitors and employees; and reduce heat islands and stormwater flows.
- Support the low impact development goals of the Comprehensive Plan and the City's National Pollution Discharge Elimination System permit.
- Promote safety.
- Provide screening between incompatible land uses.
- Mitigate the adverse effects of development on the environment.
- Improve the visual environment for both residents and nonresidents.
- Regulate the protection of existing landscaping.
- Establish requirements for the long-term maintenance of required landscaping.
- Establish procedures for modifying landscaping requirements and penalties for violations of the landscaping code.

(Ord. 2523 §6, 2017; Ord. 1872 §14 (part), 1999)

18.52.010 Applicability

This chapter sets forth rules and regulations to control maintenance, clearing and planting of landscaping and vegetation within the City of Tukwila on any developed properties that are zoned commercial, industrial, or multifamily; and on properties that are zoned LDR and developed with a non-single family residential use. For properties located within the Shoreline jurisdiction, the maintenance and removal of vegetation shall be governed by TMC Chapter 18.44, "Shoreline Overlay." For properties located within a critical area or its associated buffer, the maintenance and removal of vegetation shall be governed by TMC Chapter 18.45 "Critical Areas". Clearing and removal of trees on undeveloped land and any land zoned LDR that is developed with a single family residence is regulated by the TMC 18.54 Urban Forestry and Tree Regulations. In case of conflict the most stringent regulations apply.

18.52.020 Landscaping Types

A. General Standards for All Landscaping Types.

1. *Trees*.

a. Trees shall be spaced based on the stature tree selected (small, medium or large stature of tree), excluding curb cuts and spaced regularly, except where there are conflicts with utilities.

b. Large and medium stature tree species are required, per the Tukwila Approved Tree List, except where there is insufficient planting area (due to proximity to a building, street light, above or below ground utility, etc.) or the planned tree location does not permit this size tree at maturity.

2. *Shrubs.* Shrubs shall be spaced based on the mature size of the plant material selected and shall achieve a continuous vertical layer within 3 years. The shrubs will provide 4 feet clearance when mature when adjacent to any fire hydrant or fire department connection.

3. *Groundcover.*

a. Sufficient live groundcovers of varying heights, colors and textures to cover, within 3 years, 100% of the yard area not needed for trees and shrubs.

b. If grass is being used as the groundcover, a 4-foot diameter ring of bark mulch is required around each tree.

~~4. Bioretention may be used as a Type I or II landscape perimeter, provided the intent of the screen is achieved. To support bioretention facility function and plant survival, flexibility in plant materials and placement shall be allowed, provided public safety is not compromised.~~

~~5. The amount of landscaping on commercially-zoned properties may be reduced by 15% if buildings are moved to the front of the site with no parking between the building and the front landscaping, to create a more pedestrian-friendly site design.~~

B. Type I – Light Perimeter Screening.

1. The purpose of Type I landscaping is to enhance Tukwila's streetscapes, provide a light visual separation between uses and zoning districts, screen parking areas, and allow views to building entryways and signage.

2. Plant materials shall consist of the following:

a. Trees: A mix of deciduous and evergreen trees.

b. One shrub per 7 linear feet.

c. Groundcover.

C. Type II – Moderate Perimeter Screening.

1. The purpose of Type II landscaping is to enhance Tukwila's streetscapes, provide a moderate visual separation between uses and zoning districts, screen blank building walls and parking areas, and allow views to building entryways and signage.

2. Plant materials shall consist of the following:

a. Trees: A mix of deciduous and evergreen trees.

b. One shrub per 4 linear feet, excluding curb cuts.

c. Groundcover.

D. Type III – Heavy Perimeter Screening.

1. The purpose of Type III landscaping is to provide extensive visual separation along property lines between highly incompatible development, such as warehousing and residential uses.

2. Plant materials shall consist of the following:

a. Trees consisting of at least 50% evergreen along the applicable property line (75% along property line adjacent to residential uses).

b. Privacy screen utilizing evergreen shrubs, screening walls or fences (up to 7 feet tall).

c. Groundcover.

E. Parking Lot Landscaping. This landscaping is required to mitigate adverse impacts created by parking lots such as noise, glare, stormwater run-off, and increased heat and to improve their physical appearance.

1. Trees shall be evenly distributed throughout the parking lot. Planting in continuous, landscaped planting strips between rows of parking is encouraged. Surface water management design may also be combined with landscaping in parking lots. In industrial districts (C/LI, LI, HI, MIC/L, MIC/H), clustering of interior parking lot landscaping may be permitted to accommodate site usage.

2. *Landscape islands.*

a. Landscape islands must be a minimum of 6 feet wide, exclusive of overhang, and a minimum of 100 square feet in area. All landscaped areas must be protected from damage by vehicles through the use of curbs, tire stops, or other protection techniques.

b. Landscape islands shall be placed at the ends of each row of parking to protect parked vehicles from turning movements of other vehicles.

c. The number and stature of trees shall be based on the area available in the landscape island. A minimum of one large stature evergreen or deciduous tree or two medium stature trees are required for every 100 square feet of landscaped island, with the remaining area to contain a combination of shrubs, living groundcover, and mulch.

d. For parking lots adjacent to public or private streets~~, if landscape islands are designed into the parking lot layout to divide continuous rows of parking stalls,~~ the islands must be placed at minimum spacing of 1 for every 10 parking spaces. For parking areas located behind buildings or otherwise screened from public or private streets or public spaces, if landscape islands are used, islands shall be placed at a minimum of 1 for every 15 parking stalls.

3. Bioretention, which includes trees, shrubs and groundcover, may be used to meet interior parking lot landscaping requirements. The bioretention facility must be designed by a professional trained or certified in low impact development techniques as set forth in TMC Chapter 14.30. All bioretention facilities must be protected by curbing to prevent vehicle damage to the facility and for public safety.

4. Vehicular Overhang.

a. Vehicle overhang into any landscaping area shall not exceed two feet.

b. No plant material greater than 12 inches in height shall be located within two feet of the curb or other protective barrier in landscape areas adjacent to parking spaces and vehicle use areas.

c. Raised curbs or curb stops shall be used around the landscape islands or bioretention facilities to prevent plant material from being struck by automobiles. Where bioretention is used, curb cuts shall be placed to allow stormwater runoff from adjacent pavements to enter the bioretention system.

5. Pervious pavement shall be used, where feasible, including parking spaces and pedestrian paths.

6. Parking lot landscape design shall accommodate pedestrian circulation.

F. Street Trees in the Public Frontage.

1. *Street tree spacing.*

a. Street tree spacing in the public frontage shall be as specified in TMC Section 18.52.060.B.2. based on the stature size of the tree.

b. Spacing must also consider sight distance at intersections, driveway locations, and utility conflicts as specified in TMC Section 18.52.060.B.3.

c. Street trees in the public frontage shall be planted using the following general spacing standards:

(1) At least 3-1/2 feet back from the face of the curb.
(2) At least 5 feet from underground utility lines.
(3) At least 10 feet from utility poles.
(4) At least 7-1/2 feet from driveways.
(5) At least 3 feet from pad-mounted transformers (except 10 feet in front for access).
(6) At least 4 feet from fire hydrants and connections.

d. Planting and lighting plans shall be coordinated so that trees are not planted in locations where they will obstruct existing or planned street or site lighting, while maintaining appropriate spacing and allowing for their size and spread at maturity.

e. Planting plans shall consider the location of existing or planned signage to avoid future conflicts with mature trees and landscaping.

2. *Tree grates.*

a. Tree grates are not encouraged, but when used, shall be designed so that sections of grate can be removed incrementally as the tree matures and shall be designed to avoid accumulation of trash.

b. When used, tree grates and landscaped tree wells shall be a minimum 36 square feet in size (6' x 6'). Tree well size may be adjusted to comply with ADA standards on narrower sidewalks. See TMC Section 18.52.070.A.1., "Soil Preparation and Planting," for structural soil requirements. Root barriers may be installed at the curb face if structural soils are not used.

3. *Maintenance and Pruning.*

a. Street trees are subject to the planting, maintenance, and removal standards and Best Management Practices (BMPs) as adopted by the International Society of Arboriculture, as it now reads and as hereafter amended. Street trees planted prior to the adoption of the most current tree planting standards shall be exempt from these planting standards but are still subject to current removal and maintenance standards.

b. The following standards apply to street tree maintenance:

(1) Street trees shall be maintained consistent with International Society of Arboriculture BMPs.

(2) Street trees shall be maintained in a manner that does not impede public street or sidewalk traffic, consistent with the specifications in the Public Works Infrastructure Design Manual, including:

(a) 8 feet of clearance above public sidewalks.

(b) 13 feet of clearance above public local and neighborhood streets.

(c) 15 feet of clearance above public collector streets.

(d) 18 feet of clearance above public arterial streets.

(3) Street trees shall be maintained so as not to become a defective tree as per the definition in TMC Chapter 18.06.

4. Trees planted in a median shall be appropriate for the planting environment and meet the following requirements:

a. Trees shall be consistent with previously approved median tree plans, given space constraints for roots and branches at maturity.

b. Median plantings shall provide adequate species diversity Citywide and reasonable resistance to pests and diseases.

c. Columnar trees may be considered for median plantings to avoid conflicts with vehicles and utilities.

d. Structural soils shall be used to avoid the need for root barriers and to ensure the success of the median plantings.

e. Any median tree that is removed must be replaced within the same median unless spacing constraints exist. Replacement trees shall be of the same stature or greater at maturity as the removed tree, consistent with other space considerations.

(Ord. 2523 §7, 2017; Ord. 2518 §11, 2016; Ord. 2251 §62, 2009; Ord. 1872 §14 (part), 1999)

18.52.030 Perimeter and Parking Lot Landscaping Requirements by Zone District

In the various zone districts of the City, landscaping in the front, rear and side yards and parking lots shall be provided as established by the various zone district chapters of this title. These requirements are summarized in the following table (Table A), except for Tukwila Urban Center (TUC) requirements, which are listed in TMC Chapter 18.28.

ZONING DISTRICTS	FRONT YARD (SECOND FRONT) (linear feet)	LANDSCAPE TYPE FOR FRONTS	LANDSCAPE FOR SIDE YARD (linear feet)	LANDSCAPE FOR REAR YARD (linear feet)	LANDSCAPE TYPE FOR SIDE/REAR	LANDSCAPING FOR PARKING LOTS (square feet)
LDR (for uses other than residential)	15[2]	Type I	10	10	Type I	20 per stall for non-residential uses; 15 per stall if parking is placed behind building
MDR	15[1, 2, 11]	Type I	10	10	Type I	Same as LDR
HDR	15[1, 2, 11]	Type I	10	10	Type I	Same as LDR
MUO	15 (12.5)[2, 11]	Type I[7]	6[4]	6[4, 11]	Type I[7]	20 per stall adjacent to street; 15 per stall if parking is placed behind building
O	15 (12.5)[2]	Type I[7]	6[4]	6[4]	Type I[7]	Same as MUO
RCC	20 (10)[2, 3]	Type I[7]	6[4]	10[11]	Type II	Same as MUO
NCC	10[4, 11]	Type I[7, 13]	0[4]	0[4, 11]	Type II	Same as MUO
RC	10	Type I[13]	6[4]	0[4]	Type II[8]	Same as MUO
RCM	10	Type I	6[4]	0[4]	Type II[8]	Same as MUO

C/LI	15	Type I[6]	6[5, 12]	0[5, 12]	Type II[8]	15 per stall; 10 per stall for parking placed behind building
LI	15[2]	Type II	0[4, 12]	0[4, 12]	Type III	15 per stall; 10 per stall for parking placed behind building
HI	15[2]	Type II	0[4, 12]	0[4, 12]	Type III	15 per stall
MIC/L	10[5]	Type II	0[5, 12]	0[5, 12]	Type III	10 per stall
MIC/H	10[5]	Type II	0[5, 12]	0[5, 12]	Type III	10 per stall
TUC – See TMC Chapter 18.28						
TVS	15[2, 3]	Type II	0[4]	0[4]	Type III	Same as C/LI
TSO	15[2, 9]	Type I	0[10]	0[10]	Type III	Same as C/LI for non-residential uses. Same as LDR for residential uses.

TABLE A – Perimeter and Parking Lot Landscaping Requirements by Zone District

Notes:

1. Minimum required front yard landscaped areas in the MDR and HDR zones may have up to 20% of their required landscape area developed for pedestrian and transit facilities subject to the approval criteria in TMC Section 18.52.100.B.

2. In order to provide flexibility of the site design while still providing the full amount of landscaping required by code, the front yard landscape width may be divided into a perimeter strip and one or more other landscape areas between the building and the front property line if the perimeter strip is a minimum of 10 feet and the landscape materials are sufficient to provide landscaping along the perimeter and screening of the building mass.

3. Required landscaping may include a mix of plant materials, pedestrian amenities and features, outdoor café-type seating and similar features, subject to the approval criteria in TMC Section 18.52.100.B. Bioretention may also be used as required landscaping subject to the approval criteria in TMC Section 18.52.100.E. Required plant materials will be reduced in proportion to the amount of perimeter area devoted to pedestrian- oriented space.

4. Increased to 10 feet if any portion of the yard is within 50 feet of LDR, MDR or HDR.

5. Increased to 15 feet if any portion of the yard is within 50 feet of LDR, MDR or HDR.

6. Increased to Type II if the front yard contains truck loading bays, service areas or outdoor storage.

7. Increased to Type II if any portion of the yard is within 50 feet of LDR, MDR or HDR.

8. Increased to Type III if any portion of the yard is within 50 feet of LDR, MDR or HDR.

9. Only required along public streets.

10. Increased to 10 feet for residential uses; or if adjacent to residential uses or non-TSO zoning.

11. In the MDR and HDR districts and other districts where multifamily development is permitted, a community garden may be substituted for some or all of the landscaping. In order to qualify, a partnership with a nonprofit (501(c)(3)) with community garden expertise is required to provide training, tools and assistance to apartment residents. Partnership with the nonprofit with gardening expertise is required throughout the life of the garden. If the community garden is abandoned, the required landscaping must be installed. If the garden is located in the front landscaping, a minimum of 5 feet of landscaping must be placed between the garden and the street.

12. To accommodate the types of uses found in the C/LI, LI, HI and MIC districts, landscaping may be clustered to permit truck movements or to accommodate other uses commonly found in these districts if the criteria in TMC Section 18.52.100.D are met.

13. For NCC and RC zoned parcels in the Tukwila International Boulevard District, the front landscaping may be reduced or eliminated if buildings are brought out to the street edge to form a continuous building wall, and if a primary entrance from the front sidewalk as well as from off-street parking areas is provided.

(Ord. 2580 §6, 2018; Ord. 2523 §8, 2017; Ord. 2442 §1, 2014; Ord. 2251 §61, 2009; Ord. 2235 §13, 2009; Ord. 1872 §14 (part), 1999)

18.52.040 Screening and Visibility

A. Screening.

1. Screening of outdoor storage, mechanical equipment and garbage storage areas and fences:

a. Outdoor storage shall be screened from abutting public and private streets and from adjacent properties. Such screens shall be a minimum of 8 feet high and not less than 60% of the height of the material stored. The screens shall be specified on the plot plan and approved by the Community Development Director. In the MDR and HDR zones, outdoor storage shall be fully screened from all public roadways and adjacent parcels with a high obscuring structure equal in height to the stored objects and with a solid screen of exterior landscaping.

b. Ground level mechanical equipment and garbage storage areas shall be screened with evergreen plant materials and/or fences or masonry walls.

c. Fences. All fences shall be placed on the interior side of any required perimeter landscaping.

2. A mix of evergreen trees and evergreen shrubs shall be used to screen blank walls.

3. Evergreen shrubs and evergreen trees shall be used for screening along rear property lines, around solid waste/recycling areas, utility cabinets and mechanical equipment, and to obscure grillwork and fencing associated with subsurface parking garages. Evergreen shrubs and trees shall be pruned so that 18 inches visibility at the base is maintained.

B. Visibility.

1. Design of new landscaping and maintenance of existing landscaping shall consider Crime Prevention Through Environmental Design (CPTED) principals and visibility for safety and views. Appropriate plant species shall be specified to avoid the need for excessive maintenance pruning.

2. Landscaping shall not obstruct views from or into building windows, the driveway, sidewalk or street. Landscape design shall allow for surveillance from streets and buildings and avoid creating areas that might harbor criminal activity.

3. Landscaping at crosswalks and other locations where vehicles and pedestrians intersect must not block pedestrians' and drivers' views.

4. In general, deciduous trees with open branching structures are recommended to ensure visibility to retail establishments. More substantial shade trees or evergreens are recommended in front of private residences.

(Ord. 2523 §9, 2017)

18.52.050 Significant Tree Retention

A. All significant trees located within any required landscape area that are not dead, dying, diseased, or a nuisance species, as identified in the Tukwila Approved Tree List, and that do not pose a safety hazard or conflict with overhead utility lines as determined by the City or an ISA certified arborist, shall be retained and protected during construction with temporary fencing or other enclosure, as appropriate to the site and following Best Management Practices for tree protection (see TMC Chapter 18.54).

B. Topping of trees is prohibited and is subject to replacement. Additionally, pruning of more than 25% of canopy in a 36 month period is prohibited and is subject to replacement per TMC 18.52.110 Table C.

~~B~~C. Retained significant trees may be counted towards required landscaping. Additionally, the required landscaping may be reduced in exchange for retaining significant trees subject to Director approval and per TMC 18.52.100.F. ~~For each 2% of effective canopy cover provided by preserved trees incorporated into a development plan, a 2% reduction in the minimum landscape requirement may be granted. No more than 20% of the minimum landscape requirement may be reduced for any one development. Approval is required per TMC Section 18.52.100 F.~~

~~C~~D. The area designated for protection will vary based on the tree's diameter, species, age, and the characteristics of the planted area, and Best Management Practices for protection shall be utilized (see TMC Chapter 18.54). Property owners may be required to furnish a report by an ISA certified arborist to document a tree's condition if a tree is to be retained. The Director may require that an ISA certified arborist be retained to supervise tree protection during construction. Grade changes around existing trees within the critical root zone are not allowed.

(Ord. 2523 §10, 2017)

18.52.055 Tree Protection Standards

All trees not proposed for removal as part of a project or development shall be protected using Best Management Practices 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 fence or plywood 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, dumping 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 18.54."

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. No construction personnel shall prune affected limbs except under the direct supervision of 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.

18.52.060 Plant Material Requirements and Tree Standards

A. Plant Material Requirements.

1. Plants shall meet the American Standard for Nursery Plant Stock (American Nursery and Landscape Association-ANLA) (ANSI Z60.1) as it now reads and as hereafter amended, and shall be healthy, vigorous and well-formed, with well-developed, fibrous root systems, free from dead branches or roots. Plants shall be free from damage caused by temperature extremes, pre-planting or on-site storage, lack of or excess moisture, insects, disease, and

mechanical injury. Plants in leaf shall be well foliated and of good color. Plants shall be habituated to outdoor environmental conditions (i.e. hardened-off).

2. Evergreen trees shall be a minimum of 6 feet in height at time of planting.

3. Deciduous trees shall have at least a 2-inch caliper at time of planting as measured 4.5 feet from the ground, determined according to the American Standard for Nursery Stock as it now reads and as hereafter amended.

4. Shrubs shall be at least 18 inches in height, and full and bushy at time of planting.

5. New plant materials shall include native species or non-native species with lower water requirements and that are adapted to the climatic conditions of the Puget Sound Region. There must be a diversity of tree and shrub genus and species in the site landscaping, taking into account species in existing development around the site.

a. If there are more than 8 required trees, no more than 40 percent may be of one species.

b. If there are more than 24 required trees, no more than 20 percent may be of one species.

c. If there are more than 25 required shrubs, no more than 50 percent may be of one species.

6. Any species that is listed on the State of Washington or King County noxious weed lists or otherwise known to be a nuisance or invasive shall not be planted.

7. Plant materials shall be selected that reinforce the landscape design concept, and are appropriate to their location in terms of hardiness, cultural requirements, tolerance to urban conditions, maintenance needs and growth characteristics.

8. The classification of plant material as trees, shrubs and evergreens shall be as listed in the Hortus Third, A Concise Dictionary of Plants Cultivated in the U.S. and Canada, as it now reads and as hereafter amended.

9. Plant material requirements for bioretention facilities shall be in accordance with the City's Bioretention Plant List, unless approved by staff.

10. Non-developed site areas, such as utility easements, shall be landscaped and/or treated with erosion control planting or surfacing such as evergreens, groundcover, shrubs, trees, sod or a combination of similar materials. In areas with overhead utility lines, no shrubs or trees shall be allowed that could mature over 20 feet in height. Trees should not be planted within 10 feet of underground utilities, such as power, water, sewer or storm drainage pipes.

B. Tree Standards.

1. Tree species shall be appropriate for the planting environment as determined by the Department Director in consultation with the City environmentalist and shall seek to achieve a balance of the following:

a. Consistency with Tukwila Approved Tree List or the City's Bioretention Plant List.

b. Compatibility with space constraints for roots and branches at maturity.

c. Adequate species diversity Citywide and reasonable resistance to pests and diseases.

2. Trees shall be provided adequate spacing from new and existing trees according to the following standards wherever possible:

a. Trees categorized as small stature on the tree list shall be spaced no greater than 20 feet on center and not closer than 15 feet on center from other newly planted or existing trees.

b. Trees categorized as medium stature on the tree list shall be spaced no greater than 30 feet on center and not closer than 20 feet on center from other newly planted or any existing trees.

c. Trees categorized as large stature on the tree list shall be spaced no greater than 40 feet on center and not closer than 30 feet on center from other newly planted or existing trees.

d. Any tree determined to have a mature spread of less than 20 feet (a columnar or fastigiate variety) is discouraged except under specific conditions and shall be considered a small stature tree and spaced accordingly.

3. Trees shall be placed according to the following standards:

a. Small stature trees shall be planted with the center of their trunks a minimum of 2 feet from any hard surface paving.

b. Medium stature trees shall be planted with the center of their trunks a minimum of 2.5 feet from any hard surface paving.

c. Large stature trees shall be planted with the center of their trunks a minimum of 3 feet from any hard surface paving.

d. Trees shall generally be planted a minimum of:

(1) 4 feet on center from any fire hydrant, above-ground utility or utility pole;

(2) 2 feet on center from any underground utility;

(3) 5 feet on center from a street light standard;

(4) 20 feet from a street intersection; however, a greater or lesser corner setback may be required based on an analysis of traffic and pedestrian safety impacts.

(5) 5 to 10 feet from building foundations depending on species.

4. Where there are overhead utility lines, the tree species selected shall be of a type which, at full maturity, will not interfere with the lines or require pruning to maintain necessary clearances.

5. Root barriers may be installed according to the manufacturer's specifications when a tree is planted within 5 feet of any hard surface paving or utility feature and in areas where structural soil is not required, subject to approval by the Department Director in consultation with the City's environmentalist.

6. Low water usage species are encouraged in order to minimize future irrigation requirements, except where site conditions within the required landscape areas ensure adequate moisture for growth.

7. Shade trees should be planted to shade buildings' east- and west-facing windows to provide a balance between summer cooling and winter heating through solar gain.

(Ord. 2523 §11, 2017)

18.52.070 Soil Preparation, Planting and Irrigation

A. Soil Preparation and Planting.

1. For landscaping in sidewalks and parking lots, or in limited areas of soil volume, structural soils (Cornell University product or similar) must be used to a preferred depth of 36 inches to promote tree root growth and provide structural support to the paved area. Minimum soil volumes for tree roots shall be 750 cubic feet per tree (see specifications and sample plans for CU-Structural Soils). Trees and other landscape materials shall be planted according to specifications in "CU Structural Soils – A Comprehensive Guide," as it now reads and as hereafter amended, or using current Best Management Practices (BMPs) as approved by the Director. Suspended pavement systems (Silva Cells or similar) may also be used if approved by the Director.

2. For soil preparation in bioretention areas, existing soils must be protected from compaction. Bioretention soil media must be prepared in accordance with standard specifications of the Surface Water Design Manual, adopted in accordance with TMC Chapter 14.30, to promote a proper functioning bioretention system. These specifications shall be adhered to regardless of whether a stormwater permit is required from the City.

3. For all other plantings (such as large planting areas where soil volumes are adequate for healthy root growth with a minimum volume of 750 cubic feet per tree), soils must be prepared for planting in accordance with BMP T5.13, "Post Construction Soil Quality and Depth," from the Washington Department of Ecology Stormwater Management Manual for Western Washington (as it now reads and as hereafter amended), regardless of whether a stormwater permit is required by the City.

4. The applicant will be required to schedule an inspection by the City of the planting areas prior to planting to ensure soils are properly prepared. Soil must be amended, tilled and prepped to a depth of at least 12 inches.

5. Installation of landscape plants must comply with BMPs including:

a. Planting holes that are the same depth as the size of the root ball and two to three times wider than the root ball.

b. Root balls of potted and balled and burlapped (B&B) plants must be loosened and pruned as necessary to ensure there are no encircling roots prior to planting. All burlap and all straps or wire baskets must be removed from B&B plants prior to planting.

c. The top of the root flare, where the roots and the trunk begin, should be placed at grade. The root ball shall not extend above the soil surface and the flare shall not be covered by soil or mulch.

d. If using mulch around trees and shrubs, maintain at least a 6-inch mulch-free ring around the base of the tree trunks and woody stems of shrubs. If using mulch around groundcovers until they become established, mulch shall not be placed over the crowns of perennial plants.

B. Irrigation.

1. The intent of this standard is to ensure that plants will survive the critical establishment period when they are most vulnerable due to lack of watering and to ensure their long term viability.

2. All required plantings must be served by a permanent automatic irrigation system, unless approved by the Director.

a. Irrigation shall be designed to conserve water by using the best practical management techniques available, including BMPs, for daily timing of irrigation to optimize water infiltration and conservation. These techniques may include, but not be limited to: drip irrigation (where appropriate) to minimize evaporation loss, moisture sensors to prevent irrigation during rainy periods, automatic controllers to ensure proper duration of watering, sprinkler head selection and spacing designed to minimize overspray, and separate zones for turf and other landscaping and for full sun exposure and shady areas to meet watering needs of different sections of the landscape.

b. Exceptions to the irrigation requirement may be approved by the Director, such as xeriscaping (i.e., low water usage plantings), plantings approved for low impact development techniques, established indigenous plant material, or landscapes where natural appearance is acceptable or desirable to the City. However, those exceptions will require temporary irrigation until established.

3. All temporary irrigation must be removed at the end of the 3-year plant establishment period.

(Ord. 2523 §12, 2017)

18.52.080 Maintenance and Pruning

A. Any landscaping required by this chapter shall be retained and maintained by the property owner for the life of the development in conformance with the intent of the approved landscape plan and this chapter. Maintenance shall also include keeping all planting areas free of weeds and trash and replacing any unhealthy or dead plant materials.

B. Green roofs or rooftop gardens shall be maintained to industry standards and any dead or dying plant material replaced.

C. Pruning of trees and shrubs is only allowed for the health of the plant material, to maintain sight distances or sight lines, or if interfering with overhead utilities. All pruning must be done in accordance with American National Standards Institute (ANSI) A-300 specifications, as it now reads and as hereafter amended.

D. No tree planted by a property owner or the City to fulfill landscape requirements, or any existing tree, may be topped or removed without prior approval from the City. Any tree topped or removed without approval shall be subject to code enforcement action per TMC Chapter 8.45 in addition to the requirements of TMC Section 18.52.110, "Violations."

E. Private property owners shall collect and properly dispose of all landscaping debris. Private property landscaping debris shall not be placed or blown into the public right-of-way for City collection. Violations will be subject to code enforcement action per TMC Chapter 8.45.

F. As trees along the street frontages mature, they shall be limbed up, using proper ISA pruning techniques, to a minimum height of 8 to 18 feet depending on location of tree (over sidewalk, adjacent to road, etc.) to allow adequate visibility and clearance for vehicles. Trees may be pruned to improve views of signage and entryways by using such techniques as windowing, thinning, and limbing up; however, no more than 1/4 of the canopy may be removed within any 2-year period. All pruning shall be done in accordance with ANSI Standard A-300 specifications, as it now reads and as hereafter amended.

G. Trees may only be pruned to lower their height to prevent interference with an overhead utility line with prior approval by the Director. The pruning must be carried out under the direction of an ISA certified arborist. The crown shall be maintained to at least 2/3 the height of the tree prior to pruning. Otherwise, trees shall not be topped. Illegal topping is subject to replacement. Additionally, pruning of more than 25% of canopy in a 36 month period is prohibited and is subject to replacement per TMC 18.52.110 Table C.

(Ord. 2523 §13, 2017)

18.52.090 Landscape Plan Requirements

A. Landscape plan design shall take into consideration the mature size of proposed landscape materials to minimize the future need for pruning (i.e. placement such that mature trees and shrubs will not cause problems for foundations, obscure signage, grow too close to overhead or underground utility lines, obstruct views of traffic, etc.).

B. A Washington State licensed landscape architect or other accredited landscape design professional shall prepare the landscape plans in accordance with the standards herein. Detailed plans for landscaping and screening shall be submitted with plans for building and site improvements. The plans shall, at a minimum, include the type, quantity, spacing and location of plants and materials; typical planting details; soil amendment/installation; tree protection details as applicable; and the location of irrigation systems and significant trees within 20 feet of the property line on adjacent properties. Underground and at-ground utilities shall be shown on the plans so that planting conflicts

are avoided. A detailed list of items to be included on the landscape plan is available in the Landscape Plan handout, available on-line or at the offices of the Department of Community Development.

C. Installation of the landscaping and screening shall be completed and a Landscaping Declaration submitted by the owner or owner's agent prior to issuance of the Certificate of Occupancy. Any plant substitutions shall be noted on the Declaration. If necessary, due to weather conditions or construction scheduling, the installation may be postponed to the next planting season (October – April) if approved by the Director and stated on the building permit. A performance assurance device equal to 150% of the cost of the labor and materials must be provided to the City before the deferral is approved.

(Ord. 2523 §14, 2017; Ord. 2368 §53, 2012; Ord. 2251 §65, 2009; Ord. 1971 §19, 2001; Ord. 1872 §14 (part), 1999)

18.52.100 Request for Landscape Modifications

A. ~~C.~~ Revisions to existing landscaping may be approved only if the following criteria are met:

1. The ~~modification or~~ revision does not reduce the landscaping to the point that activities on the site become a nuisance to ~~neighbors~~adjacent properties; and

~~2. The modification or revision does not diminish the quality of the site landscape as a whole; and either~~

~~a~~2. Proposed vegetation removal, replacement, and any mitigation measures proposed are consistent with the purpose and intent ~~given in~~of this chapter and brings landscaping into conformance with standards of TMC 18.52 ; ~~and~~or

3.~~b.~~ Proposed revision~~The granting of an exception or standard reduction~~ will not be detrimental to the public health, safety or welfare or injurious to other property in the vicinity.

4~~3~~. Any trees proposed to be removed shall be replaced with trees of similar or larger size at a minimum ratio of 1:1. ~~In addition, if trees are removed due to conflicts with utilities, these trees shall be replaced based on the tree replacement table (Table C) in TMC Chapter 18.52.110.~~

~~A~~B. The following deviations~~modifications~~ to the requirements of this chapter may be considered either as a Type 2, Special Permission Director decision, or through design review if the project is subject to that process.

1. Deviation from ~~Modifications to~~ the requirements of Type I, II, or III landscaping, including but not limited to the use of the landscape area for pedestrian and transit facilities, landscape planters, rooftop gardens or green roofs, terraced planters or green walls, or revisions to existing landscaping. ~~5. The~~ amount of landscaping on commercially-zoned properties may be reduced by 15% if buildings are moved to the front of the site with no parking between the building and the front landscaping, to create a more pedestrian-friendly site design.

2. Clustering and/or averaging of required landscaping. The landscape perimeter may be clustered if the total required square footage is achieved, unless the landscaping requirement has been increased due to proximity to LDR, MDR or HDR. In addition, up to 50% of the perimeter landscaping may be relocated to the interior parking to provide more flexibility for site organization.

3. Substitution of bioretention facility for required landscaping for Type I or II landscaping. Landscaping in a bioretention facility that includes trees, shrubs and groundcover may be counted up to 100% towards required landscaping depending on the location, type of bioretention facility proposed and proposed use.

4. Credit for retained significant trees towards landscaping requirement.

B. The following criteria apply to requests for deviation from ~~to modify~~ any required landscaping standards. ~~Modifications to landscaping requirements may be approved only if the following criteria are met:~~

1. The deviation~~modification or revision~~ does not reduce the landscaping to the point that activities on the site become a nuisance to neighbors; and

2. The modification or revision does not diminish the quality of the site landscape as a whole; and

3. One or more of the following are met:

   a. The modification or revision more effectively screens parking areas and blank building walls; or

   b. The modification or revision enables significant trees or existing built features to be retained; or

   c. The modification or revision is used to reduce the number of driveways and curb cuts and allow joint use of parking facilities between neighboring businesses; or

d. The modification or revision is used to incorporate pedestrian or transit facilities; or

e. The modification is for properties in the NCC or RC districts along Tukwila International Boulevard, where the buildings are brought out to the street edge and a primary entrance from the front sidewalk as well as from off-street parking areas is provided; or

f. The modification is to incorporate alternative forms of landscaping such as landscape planters, rooftop gardens, green roof, terraced planters or green walls; or

g. The modification is to incorporate a community garden, subject to the provisions of TMC Section 18.52.030, Note 11.

~~C. Revisions to existing landscaping may be approved only if the following criteria are met:~~

~~1. The modification or revision does not reduce the landscaping to the point that activities on the site become a nuisance to neighbors; and~~

~~2. The modification or revision does not diminish the quality of the site landscape as a whole; and either~~

~~a. Proposed vegetation removal, replacement, and any mitigation measures proposed are consistent with the purpose and intent given in this chapter; or~~

~~b. The granting of an exception or standard reduction will not be detrimental to the public health, safety or welfare or injurious to other property in the vicinity.~~

~~3. In addition, if trees are removed due to conflicts with utilities, these trees shall be replaced based on the tree replacement table (Table C) in TMC Chapter 18.52.110.~~

~~D~~C. Clustering or perimeter averaging of landscaping may be considered if:

1. It does not diminish the quality of the site landscape as a whole; and
2. It does not create a nuisance to adjacent properties; and
3. If adjacent to residential development, the impacts from clustering are minimized; and
4. One or more of the following criteria are met:

a. Clustering or perimeter averaging of plant material allows more effective use of the industrial property; or

b. Clustering or perimeter averaging of landscaping enables significant trees to be retained; or

c. Clustering or perimeter averaging is used to reduce the number of driveways and curb cuts and/or allow joint use of parking facilities between neighboring businesses; or

d. Clustering or perimeter averaging avoids future conflicts with signage.

~~D~~E. Landscaping in a bioretention facility, which includes trees, shrubs, and groundcovers as identified on the City's approved Bioretention Plant List and as regulated in TMC Chapter 14.30, may be counted up to 100% towards required Type I or Type II landscaping. Bioretention facilities shall not be counted towards required Type III landscaping. All of the following criteria must be met:

1. The bioretention facility has been designed by a professional trained or certified in low impact development techniques; and
2. The landscaping meets the screening requirements of the specified landscape type; and
3. Public safety concerns have been addressed; and
4. The number of trees required by the landscape type are provided.

F. Credit for~~Retained~~ significant trees.

1. Credit for retained significant trees may be counted towards required landscaping if the following criteria are met:

a. Assessment of trees by an ISA certified arborist as to tree health, value of the trees and the likelihood of survivability during and after construction is provided; and

b. Retention of tree(s) supports the Tukwila Comprehensive Plan urban tree canopy goals and policies; and

c. A financial assurance is posted based on 150% of the value of the retained tree(s) to ensure tree replacement should the retained trees be damaged or die as a result of construction impacts. The financial assurance shall be retained for three years.

2. The value of the significant tree(s) to be retained, as determined by an ISA certified arborist, shall be posted on the tree prior to site preparation and retained throughout the construction of the project.

(Ord. 2523 §15, 2017)

18.52.110 Violations

A. Violations. The following actions shall be considered a violation of this chapter:

1. Any removal or damage of landscaping that is required by this chapter.
2. Topping or excessive pruning of trees or shrubs, except as explicitly allowed by this chapter.
3. Failure to replace dead landscaping materials.

B. Penalties. In addition to any other penalties or other enforcement actions, any person who fails to comply with the provisions of this chapter also shall be subject to a civil penalty assessed against the violator as set forth herein. Each unlawfully removed or damaged tree shall constitute a separate violation.

1. The amount of the penalty shall be assessed based on Table B below. 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.

2. Penalties are in addition to the restoration of removed plant materials through the remedial measures listed in TMC Section 18.52.110.C.

3. 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.

TABLE B – Fines

Type of Violation	Allowable Fines per Violation
Removal or damage of trees or specimen shrubs without applying for and obtaining required City approval	$1,000 per tree, or up to the marketable value of each tree removed or damaged as determined by an ISA certified arborist.

C. Remedial Measures. In addition to the penalties provided in TMC Section 18.52.110.B, 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. In addition, any shrubs and groundcover removed without City approval shall be replaced.

2. To replace the tree canopy lost due to the tree removal, additional trees must be planted on-site. Payment may 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 C.

TABLE C – 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) OR 2 inches (any trunk of a multi-trunk tree)	3
Over 6-8 inches	4
Over 8-20 inches	6
Over 20 inches	8

D. Enforcement. It shall be the duty of the Community Development Director to enforce this chapter pursuant to the terms and conditions of TMC Chapter 8.45 or as otherwise allowed by law.

E. Inspection Access.

1. For the purposes of inspection for compliance with the provisions of a permit or this chapter, authorized representatives of the Community Development Director may enter all sites for which a permit has been issued.

2. Upon completion of all requirements of a permit, the applicant shall request a final inspection by contacting the planner of record. The permit process is complete upon final approval by an authorized representative of the Community Development Director.

(Ord. 2523 §16, 2017)

Chapter 18.06
DEFINITIONS

Sections:

18.06.017 Adaptive Management

"Adaptive management" means the use of scientific methods to evaluate how well regulatory and non-regulatory actions protect a ~~sensitive~~critical area.

18.06.036 Alteration

"Alteration" means any human-induced change in an existing condition of a ~~sensitive~~critical area or its buffer. Alterations include, but are not limited to, grading, filling, channelizing, dredging, clearing of vegetation, construction, compaction, excavation, or any other activity that changes the character of the ~~sensitive~~critical area.

18.06.069 Best Available Science

"Best Available Science" means that scientific information applicable to the ~~sensitive~~critical area prepared by appropriate local, state or federal agencies, a qualified scientist or team of qualified scientists, which will be consistent with the criteria established in WAC 365-195-900 through WAC 365-195-925. Characteristics of a valid scientific process will be considered to determine whether information received during the permit review process is reliable scientific information. A valid scientific process includes some or all of the following characteristics:

1. Peer reviewed research or background information.
2. Study methods clearly stated.
3. Conclusions based on logical assumptions.
4. Quantitative analysis.
5. Proper context is established.
6. References are included that cite relevant, credible literature and other pertinent information.

~~"Compensatory mitigation" means replacing project induced wetland and buffer losses or impacts, and includes, but is not limited to, the following:~~
~~1. Restoration: Actions performed to reestablish wetland and its buffer functional characteristics and processes which have been lost by alterations, activities or catastrophic events within an area which no longer meets the definition of a wetland;~~
~~2. Creation: Actions performed to intentionally establish a wetland and its buffer at a site where it did not formerly exist;~~
~~3. Enhancement: Actions performed to improve the condition of an existing degraded wetland or its buffer so that the functions it provides are of a higher quality.~~

~~"Constructed wetlands" or "constructed watercourses" means those wetlands or watercourses which an applicant can demonstrate were intentionally created from nonwetland or nonwatercourse sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds and landscape amenities; and does not mean those wetlands and watercourses created through compensatory mitigation.~~

~~18.06.265 Emergent Wetland~~
~~"Emergent wetland" means a regulated wetland with at least 30% of the surface area covered by erect, rooted, herbaceous vegetation as the uppermost vegetative stratum.~~
~~(Ord. 1758 §1(part), 1995~~

18.06.285 Essential Street, Road, or Right-of-Way ~~or Utility~~
"Essential street, road, or right-of-way ~~or utility~~" means a ~~utility facility, utility system,~~ street, road or right-of-way where no feasible alternative location exists based on an analysis of technology and system efficiency.

18.06.287 Essential Utility
"Essential utility" means a utility facility or utility system, where no feasible alternative location exists based on an analysis of technology and system efficiency.

~~18.06.335 Forested Wetland~~
~~"Forested wetland" means a regulated wetland with at least 20% of the surface area covered by trees greater than 20 feet in height.~~

~~18.06.360 Geotechnical Engineer~~

~~"Geotechnical engineer" means a practicing, geotechnical/civil engineer licensed as a professional civil engineer with the State of Washington who has at least four years of professional employment as a geotechnical engineer with experience in landslide evaluation.~~

18.06.581 ~~Compensatory~~ Mitigation
"Mitigation" means replacing project induced ~~wetland~~ ~~sensitive~~critical area and buffer losses or impacts, and includes but is not limited to the following:

1. Restoration: Actions performed to reestablish ~~wetland~~ ~~sensitive~~critical area and its buffer functional characteristics and processes which have been lost by alterations, activities or catastrophic events within an area which no longer meets the definition of a ~~wetland~~ ~~sensitive~~critical area;

2. Creation: Actions performed to intentionally establish a ~~wetland~~ ~~sensitive~~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 ~~wetland~~ ~~sensitive~~critical area or its buffer so that the functions it provides are of higher quality.

18.06.710 Critical ~~Sensitive~~ Area Buffer

"Critical ~~Sensitive~~ area buffer" means an area lying adjacent to but outside a ~~sensitive~~critical area as defined by this Title, whose function is to protect ~~sensitive~~ critical areas from the potential adverse impacts of development, land use, or other activities. A wetland or watercourse ~~sensitive~~critical area buffer also provides critical habitat value, bank stabilization, ~~and~~ or water overflow area functions.

18.06.715 Critical ~~Sensitive~~ Area Regulated Activities

"Critical ~~Sensitive~~ area regulated activities" means any of the following activities ~~which~~ that are directly undertaken or originate in a regulated wetland or watercourse or their buffers:

1. Removal, excavation, grading or dredging of soil, sand, gravel, minerals, organic matter or material of any kind;
2. Dumping, discharging or filling with any material;
3. Draining, flooding or disturbing the water level or water table;
4. Driving of pilings;
5. Placing of obstructions;
6. Construction, reconstruction, demolition or expansion of any structure;
7. Destruction or alteration of wetlands, watercourses or their buffers through clearing, harvesting, shading, intentional burning or planting of vegetation that would alter the character of a regulated wetland, watercourse or buffer, provided that these activities are not part of a forest practice governed under RCW 76.09 and its rules; or
8. Activities that result in a significant change to the water sources of wetlands or watercourses. These alterations include a significant change in water temperature; physical or chemical characteristics, including quantity; and the introduction of pollutants.

18.06.720 Critical ~~Sensitive~~ Areas

"Critical ~~Sensitive~~ areas" means wetlands, watercourses, areas of potential geologic instability (other than Class I areas), abandoned coal mine areas, and fish and wildlife habitat conservation areas, and special hazard flood areas.

~~(Ord. 1758 §1(part),~~ 18.06.725 Critical ~~Sensitive~~ Areas Ordinance

"Critical ~~Sensitive~~ Areas Ordinance" means the Environmentally Critical ~~Sensitive~~ Areas ~~Overlay District~~ chapter of this title or as amended hereafter which establishes standards for land development on lots with ~~sensitive~~critical areas (e.g. steep slopes, wetlands, watercourses, etc.).

18.06.730 Critical ~~Sensitive~~ Area Tract or Easement

"Critical ~~Sensitive~~ area tract or easement" means a tract or portion of a parcel ~~which~~ that is created to protect the ~~sensitive~~critical area and its buffer, whose maintenance is assured, and which is recorded on all documents of title of record for all affected lots and subsequent owners.

~~"Tree" means any self-supporting woody plant, which at maturity is usually 20 feet or more in height and generally has characterized by one main trunk, with a potential diameter breast height of 2 inches or more, and potential minimum height of 10 feet.~~

~~18.06.850 Tree Clearing Permit~~

~~"Tree clearing permit" means a permit issued by the Director authorizing tree clearing activities, pursuant to the general permit provisions of this title.~~

18.06.922 Wetland~~s~~

"Wetland~~s~~" means those areas that are inundated or saturated by groundwater or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include bogs, swamps, marshes, ponds, lakes and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including but not limited to irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, landscape amenities or those wetlands created after July 1, 1990 that were unintentionally created as a result of the construction of a road, street or highway. ~~Constructed wetlands are not considered wetlands for the purposes of this chapter~~. However, those artificial wetlands intentionally created from nonwetland areas to mitigate conversion of wetlands as permitted by the City shall be considered wetlands.

18.06.924 Wetland Edge

"Wetland edge" means the delineated boundary of a wetland performed in accordance with approved federal wetland delineation manual and current applicable regional supplements. ~~as delineated based on the 1987 manual in use January 1, 1995 by the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers.~~

~~18.06.932 Wetland, Isolated~~

~~"Isolated wetlands" means those wetlands which that:~~
~~Are not hydrologically connected to, outside of and not contiguous to any 100 year floodplain of a lake, river or stream, in accordance with current State and federal regulations; and have no contiguous hydric soil and hydrophytic vegetation between the wetland and any regulated surface water.~~

18.06.933 Wetlands, Regulated

"Regulated wetland~~s~~" means ponds or lakes ~~30~~ 20 acres or less and those lands subject to the "wetland" definition contained in this chapter. ~~Wetlands 1,000 sq. ft. and less that do not meet any of the criteria of TMC 18.45.080B are not regulated.~~

CHAPTER 18.45 ENVIRONMENTALLY CRITICAL AREAS

Sections:

18.45.10 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.

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

1. Minimize developmental impacts on the natural functions of these areas.
2. Protect quantity and quality of water resources.
3. Minimize turbidity and pollution of wetlands and fish- bearing waters and maintain wildlife habitat.
4. Prevent erosion and the loss of slope and soil stability caused by the removal of trees, shrubs, and root systems of vegetative cover.
5. Protect the public against avoidable losses, public emergency rescue and relief operations cost, and subsidy cost of public mitigation from landslide, subsidence, erosion and flooding.
6. Protect the community's aesthetic resources and distinctive features of natural lands and wooded hillsides.
7. Balance the private rights of individual property owners with the preservation of environmentally critical areas.

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

9. Give special consideration to conservation or protection measures necessary to protect or enhance anadromous fisheries.

10. 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.

(Ord. 2301 §1 (part), 2010)

18.45.20 Best Available Science

A. Policies, 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. 2301 §1 (part), 2010)

18.45.30 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 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;
2. Areas of potential geologic instability: Class 2, 3, 4 areas (as defined in the Definitions chapter of this title and TMC 18.45.120.A);
3. Wetlands;
4. Watercourses;
5. Fish and Wildlife Habitat Conservation Areas; and
6. Special Hazard Flood Areas. (See TMC 16.52 for additional regulations)

B. The Growth Management Act also identifies areas of seismic instability as critical areas. Areas of seismic instability 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 which imposes greater restrictions or higher standards upon the development or use of land shall prevail.

D. *CRITICAL AREAS MAPS AND INVENTORIES*

1. The distribution of many critical areas and potential critical areas in Tukwila is displayed on the Critical Areas Maps, on file with the Department of Community Development (DCD). These maps are based on 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. Thus it is the responsibility of property owners and applicants to verify 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 wetland based on methodology required under TMC 18.45.80 and verifying that watercourse typing and location is consistent with TMC 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 to the Critical Areas Maps. Removal of any information from the critical area maps is a Type 1 decision.

(Ord. 2301 §1 (part), 2010)

18.45.40 Critical Areas Special Studies

A. Application Required. 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 below to adequately identify and evaluate the critical area and its buffers.

1. A required critical area study shall be prepared by a person with experience and training in the scientific discipline appropriate for the relevant critical area as outlined below, 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.

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 wetland 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.

c. A qualified professional for a geological hazard 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 hydrologist, fisheries biologist, engineer or other scientist with experience in preparing watercourse assessments.

2. The critical area study 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 critical area study shall evaluate the proposal and all probable impacts to critical areas.

B. Wetland and Watercourse Critical Area Studies. The critical area study 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. A copy of the site plan for the development proposal showing: critical areas and buffers and the development proposal with dimensions, clearing limits, 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;

4. 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 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, 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) Assessment. For proposed wetland filling or proposed projects that will impact buffers the Washington Wetland Classification System (2014 or most current) 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.

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

7. 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.

9. Plans for adequate mitigation to offset any impacts.

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

11. Any technical information required by the Director to assist in determining compliance with this Chapter.

12. Wetland and Watercourse special studies are valid for five years following the date of the study, unless otherwise determined by the Director.

C. *GEOTECHNICAL REPORT* –

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 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 report shall be reviewed and approved by a geotechnical engineer.

D. *CRITICAL AREA STUDY - MODIFICATIONS TO REQUIREMENTS* –

1.The Director may limit the required geographic area of the critical area 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.

E. REVIEW OF STUDIES – The Department of Community Development will review and verify the information submitted in the critical area study, to confirm the nature and type of the critical area. Public Works Department shall seek a peer review of the geotechnical report on Class 3 and 4 slopes; 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 at the discretion of the Director, critical area studies may undergo peer review, at the expense of the applicant. *(Ord. 2368 § 47, 2012; Ord. 2301 §1 (part), 2010)*

(Ord. 2301 §1 (part), 2010)

18.45.70 Critical Area Permitted Activities

A. 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:

1. Maintenance 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.

2. Site exploration or research that does not include use of heavy equipment or native vegetation removal

3. Maintenance 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 road.

4. Actions to remedy the effects of emergencies that threaten the public health, safety or welfare.

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 18.45.158.E.3

B. PERMITTED ACTIVITIES SUBJECT TO ADMINISTRATIVE REVIEW. The following uses may be permitted only after administrative review and approval of a Type 2 Special Permission application by the Director:

1. Maintenance 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.

2. New surface water discharges to critical areas or their 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 173.201 as amended, and does not adversely affect wetland hydrology or watercourse flow. Water quality monitoring may be required as a condition of use.

3. Construction of bioswales and dispersion trenches are the only storm water facilities allowed in wetland or watercourse buffers. Water quality monitoring may be required as a condition of use

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.

6. Construction or maintenance of Essential Public Streets, Roads and Rights-of-Way as defined by TMC 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.

7. 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 sensitivity to human disturbance or alteration. Access features shall be the minimum dimensions necessary to avoid adverse impacts to the critical area. Trails shall be no wider than 5 feet and are only allowed in the outer 25 percent of the buffer, except for allowed wetland or stream crossings. Crossings and 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).

b. Public access must be specifically developed for interpretive, educational or research purposes by, or in cooperation with, the City or as part of the adopted Tukwila Parks 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 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.

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.

8. 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 18.45.90 (alteration of wetland), TMC 18.45.110 (alteration of watercourse), or TMC 18.45.100 (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. 2301 §1 (part), 2010)

18.45.075 Mitigation Sequencing

A. Applicants shall demonstrate that reasonable efforts have been 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.

18.45.80 Wetlands Designations, Ratings and Buffers

A. *WETLAND DESIGNATIONS*.

1. For the purposes of TMC Chapter 18.45, "wetlands" and "regulated 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 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 or wetland boundaries must be conducted within no more than five years prior to the date of permit application.

B. *WETLAND RATINGS* –

Wetlands shall be designated in accordance with the Washington State Wetlands Rating System for Western Washington, (Washington State Department of Ecology,2014, Publication # 14-06-029); or as otherwise amended by Ecology as Category I, II, III, or IV.

C. *WETLAND BUFFERS* –

1. Purpose. 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 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*–

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.

Table 18.45.080-1 Wetland Buffer Widths

Category	Wetland buffer width (ft), Ecology 2014, high-intensity land use impact					
	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 1)	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 1)
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

(1) 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' 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

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 (see TMC Figure 18-2).

F. VARIATION 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 ¾ 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.

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.

d. Compliance with TMC 18.45 Vegetation Protection and Management section.

e. Submittal of buffer enhancement plan, mitigation monitoring and maintenance plan along with financial guarantee in accordance with TMC 18.45.

2. Interrupted Buffer: A waiver for interrupted buffer may be allowed by the Director as a Type 2 permit if the following criteria is met:

   i) The buffer is interrupted by a paved public or private road; legally constructed buildings; or legally approved parking lots. This waiver does not apply to accessory structures such as sheds and garages; and
   j) The existing legal improvement creates a substantial barrier to the buffer function; and
   ii) The interrupted buffer does not provide additional protection of the critical area from the proposed development; and
   iii) The interrupted buffer does not provide significant hydrological, water quality and wildlife functions. This waiver does not apply if large trees or other significant native vegetation exists; and
   iv) Enhancement of remaining buffer is required if 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 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 habitat for endangered, threatened, sensitive or monitor species listed by the federal government or the State.

(Ord. 2368 §48, 2012; Ord. 2301 §1 (part), 2010)

18.45.90 Wetlands Uses, Alterations and Mitigation

A. 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. Where required, a mitigation plan must be developed and must comply with the standards of mitigation required in TMC Chapter 18.45. Where unauthorized alterations occur within a critical area or its buffer, the City will require the applicant to submit a critical area study, 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* –

1. Alterations to wetlands are discouraged and are limited to the minimum necessary for 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.
   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 section.

2. Alterations are not permitted to Category I and II wetlands unless specifically exempted under the provisions of TMC Chapter 18.45.

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 IV wetlands less than 1,000 square feet in size that meet all of the following conditions are allowed where adequate mitigation is carried out in accordance with the standards of this section.

a. They are not associated with a riparian 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 habitat identified as essential for local populations of priority species identified by the Washington State Department of Fish and Wildlife, and
e. They do not score 6 points or greater for habitat in the Western Washington Wetland Rating System.

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:

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;

b. Rehabilitation. The manipulation of the physical, chemical or biological characteristics of a site with the goal of repairing historic functions and processes of a degraded wetland, resulting in a gain in wetland functions but not acreage;

2. Creation (establishment). 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. Enhancement. The manipulation of the physical, chemical or biological characteristics to heighten, intensify, or improve specific functions (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.

4. A combination of the three types.

b) Required mitigation ratios are described in TMC Section 18.45.090.E.1.b.(1). 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.

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.

4. Mitigation for alteration to wetland buffers will be 1:1.

2) 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, re-establishment, 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 of mitigation shall be done by the property owner for a period of no less than five years and for ten 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 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. 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 or as amended, for potential offsite mitigation locations.

3. Purchase of mitigation credits through mitigation banks and in lieu fee programs is preferred over permittee responsible offsite mitigation.

4. The Community Development Director may approve, through a Type 2 decision, 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:

i)Adequate measures have been taken to ensure the non-development and long-term viability of the mitigation site; and

ii)Adequate coordination with the other affected local jurisdiction has occurred.

iii)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:

Sites within the immediate drainage sub-basin; Sites within the next higher drainage sub-basin; and 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.

(Ord. 2301 §1 (part), 2010)

F. WETLAND MITIGATION PLAN CONTENT.

1. The mitigation plan shall be developed as part of a critical area 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 be an improvement of wetland and buffer 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. 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.

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 222-16-031(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.
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.

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 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 Chapter 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:

1. 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 (see TMC Figure 18-2).

E. *VARIATION OF STANDARD WATERCOURSE BUFFER WIDTH* –

1 Buffer averaging may be allowed by the Director as a Type 2 decision 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 ¾ of the required width; 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.

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.

d. Compliance with TMC 18.45 Vegetation Protection and Management section.

e. Submittal of buffer enhancement plan, mitigation monitoring and maintenance plan along with financial guarantee in accordance with TMC 18.45.

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

i) The buffer is interrupted by a paved public or private road; legally constructed buildings; or legally approved parking lots. This waiver does not apply to accessory structures such as sheds and garages.

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

iii) The interrupted buffer does not provide additional protection of the critical area from the proposed development; and

iv) The interrupted buffer does not provide significant hydrological, water quality and wildlife functions. This waiver does not apply if large trees or other significant native vegetation exists.

v) Enhancement of remaining buffer is required if 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 habitat for endangered, threatened, sensitive or monitor species listed by the federal government or the State.

(Ord. 2301 §1 (part), 2010)

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 TMC Chapter 18.45. Any use or development allowed is subject to the standards of TMC Chapter 18.45.

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 which flow under a road, trail or driveway. Daylighting of a stream refers to taking a stream out of a pipe which 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. 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 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 or as amended.

2. 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), shall be upgraded to meet the standards in the Washington Department of Fish and Wildlife Water Crossing Design Guidelines manual 2013 or as amended 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 or as amended.

3. 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; requires 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 in the "Water Crossing Design Guidelines" manual (2013 or as amended).

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.

C. *MITIGATION STANDARDS*

1) The following shall be considered the minimum standards for approved mitigation projects:

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 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* – Department of Community Development-approved plans as Type 2 decision must have the mitigation construction completed before the existing watercourse can be modified. The Director may allow activities that permanently disturb a watercourse prior to implementation of the mitigation plan under the following circumstances:

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

E. MITIGATION PLAN CONTENT. All impacts to a water- course 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.

a. 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 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.

b. 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.

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

i. 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.

ii. 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.

iii. 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.

iv. 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.

v. 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.

vi. 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.

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

(Ord. 2301 §1 (part), 2010)

18.45.120 Areas of Potential Geologic Instability Designation, Rating and Buffers

A. *DESIGNATION* – Potential areas of geologic instability include areas of potential erosion and landslide hazards. Areas of potential geologic instability are classified as follows:

1. Class 1 area, which has a slope of less than 15%;
2. Class 2 areas, which has a slope between 15% and 40%, and which are underlain by relatively permeable soils;
3. 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%;
4. Class 4 areas, which include sloping areas with mappable zones of groundwater seepage, and which also include existing mappable landslide deposits regardless of slope.

B. Mapping.

1. The approximate location, extent, and designation of 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 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 or the WDNR Division of Geology and Earth Resources;
b. For potential or historic landslides, those areas mapped by the WDNR (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.

C. *BUFFERS* –

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

a. Minimize long-term impacts of development on properties containing critical areas;
b. Protect critical areas from adverse impacts during development;
c. Prevent loading of potentially unstable slope formations;
d. Protect slope stability;
e. Provide erosion control and attenuation of precipitation surface water and stormwater runoff; and
f. Reduce loss of or damage to property.

D. Each development proposal containing or threatened by an area of potential geologic instability Class 2 or higher shall be subject to a geotechnical report pursuant to the requirements of TMC Chapter 18.45.040 C, and 18.45.060. The geotechnical report 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. Development proposals shall then include the buffer distances as defined within the geotechnical report.

(Ord. 2368 §49, 2012; Ord. 2301 §1 (part), 2010)

18.45.130 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 areas of potential geologic instability subject to the standards of this section and the recommendations of a geotechnical study.

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. *ALTERATIONS* –

1. Prior to permitting alteration of an 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 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 area of potential geologic instability is cleared for development, a landscaping plan for the site shall include tree replanting with an equal mix of evergreen and deciduous trees, shrubs and

groundcovers, preferably native, and 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 area of potential geologic instability unless there is no practical alternative (demonstrated by the applicant)

4. Land disturbing activities in an 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 WA.

5. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an 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 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 & fill to amount necessary)

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

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 Elections at the expense of the applicant or owner. A copy of the recorded covenant will be forwarded to the owner.

E. *ASSURANCE DEVICES* – Whenever the City determines that the public interest would not be served by the issuance of a permit in an 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.

F. *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.

G. *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 dryer 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. 2301 §1 (part), 2010)

18.45.140 Coal Mine Hazard 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 Elections at the expense of the applicant or owner. A copy of the recorded covenant will be forwarded to the owner.

(Ord. 2301 §1 (part), 2010)

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

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

3. Wetlands and watercourses are addressed under 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

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 Chapter 18.45.040.B and 18.45.060. 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 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 Chapter 18.45.040.B and 18.45.060. 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. 2301 §1 (part), 2010)*

18.45.155 Special Hazard Flood Areas

A. Regulations governing Special Hazard Flood areas are found in TMC Chapter 16.52, Flood Zone Management and 18.45.155.B.

B. Floodplain Habitat Assessment.

1. When development is proposed within a Special Hazard Flood areas, a floodplain habitat assessment shall be prepared pursuant to the requirements of TMC Chapter 18.45.040 B and 18.45.060.

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.

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

    a. Projects that are undergoing or have undergone consultation with the National Marine Fisheries Service under the Endangered Species Act.

    b. Repair or remodeling of an existing structure, if the repair or remodeling is not a substantial improvement.

    c. Expansion of an existing structure that is no greater than 10 percent beyond its existing footprint; provided, that the repairs or remodeling is 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.

    d. 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.

    e. 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.

    f. Repair to on-site septic systems provided the ground disturbance is the minimum necessary.

    g. 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.

18.45.158 Vegetation Protection and Management

A. Purpose

1.The purpose of this section is to:

a. Regulate the protection of existing trees and native vegetation in the critical areas and their buffers;

b. Establish requirements for removal of invasive plants at the time of development or re-development of sites;

c. Establish requirements for the long-term maintenance of native vegetation to prevent establishment of invasive species and promote ecosystem processes.

B. Applicability

This chapter sets forth rules and regulations to control maintenance and clearing of trees 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 18.54 Urban Forestry and Tree chapter shall govern tree removal on any undeveloped land and any land zoned Low Density Residential (LDR) that is developed with a single family residence. TMC Chapter 18.52 “Landscape Requirements” shall govern the maintenance and removal of landscaping on developed properties that are zoned commercial, industrial, or multifamily, and on properties located in the LDR zone that are developed with a non-single family residential use. The most stringent regulations shall apply in case of a conflict.

C. Vegetation Retention and Replacement.

1. Retention

a. Native vegetation in critical areas and their buffers must be protected and maintained. No removal of native vegetation is allowed without prior approval by the City except 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 that slope stability and wetland quality will be maintained or improved. Any temporary disturbance of the buffers shall be replanted with a diverse plant community of native northwest species.

b. Invasive vegetation (blackberry, ivy, laurel, etc.) may be removed from a critical area or its buffer except 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 18.45.158.E.3. Invasive vegetation removal on steep slopes requires prior City approval

c. Hazardous or defective trees, as defined in TMC 18.06, may be removed from a critical area if threat posed by the tree is imminent. If the hazard is not obvious, an assessment by a certified professional, as defined in TMC 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 for any hazardous tree 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 land use application, including, but not limited to, subdivision or short plat, design review or building permit review, the Director of Community Development or the Board of Architectural Review may require alterations in the arrangement of buildings, parking or other elements of proposed development in order to retain significant vegetation.

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 must be submitted to the Department of Community Development (DCD) containing the following information:

a. A vegetation survey on a site plan that shows the diameter, species and location of all significant trees and all existing native vegetation.

b. A site plan that shows trees and native vegetation to be retained and trees to be removed and provides a table showing the number of significant trees to be removed and the number of replacement trees required.

c. Tree protection zones and other measures to protect any trees or native vegetation that are to be retained for sites undergoing development or re-development.

d. Location of the OHWM, stream buffer, wetland, wetland buffer, steep slope or any other critical areas with their buffers.

e. A landscape plan that shows diameter, species name, spacing and planting location for any required replacement trees and other proposed vegetation.

f. An arborist evaluation justifying the removal of hazardous trees if required by DCD.

g. An application fee per the current Land Use Permit Fee resolution.

3. Criteria for Tree Removal in a Critical Area or its buffer

A Type 2 Critical Area Tree Removal and Vegetation Clearing Permit shall only be approved if the proposal complies with the following criteria as applicable:

a. The site is undergoing development or redevelopment;
b. Tree poses a risk to structures;
c. There is imminent potential for root or canopy interference with utilities;
d. Trees interferes with the access and passage on public trails;
e. Tree condition and health is poor, the City may require an evaluation by an International Society of Arborists (ISA) certified arborist;
f. 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; and
g. The proposal complies with tree retention, replacement, maintenance and monitoring requirements of this Chapter.

4. Tree Replacement Requirements Where permitted, significant trees that are removed, illegally topped, or pruned by more than 25% within a critical areas shall be replaced pursuant to the tree replacement requirements shown below, up to a density of 100 trees per acre (including existing trees). Significant trees that are part of an approved landscape plan on the developed portion of the site are subject to replacement per TMC 18.52. Dead or dying trees removed that are part of an approved landscape plan on the developed portion of the site shall be replaced at 1:1 ratio in the next appropriate planting season. 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. Removal of dead, dying or otherwise hazardous trees in non-developed areas are subject to the replacement requirements listed in the Table below. The Director may require additional trees or shrubs to be installed to mitigate any potential impact from the loss of this vegetation as a result of new development.

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

If all required replacement trees cannot be reasonably accommodated on the site, the applicant shall pay into a tree replacement fund per the adopted fee resolution.

Topping of trees is prohibited and will be regulated as removal subject to tree replacement requirements listed above.

Pruning of trees shall not exceed 25% of canopy in a 36 month period. Pruning in excess of 25% canopy shall be regulated as removal with tree replacement required per Table listed above. Trees may 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 Permit. The pruning must 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. Tree Protection

All trees not proposed for removal as part of a project or development shall be protected using Best Management Practices 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 fence or plywood 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, dumping 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. Plant Materials Standards

For any new development, redevelopment or restoration in a Critical Area, 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 biologist shall be submitted to the City for approval that shows plant species, size, number, spacing, soil preparation irrigation, and invasive species removal. The requirement for

a biologist may be waived by the Director for single family property owners when the mitigation area is less than 1500 sq. ft.

2. Invasive vegetation must be removed as part of site preparation and native vegetation planted in the Critical Area and its buffer where impacts occur.

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 TMC 18.45.158.E.3 Where not feasible and mechanized equipment is needed, the applicant must obtain a Type 2 permit prior to work being conducted. Removal of invasive vegetation must be conducted so that the slope stability, if applicable, will be maintained and native vegetation is protected. A plan 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.

4. 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 for alternative approaches, such as sheet mulching and goat grazing. The method selected shall not destabilize the bank or cause erosion.

5. A combination of native trees, shrubs and groundcovers (including but not limited to grasses, sedges, rushes and vines) shall be planted. 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.

6.. 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 or conflicts with utilities).

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

8. 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 landscaping chapter TMC 18.52 for plant sizes in required landscape areas.

9. Site preparation and planting 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.

10. Plants may be selected and placed to allow for public and private view corridors with approval by Director.

11. 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.

12. 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 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.

Critical Area Buffer Vegetation Planting Densities Table

Plant Material Type	Planting Density
Stakes/cuttings along streambank (willows, red osier dogwood)	1 - 2 feet on center or per bioengineering method
Shrubs	3 - 5 feet on center, depending on species
Trees	15 – 20 feet on center, depending on species
Groundcovers, grasses, sedges, rushes, other herbaceous plants	1 – 1.5 feet on center, depending on species
Native seed mixes	5 - 25 lbs. per acre, depending on species

13.The Department 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 proposed as a measure to control invasive plants and increase buffer function.

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

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. 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.Plant debris from removal of invasive plants 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 need to be disposed of in the landfill/trash and non-regulated noxious weeks can be disposed of in green waste or composted on site.

3.Use of pesticides.

a. Pesticides (including herbicides, insecticides, and fungicides) shall not be used in the critical area or its buffer except where:

(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 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 is applied in accordance with state regulations;

(4) The proposed herbicide is approved for aquatic use by the U.S. Environmental Protection Agency; 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.

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 Special Permission or critical area 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 Urban Environmentalist to document planting of the correct number and type of plants.
   b. Submit annual documentation of tree and vegetation health for three years.
2. Restoration and Mitigation Project Requirements.

a. A five-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 survival rates against project goals and present contingency plans to meet project goals.

c. Mitigation will be complete after project goals have been met and accepted by the City environmentalist.

d. A 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.

18.45.160 Critical Area Master Plan Overlay

A. The purpose of this section is to provide an alternative to preservation of existing individual wetlands, watercourses and their buffers in situations where an area-wide plan for alteration and mitigation 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 designate certain areas as 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 5 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 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.

(Ord. 2301 §1 (part), 2010)

18.45.170 Critical Areas Tracts and Easements

A. In development proposals for planned residential or mixed use developments, short subdivisions or 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 18.45.170A, 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. 2301 §1 (part), 2010)

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.

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 permittable 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. *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. 2368 §50, 2012; Ord. 2301 §1 (part), 2010)

18.45.190 Time Limitation, Appeals and Vesting

A. Time Limitation: Type 2 Special Permission decision for interrupted buffer, buffer averaging or other alterations shall expire in one year unless the applicant submits a complete building permit or other construction permit within one year. Type 1 tree permit for tree removal within sensitive areas or their buffers shall expire in one year unless an extension is granted by the Director.

The Director may grant an extension 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 Community Development 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 Section 18.108.020 and TMC Chapter 18.116.

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 Community Development Department; and
3. Findings of the Director, which shall be given substantial weight.

C. Vesting: Projects are vested to critical area ordinance in effect at the time a complete building permit is submitted except for short plats, subdivisions, binding site plans and shoreline permits. Short plats or subdivisions

or binding site plans are vested to the critical area ordinance in effect at the time complete application is submitted for preliminary plats or for the binding site plan. The final plat and all future building permits on the lots remain vested to that same critical areas ordinance in effect for the preliminary plat or preliminary binding site plan application, so long as building permits are applied for within five years of the final plat. For short plats and subdivisions which received preliminary plat approval prior to the adoption of this ordinance, building permits on the lots shall be considered under the critical areas ordinance in effect on the date of the preliminary plat application provided complete building or construction permits are submitted within five years of the final plat approval. Vesting provisions for shoreline permits are provided in TMC 18.44

(Ord. 2301 §1 (part), 2010)

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 B.
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.

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 a Special Permission or Tree Permit issuance to ensure compliance with this chapter. The permit process is complete upon final approval by the Director.

(Ord. 2301 §1 (part), 2010)

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 Elections. 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. 2301 §1 (part), 2010)

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 and confirmed by the City to the Department from the applicant's qualified professional 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.

(Ord. 2301 §1 (part), 2010)

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 18.34; 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. 2301 §1 (part), 2010)

Wynetta Bivens

To: Christy O'Flaherty
Subject: RE: Planning Commision Comments

From: donald scanlon <donscan@donscan.org>
Sent: Wednesday, April 10, 2019 2:57 PM
To: Tukwila City Clerk <TukwilaCityClerk@TukwilaWA.gov>
Subject: Planning Commision Comments

I plan to attend the planning commission meeting Thursday night. In case I can't make it please enter these comments.

My concern is with the deletion of item 8 under section 18.45.110. This states culverts shall be upgraded when being re-developed or when new development occurs. I don't see anything like this in the new section 18.45.110. The new draft is only focused on piping streams. It doesn't address when and where streams should be opened up or improved. I would like to see the old item eight be retained.

Don Scanlon

EXHIBIT 1 DATE 4/11/19
PROJECT NAME Critical Areas Code Update
FILE NO L18-0056

CH& ATTORNEYS AT LAW
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office 206.587.0700
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April 10, 2019

VIA HAND DELIVERY

City of Tukwila Planning Commission
City of Tukwila
6300 Southcenter Blvd., #100
Tukwila, WA 98188

Re: **Comments on Proposed Critical Areas Code Update L18-0056**

Dear Planning Commissioners:

This firm represents Segale Properties LLC ("**Segale**"). As you are likely aware, Segale controls the large Tukwila South property, abutting the Green River. In 2009, Segale and the City entered into a long-term Development Agreement governing the future building on the Tukwila South property. After years of construction to install all necessary infrastructure and re-grade the property for development, the Tukwila South lands are finally ready to be marketed and are being actively reviewed for ground lease and/or sale for commercial and residential buildings and development.

In addition to the Development Agreement, on June 8, 2009, the City Council approved the entire Tukwila South property as a Sensitive Area Master Plan Overlay District. Segale implemented a Sensitive Areas Master Plan ("SAMP") that addressed the entire 512-acre Tukwila South site, authorizing alterations and mitigation of sensitive areas, in a comprehensive plan that overall improved water quality, fish and wildlife habitat and hydrology beyond what would have occurred through the strict application of the provisions of the Sensitive Areas Ordinance. The SAMP assured protection of the Tukwila South lands' sensitive areas and buffers by locating them in Native Growth Protection Areas ("NGPAs"), and SAMP Condition 18 required that the NGPA protections be assured via recorded instruments on the real property title. Tukwila South also is in the process of being subdivided with final plats being recorded on a phased basis, and each final plat locates NGPA areas in a protected tract.

The NGPAs are mapped on Exhibit 3 to the Development Agreement. Exhibit 3 plainly labels the NGPAs as "Non-Development areas," in contrast to the remainder of the Tukwila South lands which are the "Development Areas," and Section 3.2 of the Development Agreement authorizes 100% of the Development Areas to be cleared and graded, and up to 85% of the Development Areas served by each stormwater facility to be covered with impervious surfaces. Likewise, Section 5.1 of the Development

EXHIBIT 2 DATE 4/11/19
PROJECT NAME Critical Areas Code Update
FILE NO L18-0056

nrogers@cairncross.com
direct: (206) 254-4417

Agreement confirms protection of the NGPAs. The Development Agreement also vested the build out of the Tukwila South project to the 2009 Tukwila Municipal Code, including all of Title 18, which included the City's Sensitive Areas Ordinance.

What this means is that during the term of the Development Agreement the City's proposed amendment to the Critical Areas Code will not apply to the Tukwila South lands. In addition, the SAMP is a standalone approval that has no term, and the recorded and set boundaries for protected NGPA versus developable lands will continue to apply even after the Development Agreement term expires. Nonetheless, Segale is keenly interested in the Critical Areas Ordinance ("CAO") update, as well as the CAO interplay with the also pending SMP updates. Below, we provided comments on the CAO update.

We ask that you carefully review the following provisions of the CAO update, respond to our questions, and we recommend that you include our requested revisions.

1. Assurance that created and enhanced mitigation areas are not penalized with new larger buffers.

The SAMP for Tukwila South lands authorized the construction of a significant new off-channel habitat area in the Green River, including the creation of new wetland areas, and the rehabilitation and enhancement of other existing wetlands. Those areas and their associated buffers are protected by NGPAs. Segale seeks clear assurance from the City that the NGPA boundaries applied to these newly created mitigation areas will not be later expanded due to increases in the CAO regulatory buffer widths. We believe that is the City's intent, we believe the SAMP precludes the City from expanding those buffers but it is not clearly stated in the new CAO update that increased buffer widths will not be imposed on those previously set NGPAs. One option to provide this clarification would be to add a subsection to SMC 18.45.160, *Critical Area Master Plan Overlay*, to read: "The boundaries of critical areas and associated buffers, which critical areas were created or enhanced pursuant to an approved Critical Area Master Plan or Sensitive Area Master Plan are not subject to expansion due to the later adoption of increased buffer widths into this Critical Areas Ordinance, the Shoreline Overlay regulations or any updates thereto."

2. 18.45.190, *Time Limitation, Appeals and Vesting*

Because of the SAMP overlay, and the implemented SAMP actions and mitigation, the City's addition of a vesting regulation to the new CAO is not relevant to Tukwila South. However, as a matter of public policy, we reviewed the proposed language. The addition of the vesting regulation at TMC 18.45.190.C is characterized in the Summary of Key Revisions as merely a "housekeeping" amendment. With a few clarifying revisions, we would agree. However, without these revisions, this regulation might be read as a sea change in vesting doctrine that could severely punish landowners in the City of Tukwila.

By way of background, it is important to recognize that subdivisions, binding site plans, and similar development proposals are designed to create lots and development sites for future buildings. It is at the preliminary subdivision and site plan stage of permit review, that critical area impacts are

assessed and evaluated, and sensitive areas are generally set aside in protected tracts. In fact, TMC 18.45.170, *Critical Areas Tracts and Easements,* requires that critical areas on a development site be protected in a tract or easement that must remain undeveloped in perpetuity. Importantly, applications for building permits cannot be made until after a subdivision or binding site plan is approved, because under RCW 19.27.095(2)(a), one cannot apply for a building permit without a legal parcel. This means that one cannot file and vest a building permit application for a new home or commercial building in a new subdivision, until after the final plat has been recorded. It is also generally the case that buildings in a subdivision are not all constructed immediately or all at once, but rather over the course of at least five years.

As drafted, it is not clear that the new vesting provision assures a landowner who applies for and designs a preliminary plat to protect critical areas in tracts, can apply for later building permits relying on those tract boundaries. This is a problem because a new, larger buffer width could easily eliminate the building area on one or more of the new lots and destroy the landowner's investment value. We recommend the City amend the vesting policy to clarify that future building permits in a subdivision or binding site plan are vested to the critical area provisions in effect at the time of application for the preliminary subdivision or preliminary binding site plan was made, and that vesting remains in effect for a period of five years following the recording of the final plat or final binding site plan. Suggested revisions to TMC 18.45.190.C are:

> C. Vesting: Projects are vested to the critical area ordinance in effect at the time a complete building permit is submitted except for short plats, subdivisions, binding site plans, and shoreline permits. Short plats or subdivisions or binding site plans are vested to the critical area ordinance in effect at the time complete application is submitted for preliminary plats or for the binding site plan. The final plat, final site plan, and all future building permits on the lots remain vested to that same critical areas ordinance in effect for the preliminary plat or preliminary binding site plan application, so long as building permits are applied for within five years of the final plat or site plan approval. For short plats and subdivisions which received preliminary plat approval prior to the adoption of this ordinance, building permits on the lots shall be considered under the critical areas ordinance in effect on the date of the preliminary plat ~~approval~~ application provided complete building or construction permits are submitted within ~~one~~ five years of the final plat approval. Vesting provision for shoreline permits are provided in TMC 18.44.

Again, while this vesting regulation does not affect Segale's Tukwila South lands, we highly recommend these clarifying amendments to ensure protection of Tukwila landowners.

We appreciate your attention to this matter and would be happy to answer any questions.

Very truly yours,

Nancy Bainbridge Rogers

NBR:jcs

cc: Ann Marie Soto
Minnie Dhaliwhal
Mark Segale
Mike Pruett

Wynetta Bivens

To: Minnie Dhaliwal
Subject: RE: Tukwila's Critical Areas Code amendments, Chapter 18.45, Public Notice

From: Minnie Dhaliwal <Minnie.Dhaliwal@TukwilaWA.gov>
Sent: Thursday, April 11, 2019 3:44 PM
To: Wynetta Bivens <Wynetta.Bivens@TukwilaWA.gov>
Cc: Jack Pace <Jack.Pace@TukwilaWA.gov>
Subject: Fw: Tukwila's Critical Areas Code amendments, Chapter 18.45, Public Notice

From: Karen Walter <KWalter@muckleshoot.nsn.us>
Sent: Wednesday, April 10, 2019 8:17 AM
To: CriticalAreas
Subject: FW: Tukwila's Critical Areas Code amendments, Chapter 18.45, Public Notice

Karen Walter
Watersheds and Land Use Team Leader

Muckleshoot Indian Tribe Fisheries Division
Habitat Program
39015-A 172nd Ave SE
Auburn, WA 98092
253-876-3116

From: Karen Walter
Sent: Tuesday, April 09, 2019 12:29 PM
To: 'Criticalarea@TukwilaWA.gov'
Cc: 'Minnie Dhaliwal'
Subject: Tukwila's Critical Areas Code amendments, Chapter 18.45, Public Notice

EXHIBIT 3 DATE 4/11/19
PROJECT NAME Critical Areas Code Update
FILE NO L18-0056

To Tukwila staff,

We have reviewed the propose amendments to the City of Tukwila's Critical Areas Code and have questions/comments as noted:

1.Watercourse designation/classification

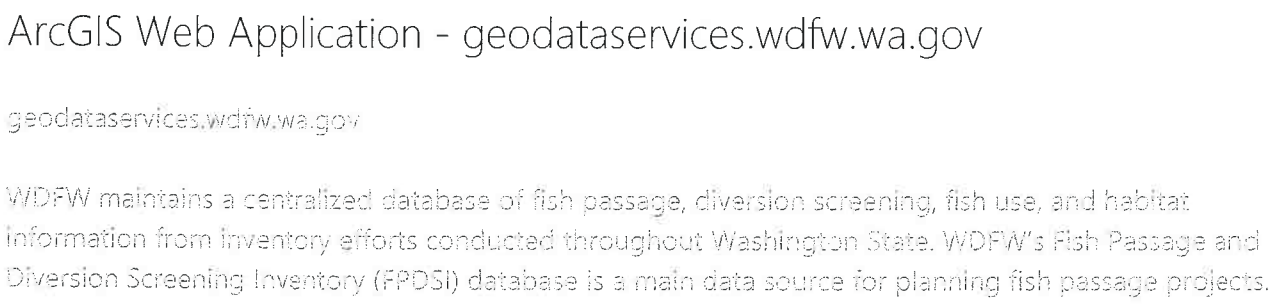
Currently, there is nothing in the City's code to require that watercourses be classified using current information and field data like there is for wetlands. The City should amend the code to require that all available information be used along with field data to verify watercourse classification. This is an important

issue, particularly for streams that have artificial barriers on them as they will likely be considered non-fishbearing due to a lack of fish presence. Instead they should be evaluated for fish habitat potential using the WAC 222-16-031 (which is cited in the code already but not as an explicit method).

We saw this incorrect classification for the various tributaries to Gilliam Creek that drain through the south side of SR 518 and Klickitat Drive back in 2007 when we did the correct assessment and showed that most of the streams in the project area met the physical criteria from WAC 222-16-031 for Type F waters but were blocked in part by barriers culverts on SR 518. We provide this information to the City of Tukwila in the course of that project. If another copy is needed, please let me know.

The City also needs to have regular updates to its critical areas maps for watercourses to include more recent field data and after barrier culverts are removed, like those on SR 518 and I-405 should be per the Federal Court injunction requirements under U.S. v Washington.

The City should be aware that WDFW is updating the State barrier data frequently and their map should be consulted as part of critical areas reports as WDFW will have already assessed upstream areas on particular streams to determine if physical criteria under WAC 222-16-031 for presumed fish habitat is met. The interactive map can be found at https://geodataservices.wdfw.wa.gov/hp/fishpassage/index.html



Please note that some of the data on this map is not shown on the PHS or Salmonscape maps so it is another tool that should be consulted regarding barriers, stream hydrography, and potential fish habitat.

2. Buffer considerations

The need to increase buffers on watercourses should include those necessary to improve water temperatures as described under any state/federal water quality improvement plans such as Total Maximum Daily Load (TMDL) plans.

3.In-Lieu mitigation considerations

The City should allow in limited cases the opportunity for applicants to pay into an In Lieu fund to ensure that projects are fully mitigated for additional piping or culvert work and for those instances when an applicant is daylighting stream sections but cannot provide fully regulatory compliant stream buffers. An option to pay into an In Lieu should help ensure that there is no net loss of important stream functions such as shading and future wood recruitment that might otherwise be lost if no mitigation is required.

We appreciate the opportunity to review these code amendments. If you have any questions, please let me know.

Thank you!
Karen Walter
Watersheds and Land Use Team Leader

Muckleshoot Indian Tribe Fisheries Division
Habitat Program
39015-A 172nd Ave SE
Auburn, WA 98092
253-876-3116

Comments to City of Tukwila Critical Area code update

Submitted at Public Meeting on April 11, 2019, City of Tukwila

by Ion Manea, owner of 13407 48th Av S, Tukwila, WA., 98168 property

Re: Critical Areas

The proposed TMC 18.45.100 E replace "sensitive area" with "critical area".
However there is no definition of "critical area" in the TMC.
Please update definition accordingly.

Re: Critical Area Map TMC 18.45.30 G. 1.

The current TMC 18.45.30 G. 4 states:

" Regardless of whether a sensitive area is shown on the sensitive areas map, the actual presence or absence of the features defined in the code as sensitive areas shall govern. The Director may require the applicant to submit technical information to indicate whether sensitive areas actually exist on or adjacent to the applicant's site, based on the definitions of sensitive areas in this code."

The proposed code change eliminates TMC 18.45. G. 1. provision and the following is inserted in TMC 18.45.30. G 1:
"Not all critical area are shown on the map, it is the applicant responsibility to verify actual presence or absence of critical area or critical area buffer based on the definition of this code."
There is no mechanism to require correct errors or make updates if circumstances change.
Please include a provision that if the actual presence or absence of critical area is verified, that finding shall govern and shall be incorporated in all revisions, updates and reprinting of sensitive areas maps, inventories, ratings and buffers.

Re: Watercourse buffers TMC 18.45.100 E

Pursuant to RCW 36.70A.172 in designating and protecting critical areas counties and cities shall include the best available science (BAS) in developing policies and development regulations to protect the functions and values of critical areas.
An update to TMC 18.45 is proposed based on planning department work augmented by public inputs.

Substantial assistance was provided by BAS review and gap analysis report (Report) prepared by The Water Shed Company (Consultant).
Although the BAS presented in the report or its references are not specific on watercourse buffer reductions, the Consultant is recommending:
….reductions of up to 25 percent with enhancement are likely to provide adequate protection for most small stream channels…
and
, for consistency with the wetland regulations, the City may consider utilizing buffer averaging only

EXHIBIT 4 DATE 4/11/19
PROJECT NAME Critical Areas Code Update
FILE NO L18-0056

Current TMC 18.45.100.E currently allows buffer reduction by up to 50% with buffer enhancement .

The proposed TMC 18.45 buffer reduction requires narrowest buffer width no less than 75% of standard buffer, same total area as required buffer and additional regulatory and financial burdens (reports, sequencing, vegetation management, financial guarantees).

The proposed TMC 18.45 update introduce an "interrupted buffer waiver" that allows existing nonconforming structures to be remodeled, reconstructed or replaced with buffer enhancement, by limited expansion vertically or laterally or by enclosing existing footprint providing that it is outside of the 75% of the existing buffer.

The current TMC 18.45 will allow a property owner to apply for a buffer reduction permit to develop 50% of the existing buffer without financial burden unnecessary additional regulatory compliance and financial hardship and no size limitations.

The Ecology regulatory watercourse buffer framework has been developed to for large acreage on forested and non urban areas where a 100ft buffer has no practical impact for the use of the property.

By the contrary, in a highly urbanized area like Tukwila, the parcels are of small size, and some buffers extend over the whole property. Under the current code, watercourse buffer reduction permit and setback variants and waivers may allow use of 50% of the property with and requires enhancement of wildlife habitat. Under the proposed 75% width and total area conditions the development is impossible and for all practical purposes that will be a property confiscation without compensation and no further enhancement for wildlife of human habitat. **This will be contrary to the purpose of TMC 18.45 including balance of the rights of individual property owners with the preservation of the environmentally critical areas**.

The proposed reduction watercourse buffers of up to 25% and preservation of the total buffer area without including best available science and just for consistency with wetland regulations could be construed as in non compliance with TMC 18.45.10, TMC 18.45.20 and RCW 36.70A.172 and could be the subject of a petition with under RCW 36.70A.290.

It will be more fair and constructive and in concordance with the purpose of the TMC 18.45 to maintain the 50% reduction rule as is now and no further requirements on minimum widths or total buffer area.

Re: TMC 18.45.110 B 2. Alterations

"Any watercourse alteration shall not cause adverse impact to fish, confine the channel or flood plain, or adversely affect riparian habitat (including downstream habitat)
However, allowed alterations like crossing and culverts will confine the channel or flood plain.
It will be more appropriate to remove "confine the channel or flood plain" text.

Re: TMC 18.45.110. C d

" Stream channel bed and biofiltration system equivalent to (in the case of public drainage maintenance projects) and better than (in case of other kinds of projects) in the original stream"
It implies a double standard for public drainage vs. other kinds of projects.
It will be more appropriate to replace *" .. system equivalent to ... and better than.."* with *"... system equivalent to the original stream"*

Re: TMC 18.45.180 4. f

There is a new requirement stating that:
"All unavoidable impacts are fully mitigated"

The statement is confusing. The whole purpose of reasonable use exception is to address expressly the exceptional situation in which mitigation alternatives have been exhausted. Requiring full mitigation of impacts will practically exclude the use of reasonable use exception permitting alternative.
It will be more appropriate to exclude this provision.

Re: TMC 18.45.195 D 4.

There is no justification of establishing a minimum penalty of $ 1,000 per tree regardless of the tree size and marketable value of each tree.

It will be more appropriate that penalty to be "up to the marketable value of the tree" established by a certified professional.

Ion Manea

Date: 04.11.2019

Property owner, 13407 4th Av S, Tukwila, WA., 98168

WATER RESOURCE INVENTORY AREA 9 (WRIA 9) WATERSHED ECOSYSTEM FORUM

GREEN / DUWAMISH AND CENTRAL PUGET SOUND WATERSHED

Algona
Auburn
Black Diamond
Burien
Covington
Des Moines
Enumclaw
Federal Way
Kent
King County
Maple Valley
Normandy Park
Renton
SeaTac
Seattle
Tacoma
Tukwila

King Conservation District

King County Flood Control District

Vashon/Maury Island Community Council

Covington Water District

Port of Seattle

Washington Department of Ecology

Washington Department of Fish and Wildlife

Washington Department of Natural Resources

U.S. Army Corps of Engineers

Green-Duwamish Urban Waters Partnership

Washington Environmental Council

Green/Duwamish Watershed Alliance

Trout Unlimited/ Mid-Sound Fisheries Enhancement Group

Save Habitat and Diversity of Wetlands (SHADOW)

American Rivers

The Boeing Company

Master Builders Association

King County Agricultural Commission

April 11, 2019

SMP Periodic Update
Department of Community Development
6300 Southcenter Bl. Suite 100
Tukwila, WA 98188

Re: City of Tukwila Shoreline Management and Critical Areas Ordinance 2019 updates – Comments from WRIA 9

Dear City of Tukwila,

Below are WRIA 9 staff comments on the City of Tukwila's 2019 Shoreline Management (Tukwila Municipal Code 18.44) and Critical Areas Ordinance (Tukwila Municipal Code 18.45) updates.

GENERAL COMMENTS:

- We are encouraged to see various incentives being used to increase the likelihood that shoreline restoration activities will occur.

- The Green/Duwamish River is a Shoreline of Statewide Significance. Jurisdictions along the river are obligated to manage this shoreline with consideration to the interests of their residents and *all* citizens of the state. We encourage the City to approach any suggested changes to this update with this responsibility in mind.

- We commend the City for specifically referencing the 2005 WRIA 9 Salmon Habitat Plan that Tukwila ratified. The 2014 Duwamish Blueprint and the 2005 Salmon Habitat Plan are policy and programmatic guides for shoreline management in the city and should be used to guide shoreline restoration, protection, land use, and regulations. WRIA 9 is currently updating the Plan to reflect new science, programmatic and policy changes, and capture completed and new high priority capital projects within the watershed. The updated plan is expected to be adopted in 2020 by the Watershed Ecosystem Forum, followed by ratification by all the cities which are party to the WRIA 9 Interlocal Agreement. We recommend including language that accommodates addendums and updates to the plan (e.g., Duwamish Blueprint), and any projects therein. WRIA 9 staff would be happy to assist in crafting appropriate language to include in this update.

SECTION SPECIFIC COMMENTS:

- **Section 18.44.060** there is language about thinning restoration plantings under "4. Restoration Project Plantings". We recommend adding language about the purpose of thinning for these densely planted restoration sites. The purpose should be to improve plant survival and health if dense planting is causing negative implications from competition.

EXHIBIT 5 DATE 4/11/19
PROJECT NAME Critical Areas Code Update
FILE NO 18-0056

Financial support provided by signers of Watershed Planning Interlocal Agreement for WRIA 9 including:
Algona, Auburn, Black Diamond, Burien, Covington, Des Moines, Enumclaw, Federal Way, Kent, King County,
Maple Valley, Normandy Park, Renton, SeaTac, Seattle, Tacoma, Tukwila

- We strongly support the new language in **18.44.110 section H** for time limits for revisions to shoreline permits. Shoreline permits should not be treated as existing in perpetuity, and reasonable time limits like those being proposed should be instituted.

- **Section 18.44.040** for shoreline buffers allows the director to reduce buffer widths by 50% in some cases. Given Tukwila's urban landscape, the existing required buffers are already below what is generally called for by existing Best Available Science for fully functioning riparian buffers. Reducing the buffer by 50% is not founded in Best Available Science. It appears this allowance is no longer allowed under the CAO, which covers smaller waterbodies, but has been retained in the SMP language. Given that this language would mostly apply to a Shoreline of Statewide Significance, we encourage the City to apply the same standards as it uses for its CAO language instead.

- **Section 18.44.080 C** describes a regional trail standard that is relatively wide. The regional trail noted is entirely appropriate for that setting, but given the number of trails that occur along streams and rivers and in natural areas, we encourage the City to consider adding two to three smaller width trail standards to address different circumstances. At the lower end of trail widths, we encourage the City to consider a minimal width trail for natural areas. We note that King County Parks uses a backcountry trail standard in natural areas that accommodates single file foot traffic. This type of standard has a minimal footprint and is one of the most appropriate approaches for minimizing impacts to critical areas and shoreline environments while still encouraging access. Depending on the City's park classification, it may be appropriate to consider another standard that falls between the regional standard and the backcountry standard.

- **Section 18.44.030**, permitted uses matrix has new language around overwater structures. Given the known ecological impacts associated with various forms of overwater structures, we strongly encourage the City to consider using a higher bar for that type of infrastructure and suggest changing "Piers, Docks, and other overwater structures" and "Vehicle bridges (private)" from a permitted use to the more rigorous conditional use category. The City should also include provisions that address removal of overwater structures that may be necessary for habitat restoration. The same section changed recreation facilities, including boat launches, from a conditional use to a permitted use. Given the impacts to a Shoreline of State Wide Significance, we strongly encourage the city keep the current conditional use designation and not change it to a permitted use.

- WRIA 9 has been involved in several salmon habitat restoration projects in the lower Green and Duwamish Rivers of the City. As our partners acquire land for salmon habitat restoration or for mitigation, citizens frequently express the desire to incorporate boat launch facilities into habitat projects. Grant funding for restoration projects does not allow for this type of use. If these recreation facilities are fundable, accommodating them in habitat restoration project design reduces the potential area and value of restoration. We strongly encourage the City to consider undertaking a comprehensive inventory of public access points within its shoreline jurisdiction and establish standards for appropriate levels of access, especially for more ecologically impactful types of access like boat ramps. We encourage the city to consider adding a policy statement in **Section 10** of the SMP supporting this analysis be done between now and the next periodic update. This type of information would temper partners' expectations and help create transparency with the public.

Thank you for the opportunity to comment. Please direct any questions about these comments to me. My contact information is below.

Sincerely,

Suzanna Smith

Suzanna Smith
Habitat Projects Coordinator
Green/Duwamish & Central Puget Sound Watershed (WRIA 9)
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855
susmith@kingcounty.gov
Office: (206) 477-4641, Cell: (206) 305-1752

City of Tukwila Shoreline Management and Critical Areas Ordinance 2019 updates – comments from King County Noxious Weed Program 4/11/19

What follows are the King County Noxious Weed Control Program's comments on the City of Tukwila's 2019 Shoreline Management (Tukwila Municipal Code 18.44) and Critical Areas Ordinance (Tukwila Municipal Code 18.45) updates. Our notes are in "Comments" to the right of the pertinent text. Questions about these comments should be sent to:

Ben Peterson
Aquatic Noxious Weed Specialist
King County Noxious Weed Control Program
(206) 477-4724
ben.peterson@kingcounty.gov
www.kingcounty.gov/weeds

18.44.080060 Vegetation Protection and Landscaping
A. **Purpose, Objectives and Applicability.** (Page 27)

5. Minor Activities Allowed without a Permit or Exemption.

a. The following activities are allowed without a permit or exemption:

(1) Maintenance of existing, lawfully established areas of crop vegetation, landscaping (including paths and trails) or gardens within a regulated critical area or its buffer. Examples include, mowing lawns, weeding, harvesting and replanting of garden crops, pruning, and planting of non-invasive ornamental vegetation or indigenous native species to maintain the general condition and extent of such areas. Cutting down trees and shrubs within a buffer is not covered under this provision. Excavation, filling, and construction of new landscaping features, such as concrete work, berms and walls, are not covered in this provision and are subject to review;

(2) Noxious weed control within vegetative buffers, if work is selective only for noxious species; is done by hand removal/spraying of individual plants; spraying is conducted by a licensed applicator; and no area-wide vegetation removal or grubbing is conducted. Control methods not meeting these criteria may still apply for a restoration exemption, or other authorization as applicable.

Commented [PB1]: This is nicely worded. You may want to add that the "licensed herbicide applicator" needs to have the required aquatic herbicide permits from WA Ecology if the application occurs in a an aquatic site.

D. Vegetation Management in the Shoreline Jurisdiction. The requirements of this section apply to all existing and new development within the shoreline jurisdiction. (Page 33)

3. Use of pesticides.

a. Pesticides (including herbicides, insecticides, and fungicides) shall not be used in the shoreline jurisdiction except where:

(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;

EXHIBIT 6 DATE 4/11/19
PROJECT NAME Critical Areas Code Update
FILE NO LU8-0056

(2) The use of pesticides has been approved through a comprehensive vegetation or pest management and monitoring plan;
(3) The pesticide is applied in accordance with state regulations;
(4) The proposed herbicide is approved for aquatic use by the U.S. Environmental Protection Agency; and
(5) The use of pesticides in the shoreline jurisdiction is approved in writing 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.

Commented [PB2]: "...or a King County Noxious Weed Control Program Best Management Practices document"

Commented [PB3]: Since herbicide use in shoreline and aquatic areas is already carefully regulated by the WA Dept. of Ecology and the WA Dept. of Agriculture, we feel that it is redundant and unnecessary to require additional approval from the City of Tukwila for use of this weed control method.

18.45.70 Sensitive Area Critical Area Permitted Uses Activities

A. General Uses Activities. The uses set forth in this entire section, including subsections A. through D, and the following general uses, may be located within a sensitive area or buffer, activities are outright permitted generally exempt from TMC Chapter 18.45. These activities are still subject to the provisions of TMC Chapter 21.04 and of the mitigation requirements of TMC Chapter 18.45this chapter, if applicable:

6. Voluntary native revegetation and/or removal of invasive species that does not include use of heavy equipment or herbicide. (Page 18-141)

Commented [PB4]: Often the use of herbicide by a licensed contractor (with permits as needed from the WA Dept. of Ecology and the WA Dept. of Agriculture) is the least disruptive method that can be used in critical areas (such as steep slopes, shoreline areas and wildlife habitats. Herbicide application is quiet, does not disturb the soil (which could cause erosion and expose more weed seeds to growth), and can be targeted at specific plants.

18.45.158 Vegetation Protection and Management in Critical Areas and their buffers

B. Vegetation Retention and Replacement.

3. Invasive vegetation (blackberry, ivy, laurel, etc.) may be removed without a permit if removal does not utilize heavy equipment or herbicide. Invasive vegetation removal on steep slopes requires prior City Approval (Page 18-161)

Commented [PB5]: Often the use of herbicide by a licensed contractor (with permits as needed from the WA Dept. of Ecology and the WA Dept. of Agriculture) is the least disruptive method that can be used in critical areas (such as steep slopes, shoreline areas and wildlife habitats. Herbicide application is quiet, does not disturb the soil (which could cause erosion and expose more weed seeds to growth), and can be targeted at specific plants.

D. Plant Materials Standards- For any new development, redevelopment or restoration in a Critical Area, invasive vegetation must be removed, and native vegetation planted and maintained in the Critical Area and its buffer.

3. Removal of invasive species shall be done by hand or with hand-held power tools. Where not feasible and mechanized equipment is needed, the applicant must obtain permission and permit prior to work being conducted. Removal of invasive vegetation must be conducted so that the slope stability, if applicable, will be maintained. A plan 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.

Commented [PB6]: Often the use of herbicide by a licensed contractor (with permits as needed from the WA Dept. of Ecology and the WA Dept. of Agriculture) is the least disruptive method that can be used in critical areas (such as steep slopes, shoreline areas and wildlife habitats. Herbicide application is quiet, does not disturb the soil (which could cause erosion and expose more weed seeds to growth), and can be targeted at specific plants.

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

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 shoreline ecological function. 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.

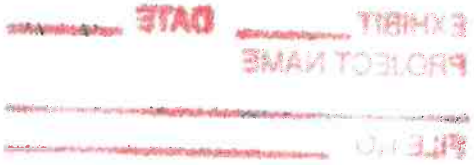
2. Plant debris from removal of invasive plants or pruning shall be removed from the site and disposed of properly unless on site storage is approved by the Director.

Commented [PB7]: Per King County Noxious Weed Control Program guidelines, Regulated Noxious Weeds need to be disposed of in the landfill/trash and non-regulated noxious weeds can be disposed of in green waste or composted on site.

3. Use of pesticides.

a. Pesticides (including herbicides, insecticides, and fungicides) shall not be used in the critical area or its buffer except where:

(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;



(2) The use of pesticides has been approved through a comprehensive vegetation or pest management and monitoring plan;
(3) The pesticide is applied in accordance with state regulations;
(4) The proposed herbicide is approved for aquatic use by the U.S. Environmental Protection Agency; and
(5) The use of pesticides in the shoreline jurisdiction is approved in writing 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. (Page 18-164)

Commented [PB8]: "...or a King County Noxious Weed Control Program Best Management Practices document"

Commented [PB9]: Since herbicide use in shoreline and aquatic areas is already carefully regulated by the WA Dept. of Ecology and the WA Dept. of Agriculture, we feel that it is redundant and unnecessary to require additional approval from the City of Tukwila for use of this weed control method.

Reply | Delete Junk | ...

Vesting and the CAO/SMP updates

NR Nancy Rogers <NRogers@Cairncross.com> Reply |
Fri 4/12, 12:42 PM
Minnie Dhaliwal; Nora Gierloff

Inbox

You forwarded this message on 4/12/2019 1:30 PM

Action Items

Hi Minnie and Nora –

I ask that you add this comment to the CAO/SMP updates.

You have my letter dated April 10, 2019 regarding potential revisions to vesting language for the CAO issues. During last night's hearing on the CAO, Minnie explained that the vesting language in the CAO was not linked to any shoreline permits. If that is true, and in light of State law that gives a Shoreline permit a 5 year term, subject to possible extension, I recommend that the City add a vesting provision to the Shoreline regulations. The provision to add to the Shoreline regulations would assure that in the situation where a project is staged or phased into first land development, followed by a building permit (or permits), those later building permits are vested to the version of the shoreline regulations that were in effect when the land development permits were applied for.

Let me know if you have questions.

Thanks,
Nancy

CH& | **Nancy Bainbridge Rogers**
Attorney
Cairncross & Hempelmann
524 Second Avenue | Suite 500 | Seattle, WA 98104-2323
d: 206-254-4417 | f: 206-587-2308
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EXHIBIT 7 DATE 4/11/19
PROJECT NAME Critical Areas Code Updates
FILE NO LUS-0056

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Matrix of Proposed 18.45 Edits					
Row Number	**Section**	**Requested Change**	**Comment Summary/Staff Discussion**	**Source**	**Staff Recommendation**
1	18.45.110	Retain the following subsection of 18.45.110: On properties 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), shall be upgraded to meet the standards in the WDFW manual "Design of Road Culverts for Fish Passage" (2003 or as updated) if technically feasible.	Don Scanlon requested to retain this section and address when and where streams should be opened up or improved.Additionally, Tukwila's Public Works staff recommended retaining this section.This section has been reinstated and the entire TMC 18.45.110 Watercourse Alterations sections has been rewritten to clarify criteria for approving culvert replacement, day-lighting, and piping/dreding/diverting/rerouting. The referenced 2003 manual is now referenced 2013 manual.	Exhibit 1	Make the requested change and amend the entire watercourse alteration section to clarify different types of alterations and criteria of approval for each. See entire TMC 18.45.110 for all the proposed changes. This section is highlighted in the underline/strikeout version included as Attachment E.
2	18.45.160	Add a subsection to TMC 18.45.160, Critical Area Master Plan Overlay, to read: " The boundaries of critical areas and associated buffers, which critical areas were created or enhanced pursuant to an approved Critical Area Master Plan or Sensitive Area Master Plan are not subject to expansion due to the later adoption of increased buffer widths into this Critical Areas Ordinance, the Shoreline Overlay regulations or any updates thereto."	Nancy Rogers, representing Segale Properties requested amendments to the Critical Areas Master Plan Overlay Section. The proposed new language would vest any future development for perpetuity. Staff is still researching the topic of vesting as it relates to Critical Area Master Plan Overlay and will come back to the Planning Commission with a recommendation at the next meeting.Additionally, TMC 18.45 only addresses Critical Areas. TMC 18.44 SMP addressed comments related to vesting to Shoreline regulations.	Exhibit 2	Deferred to the next Planning Commission meeting.
3	18.45.190.C	Amend the proposed Vesting Section: Projects are vested to the critical area ordinance in effect at the time a complete building permit is submitted except for short plats, subdivisions, binding site plans and shoreline permits. Short plats or subdivisions or binding site plans are vested to the critical area ordinance in effect at the time complete application is submitted for preliminary plats or for the binding site plan. The final plat, final site plan, and all future building permits on the lots remain vested to that same critical areas ordinance in effect for the preliminary plat or preliminary binding site plan application, so long as building permits are applied for within five years of the final plat or site plan approval. For short plats and subdivisions which received preliminary plat approval prior to the adoption of this ordinance, building permits on the lots shall be considered under the critical areas ordinance in effect on the date of the preliminary plat ~~approval~~ application provided complete building or construction permits are submitted within ~~one~~ five years of the final plat approval. Vesting provisions for shoreline permits are provided in TMC 18.44	Nancy Rogers, representing Segale Properties requested amendments to the vesting section to add clarity; include adding binding site plan to the list of short plat and subdivision; and increase the time frame from one year to five years to apply for buiding permits from the time of final plat/short plat/binding site approval. Staff agrees with the proposed revisions, except that Tukwila does not have site plan approval process (shown in green).	Exhibit 2	Make changes noted in red but not in green font

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4	18.45.100 and 18.45.030	**18.45.100. 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… **18.45.030. E.** CRITICAL AREAS MAPS AND INVENTORIES 1. The distribution of many critical areas and potential critical areas in Tukwila is displayed on the Critical Areas Maps, on file with the Department of Community Development (DCD). These maps are based on 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. Thus, it is the responsibility of property owners and applicants to verify 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 wetland based on methodology required under TMC 18.45.80 and verifying that watercourse typing and location is consistent with TMC 18.45.100.	Karen Walter, representing Muckelshoot Indian Tribe requested a section be added that requires watercourses be classified using current information and field data similar to wetlands. Currently streams that have artificial barriers on them are considered non-fishbearing due to lack of fish presence. Instead they should be evaluated for fish habitat potential using the WAC 222-16-031. Also, requested regular updates to the city's critical areas maps for watercourses to include more recent field data and after barrier culverts are removed. She also noted that Washington Department of Fish and Wildlife (WDFW) is updating the State barrier data frequently and their map should be consulted. Staff notes that the proposed changes to TMC 18.45.100. (A) reference WAC 222-16-030. Additionally, TMC 18.45.030 could be amended to require applicants to use WAC 22-16-030 for watercourse typing and location as part of their proposal. Additionally, staff appreciates Karen's guidance on using WDFW data for updates to the city's critical area maps. Staff will explore options to update the watercourse inventory maps congruent with the City's Surface Water Comprehensive Plan update and look for opportunities during review of development projects to add updated information to the inventory maps.	Exhibit 3	Make changes noted in red
5	18.45.100.E.1.g	TMC 18.45.100.E. VARIATION OF STANDARD WATERCOURSE BUFFER WIDTH – 1 Buffer averaging may be allowed by the Director as a Type 2 decision 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 ¾ of the required width; 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. 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. d. Compliance with TMC 18.45 Vegetation Protection and Management section. e. Submittal of buffer enhancement plan, mitigation monitoring and maintenance plan along with financial guarantee in accordance with TMC 18.45. f. Buffer averaging will not adversely affect water quality. g. No adverse affect to water temperature or shade potential will occur to watercourses using methodology per 2011 Washington State Department of Ecology's Green River Temperature Total Maximum Daily Load (TMDL) assessment or as amended.	Karen Walter, Muckleshoot Indian Tribe noted that the need to increase buffers on watercourses should include those necessary to improve water temperatures as described under any state/federal water quality improvement plans such as Toral Maximum Daily Load (TMDL) plans. Staff has added a reference to TMDL for buffer averaging.	Exhibit 3	Makes changes noted in red.

Row Number	Section	Requested Change	Comment Summary/Staff Discussion	Source	Staff Recommendation
6	18.45.110.C.1).f	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 to ensure that projects are fully mitigated.	Karen Walter, representing Muckleshoot Indian Tribe requested that in limited cases the city should allow the applicants to pay into aN in-lieu fund to ensure that projects are fully mitigated for additional piping or culvert work and for those instances when an applicant is daylighting stream sections but cannot provide fully regulatory compliant stream buffers. This should help ensure that there is no net loss of important stream functions such as shading and future wood recruitment that might otherwise be lost if no mitigation is required. Staff is proposing language be added to Watercourse Mitigation Standards section to include option for in-lieu fund.	Exhibit 3	Make changes noted in red
7	18.45.30.E.3	As new environmental information related to critical areas becomes available, the Director is hereby designated to periodically add, remove,or alter add new information to the Critical Areas Maps. Removal of any information from the critical area maps is a Type 1 decision.	Ion Manea, property owner expressed concern that there is no mechanism to require corrections to errors or updates if circumstances change. He requested a provision be added that if the actual presence or absence of critical area is verified, that finding shall govern and shall be incorporated in all revisions, updates and reprinting of sensitive areas maps, inventories, ratings and buffers. Staff notes that there is language under TMC 18.45.30.G.3 that addresses concerns raised by Mr. Manea.	Exhibit 4	Make changes noted in red to add clarity.
8	18.45.100E	VARIATION OF STANDARD WATERCOURSE BUFFER WIDTH 1 Buffer averaging may be allowed by the Director as a Type 2 decision 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 ¾ of the required width; 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. 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 functions and values as demonstrated by a critical areas report. c. Compliance with mitigation sequencing requirements. d. Compliance with TMC 18.45 Vegetation Protection and Management section. e.Submittal of buffer enhancement plan, mitigation monitoring and maintenance plan along with financial guarantee in accordance with TMC 18.45. f. Buffer averaging will not adversely affect water quality. g. No adverse effect to water temperature or shade potential will occur to watercourse using methodology per 2011 Washington State Department of Ecology's Green River Temperature Total Maximum Daily Load (TMDL) assessment or as amended.	Ion Manea, property owner requested the city to keep 50% buffer reduction provisions as the proposed provisions of 25% reduction with buffer averaging is not based on best available science, and is being proposed just for consistency with wetland regulations. He claims that the proposed regulations could be construed as in non-complicnace with TMC 18.45.10, 18.45.20 and RCW 36.70a.172 and could be subject of a petition under RCW.36.70A.290. Staff notes that 2011 Washington State Department of Ecology's Green River Temperature Total Maximum Daily Load (TMDL) assessment is Best Available Science that justifies larger buffers and need for shading the streams to address the concern of raising temperature of the Green/Duwamish River, which is detrimental to fish. Additionally, Washington State Department of Ecology's guidance for the streams that lie within Shoreline Zone is for buffer averaging rather than buffer reduction.	Exhibit 4	No change

Row Number	Section	Requested Change	Comment Summary/Staff Discussion	Source	Staff Recommendation
9	18.45.110B.2	3.Piping, dredging, diverting or rerouting of any watercourse should be avoided. Relocation of a watercourse or installation of a bridge is preferred to piping. If piping occurs in a watercourse critical area, it shall be limited to the degree necessary for stream crossings for access and may only occur with the permission of the Director as a Type 2 decision and subject to mitigation sequencing; approved mitigation plan; and the following criteria: a)Any watercourse alteration shall comply with the standards in current use and the standards of the Washington Department of Fish and Wildlife in the "Water Crossing Design Guidelines" manual (2013 or as amended). b)Any watercourse alteration shall not cause adverse impacts to fish, confine the channel or floodplain, or adversely affect riparian habitat (including downstream habitat). c) thru j)	Ion Manea requested to remove "confine the channel or flood plain" as allowed alterations like crossing and culverts will confine the channel or flood plain. Staff notes that any new crossing and culverts are required to meet WDFW's Water Crossing Design Guidelines so while some crossings and culverts are allowed they still need to be designed so that they do not confine the channel or flood plain.	Exhibit 4	No change
10	18.45.110.C.d	d. Stream channel bed and biofiltration systems equivalent to or ~~(in the case of public drainage maitenance projects) and~~ better than in the original stream ~~(in the case of other kinds of projects~~);	Ion Manea requested to replace "system equivalent to … and better than…" with "system equivalent to the original stream"	Exhibit 4	Make changes noted in red
11	18.45.180.4.f	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. (g. thru i.)	Ion Manea requested to not include the provision " All unavoidable impacts are fully mitigated" as requiring full mitigation of impacts will exclude the use of reasonable use exception permitting alternative. Staff notes that mitigation of impacts is required, there are options for offsite mitigation or in-lieu fee programs. Additionally, the reasonable use process will take into account the scale of the project proposed and the extent of mitigation required will need to meet nexus and proportionality test.	Exhibit 4	No change.
12	18.45.195.D.3.b.	b. The amount of the penalty shall be $1,000 per tree or up to the marketable value of each tree removed or damaged as determined by an ISA certified arborist. 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.	Ion Manea requested that instead of a minimum penalty of $1000 per tree regardless of the tree size and marketable value of each tree, the penalty should be "up to the markeable value of the tree established by a certified professional." Staff notes that the existing proposed language address this concerns as it states, "$1000 per tree or up to the marketable value of each tree as determined by an ISA certified arborist".	Exhibit 4	No change as existing language addresses this concern.
13	18.45.90.D.d	Wetland and Buffer Mitigation Location: 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 or as amended, for potential offsite mitigation locations.	WRIA 9 submitted comments on Shoreline and Critical Areas Code update. Majority of the comments were related to Shoreline code update. One recommendation that was related to Critical Areas Code was to reference 2005 WRIA 9 Salmon Habitat Plan inlcuding language that accomodates addendums and updates to the Plan. The City's Public Works staff also recommended that WRIA 9 Salmon Habitat Plan should be referenced for selection of offsite mitigation locations.	Exhibit 5	Make changes noted in red.

Row Number	Section	Requested Change	Comment Summary/Staff Discussion	Source	Staff Recommendation
14	18.45.70.A.6.	Outright Permitted Activities in Critical Area or its buffer 6. Voluntary native revegetation and/or removal of invasive species that does not include use of heavy equipment ~~or herbicide~~. The use of herbicide by a licensed contractor with certification as needed from the WA Dept. of Ecology and the WA Dept. of Agriculture is permitted but requires notification prior to application to the city and shall comply with TMC 18.45.158.E.3	Ben Peterson, King County Noxious Weed Control Program submitted comments stating that the use of herbicide by a licensed contractor (with certification as needed from the WA Dept. of Ecology and the WA Dept. of Agriculture) is often the least disruptive method that can be used in critical areas (such as steep slopes, shoreline areas and wildlife habitats). Herbicide application is quiet, does not disturb the soil (which could cause erosion and expose more weed seeds to growth), and can be targeted at specific plants. Planning Commission also requested herbicide issues be addressed. Staff has proposed revised language to address comments.	Exhibit 6, Planning Commission	Make changes noted in red
15	18.45.158.B.3	B. Vegetation Retention and Replacement 3. Invasive vegetation (blackberry, ivy, laurel, etc.) may be removed from a critical area or its buffer except steep slopes without a permit if removal does not utilize heavy equipment ~~or herbicide~~.The use of herbicide by a licensed contractor with certifications as needed from the WA Dept. of Ecology and the WA Dept. of Agriculture is permitted but requires notification prior to application to the city and shall comply with TMC 18.45.158.E.3. Invasive vegetation removal on steep slopes requires prior City Approval	Same as above	Exhibit 6, Planning Commission	Make changes noted in red
16	18.45.158.D.3	D. Plant Material Standards 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 WA Dept. of Ecology and the WA Dept. of Agriculture is permitted but requires notification prior to application to the city and shall comply with TMC 18.45.158.E.3. Where not feasible and mechanized equipment is needed, the applicant must obtain a Type 2 permit prior to work being conducted. Removal of invasive vegetation must be conducted so that the slope stability, if applicable, will be maintained and native vegetation is protected. A plan 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.	Same as above	Exhibit 6, Planning Commission	Make changes noted in red

Row Number	Section	Requested Change	Comment Summary/Staff Discussion	Source	Staff Recommendation
17	18.45.158.E	E. Vegetation Management in Critical Areas The requirements of this section apply to all existing and new development within critical areas. 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. 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.Plant debris from removal of invasive plants 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 need to be disposed of in the landfill/trash and non-regulated noxious weeds can be disposed of in green waste or composted on site. 3.Use of pesticides. a. Pesticides (including herbicides, insecticides, and fungicides) shall not be used in the critical area or its buffer except where: (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 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 is applied in accordance with state regulations; (4) The proposed herbicide is approved for aquatic use by the U.S. Environmental Protection Agency; and (5) The use of pesticides in the critical area 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. 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.	Ben Peterson, King County Noxious Weed Control Program stated that per KCNWP guidelines, Regulated Noxious Weeds need to be disposed of in the landfill/trash and non-regulated noxious weeds can be disposed of in green waste or composted on site. Staff has proposed language.	Exhibit 6	Make changes noted in red
18			Nancy Rogers representing Segale Properties submitted follow up email to her earlier comments (Exhibit 2) requesting vesting languge to added to Shoreline Code	Exhibit 7	No changes, this item was addressed as part of Shoreline Code update meeting on April 25, 2019
19	18.06.720	"Critical Sensitive areas" means wetlands, watercourses, areas of potential geologic instability (other than Class I areas), abandoned coal mine areas, and fish and wildlife habitat conservation areas, and special hazard flood areas.	Add definition for Critical Areas. Amendments to the definitions section included. See attached.	Planning Commission	Staff recommends changes to Definitions Chapter. See attached (Attachment C)
20	16.52.030(32)	"Special Flood Hazard Area" means the land in the flood plain subject to a 1% or greater chance of flooding in any given year. It is also referred to as the 100-year flood elevation or the base flood elevation. These areas are designated on Flood Insurance Rate Maps (FIRMs) using the letters A or V. Special flood hazard areas include flood-prone areas designated by the City	· 18.45.30 A (6) What is a "Special Hazard Flood Area(s) TMC 16.52.030 defines it. Reference has been added to TMC 16.52.	Planning Commission	No change needed.
21		Areas of seismic instability are defined and regulated through the Washington State Building Code. ~~See maps for designated areas of seismic instability.~~	· 18.45.30 B – references a map for designated areas of seismic instability – where is the map? The reference is removed. All the critical areas maps shall be available online. TMC 18.45.30G addresses location of Critical Area maps	Planning Commission	Make changes noted in red.

Row Number	Section	Requested Change	Comment Summary/Staff Discussion	Source	Staff Recommendation
22	18.45.30G	A. CRITICAL AREAS MAPS AND INVENTORIES 1. The distribution of many critical areas and potential critical areas in Tukwila is displayed on the Critical Areas Maps, on file with the Department of Community Development (DCD). These maps are based on 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. Thus it is the responsibility of property owners and applicants to verify 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 wetland based on methodology required under TMC 18.45.80 and verifying that watercourse typing and location is consistent with TMC 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 to the Critical Areas Maps. Removal of any information from the critical area maps is a Type 1 decision	· 18.45.30 G – this section got reworked and puts all of the onus on the applicant. The struck language was more appropriate ie. "Director may require…" Given the city's inventory maps are not based on actual delineation, the applicant is responsible for submitting reports as part of their development permits.	Planning Commission	No change.
23	18.45.40.B.12	B12 Wetland and Watercourse special studies are valid for five years following the date of the study, unless otherwise determined by the Director.	· 18.45.40 B 12. Studies are valid for 5 years – then what is required and why? The existing code did not have a time limit on how long the studies were valid. Given the site conditions and hydrology can change over time the studies need to be updated after onsite assessment.	Planning Commission	No change
24	18.45.40.D.1	The Director may limit the required geographic area of the critical area study as appropriate if the applicant, with assistance from the City, cannot obtain permission to access properties adjacent to the project area.	· 18.45.40 D 1. The second sentence doesn't read very well about "access permission" This language is to provide wiaver in case access to adjacent property is not available.	Planning Commission	No change
25	18.45.40.E	REVIEW OF STUDIES – The Department of Community Development will review and verify the information submitted in the critical area study to confirm the nature and type of the critical area. Public Works Department shall seek a peer review of the geotechnical report on Class 3 and 4 slopes; 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 at the discretion of the Director, critical area studies may undergo peer review, at the expense of the applicant.	· 18.45.40 E. Can DCD Director Approve? Yes, the Director can approve. Specific language added for geotechnical peer review requirement.	Planning Commission	No change
26	1845.80.B	Wetlands shall be designated in accordance with the Washington State Wetlands Rating System for Western Washington, (Washington State Department of Ecology,2014, Publication # 14-06-029); or as otherwise amended by Ecology as Category I, II, III, or IV ~~as listed below~~	· 18.45.80 B. first paragraph last three words "as listed below" reference the table 18.45.080-1 Comment noted, the phrase "as listed below" removed.	Planning Commission	Make change noted in red.
27	18.45.158.C.8	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. ~~No construction personnel shall prune affected limbs except under the direct supervision of a Qualified Tree Professional.~~	· 18.45.158 C. 8. "No construction personnel shall prune….." eliminate this wording and just say the removal must be done or overseen by a qualified professional. Staff is proposing the change.	Planning Commission	Make change noted in red.
28	18.45.158.D.3	D. Plant Material Standards 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 WA Dept. of Ecology and the WA Dept. of Agriculture is permitted but requires notification prior to application to the city and shall comply with TMC 18.45.158.E.3. Where not feasible and mechanized equipment is needed, the applicant must obtain a Type 2 permit prior to work being conducted. Removal of invasive vegetation must be conducted so that the slope stability, if applicable, will be maintained and native vegetation is protected. A plan 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.	· 18.45.158 D. 3. Remove the word "permission". They must get a permit. Type 2 permit is referenced	Planning Commission	No change needed.

Row Number	Section	Requested Change	Comment Summary/Staff Discussion	Source	Staff Recommendation
29	18.45.158.D.8	8. 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 landscaping chapter TMC 18.52 for plant sizes in required landscape areas.	· 18.45.158 D. 8. It says smaller plant sizes are preferred, should they be required? The planting plan is based on case by case. Smaller plants are preferred but in some cases larger plants may be more pretinent. Therefore it is not a requirement but preference.	Planning Commission	No change needed.
30	18.45.090.C.2.c	Square feet ~~Acreage~~requirements for creation, re- establishment, rehabilitation or enhancement and for proposed wetland classes are met.	Replace the word "acreage" with square feet.	Planning Commission	
31			Various sections of the code were updated for clarity. These sections are highlighted in the attached underline/strikeout version of the code.	City Attorney, Staff	Changes incorporated in the underline/strikeout version and highlighted.
32			Upon further review of the Tree Chapter, Landscape Code, Critical Areas Code and Shoreline Code it is not explicitly stated which section applies when areas overlap. Additionally, it is becoming difficult to implement. We have included a flow chart to help explain the legislative intent and to help determine which section applies. However staff is suggesting adding an applicability section to help clarify which code section applies to residential properties vs non-residential vs undeveloped properties. Staff is also seeking policy direction to see if different sections for the four chapters should be looked at for consistency.	Staff	Seeking policy direction from the Planning Commission. See attached flow chart (Attachment D)

PLANNING COMMISSION (PC) WORK SESSION MINUTES

Date: November 8, 2018
Time: 6:30 PM
Location: Council Chambers

Present: Vice Chair Dennis Martinez; Commissioners Sharon Mann, Louise Strander and Heidi Watters

Absent: Chair Nhan Nguyen, Commissioners Mike Hansen and Miguel Maestas

Staff: Planning Supervisor Minnie Dhaliwal; Urban Environmentalist Andrea Cummins; and Planning Commission Secretary Wynetta Bivens,

Vice-Chair Martinez called for adoption of the minutes.

Commissioner Strander made a motion to approve the October 11, 2018 minutes. Commissioners Mann seconded the motion. All were in favor.

Commissioner Mann made a motion to approve the October 25, 2018 Board of Architectural Review (BAR) and Planning Commission (PC) minutes. Commissioner Watters seconded the motion, motion passed. Commissioner Strander abstained from voting on the PC portion of the minutes.

Vice-Chair Martinez opened the work session on Critical Areas Code Update

Minnie Dhaliwal, Planning Supervisor, Department of Community Development (DCD) introduced Andrea Cummins, Urban Environmentalist. Staff provided background on critical areas and their importance. She went over the terminology and what it means, as well as the policy options. Staff requested the Commission to provide guidance on what they would like included in the strike-through/underline version of the code, which staff will create. Currently the City's environmental chapter is called Sensitive Areas but is being changed to Critical Areas to be consistent with critical areas as defined under the Growth Management Act (GMA). All cities in Washington State are required to have Critical Areas regulations under the GMA. It is a requirement to update the code every eight years based on best available science. Best available science is the most current science available on habitat function and the way species function in the habitats.

An overview was also provided on wetlands, watercourses, geologically hazardous areas, fish and wildlife habitat conservation areas, frequently flooded areas and housekeeping code amendments related to critical areas.

Staff provided policy options and recommendations for the PC to consider on the following items:

A. WETLANDS

Staff explained that a wetland must have all three characteristics in order to be considered as such: the right kind of hydric soils; hydrology; and the plants. Wetlands are important because they help with the water quality, store flood water, recharge the ground water, provide habitat value, function for open space, recreation and aesthetic values.

1. Designation: Staff recommended updating reference to State delineation manual and establishing a five-year time limit on wetland delineations reports.

   Decision: PC in consensus.

2. Rating: Required to use the Department of Ecology (DOE) 2014 publication.
   Decision: PC in consensus.

3. Buffer widths:

   Staff recommended Policy Option 3, from the informational memo dated October 29, 2018, "Adopt the standard buffer widths recommended by Department of Ecology; but allow alternate buffer if impact minimization measures are taken AND buffer is replanted."

   There was extensive discussion regarding the maintenance and the requirement for monitoring reports. Staff was asked to provide the cost for such services, as well as an example of application cost and a mitigation plan. Also, staff offered to provide the Commissioners with a sample monitor report.

   Decision: Staff will return with some revised language for Options 2 and 3 from the informational memo dated October 29, 2018.

   Action item:
   - Staff will provide sample mitigation plan and examples of costs associated with mitigation plans.

4. Interrupted buffer:

   Decision: Staff will return with some revised language adding a waiver for interrupted buffer for the PC to review.

5. Buffer averaging instead of buffer reduction:

   Decision: No change from the Ecology guidance.

6. Alterations:

   Staff recommends Option 1, from the informational memo dated October 29, 2018, "Keep the existing code and exempt wetlands up to 1,000 sq. ft. with mitigation for wetland impacts."

   Decision: The PC were in consensus with Option 3, from the informational memo, dated October 29, 2018, "Exempt wetlands up to 1,000 sq. ft. with mitigation for wetland impacts; exempt wetlands up to 4,000 sq. ft. with mitigation for wetland and buffer impacts."

   Action item:
   - Staff will do some additional research and provide the PC with some data.

7. Mitigation standards:

   Tukwila's code does not currently have any buffer impact standards. Therefore, there are no policy options, however staff is adding mitigation ration of 1:1 to fill the gap.

   Decision: PC in consensus.

8. Wetland and buffer mitigation location:

   This policy addresses providing more options to the applicant, such as allowing for purchase of mitigation credit from an in-lieu fee program or bank, if that is the best choice ecologically for a project.

   Decision: PC in consensus.

B. WATERCOURSES

1. Rating:

   Staff recommends changing the rating nomenclature for stream types, in order to be consistent with the Washington Department of Fish and Wildlife.

   Also, staff recommends Option 3, from the informational memo dated October 29, 2018, "Keep the standard buffer for Type 3 streams to 80 ft. but allow an alternate buffer in the range of 50-65 ft., with buffer enhancement."

   Decision: PC were in consensus, with Option 3.

2. Buffer averaging vs. reduction:

   Staff recommends Option 2, from the informational memo dated October 29, 2018, "Buffer averaging and allow up to 25 percent reduction in the buffer in some areas so that the total area of the buffer remains the same."

   Decision: PC were in consensus with Option 2.

3. Interrupted Buffer:

   Decision: Staff will return with some revised language adding a wavier for interrupted buffer for the PC to review.

C. GEOLOGICALLY HAZARDOUS AREAS

Staff stated that the City's Public Works Department is the lead on reviewing geologically hazardous areas regulations. Commissioner Mann asked if there could be minimum setback standard established that would exempt the project from the requirement of preparing a geotechnical report.

D. FISH AND WILDLIFE HABITAT CONSERVATION AREAS

Cleanup item: Standard recommendation from the DOE will be included for this item.

E. FREQUENTLY FLOODED AREAS

No proposed changes.

F. HOUSEKEEPING CODE AMENDMENTS

Following are several housekeeping items that are not required to be changed and staff did not have any options for the PC to consider. However, staff will include some language for these items in the strike-through/underline document:

1. Vesting
2. Expiration of decisions related to critical areas
3. Permitted uses section
4. Inclusion of tree retention, removal and replacement requirement
5. Reorganization
6. Penalties for unauthorized alterations
7. Non-conforming provisions

   Staff had two options for the PC to consider: no changes to the non-conforming provisions; or establish new non-conforming thresholds for development in the critical area buffers.

   Decision: Commissioner Mann and Watters liked Option 2
8. Sensitive Area Master Plan Provisions

   The existing provisions for sensitive areas master plan (TMC18.45) allow creation of higher quality wetlands in exchange for filling some small wetlands provided there is a net environmental gain. However, there will be no incentive to creating wetlands with better habitat value if it will result in larger buffers. Staff said that they see potential issues but do not have a solution.
9. Inventory update

PUBLIC OUTREACH:

Staff held an open house on October 11th, and 17 individuals attended. Also, information has been posted on the website and staff is working on completing field work related to wetland categorization.

RECOMMENDATION:

Staff will return with a strike-through/underline document for the PC to review and hold a public hearing. The PC will forward their recommendation to the City Council for their review and adoption.

DIRECTOR'S REPORT

- The Justice Center is scheduled for the December 13th agenda.
- Mike Overbeck public hearing is continued.
- On January 10th there will be potentially three items on the agenda.

Submitted by: Wynetta Bivens
Planning Commission Secretary

Adjourned: 9:48 PM

Adopted: 1/10/19

PLANNING COMMISSION WORK SESSION MINUTES

Date: **February 28, 2019**
Time: 6:30 PM
Location: Council Chambers

Present: Chair Dennis Martinez, Vice-Chair Heidi Watters, Commissioners Louise Strander, Karen Simmons and Dixie Stark

Excused Absence: Commissioners Sharon Mann and Mike Hansen

Staff: Planning Supervisor Minnie Dhaliwal, Urban Environmentalist Andrea Cummins and Planning Commission Secretary Wynetta Bivens

Adopt Minutes: Commissioner Strander made a motion to adopt the January 24, 2019 minutes. Commissioner Watters seconded the motion. Motion passed.

Chair Martinez opened the work session on critical areas regulations.

Minnie Dhaliwal, Planning Supervisor and Andrea Cummins, Urban Environmentalist, provided some background information on the critical areas. The state law regulates what is allowed in the critical areas and mandates cities to comply with the Growth Management Act (GMA). Cities must update and adopt critical area regulations every eight years, based on best available science. Staff has reviewed and identified gaps in the City's existing code for the Planning Commissioners (PC) to vet and determine what to change.

> At the November 8, 2018 work session, the PC requested staff return with additional information on four topics. There was discussion and clarification on each of the topics, which are listed in the information memorandum dated February 19, 2019.

Following are some of the issues discussed, as well as the policy decisions made by the PC.

1. Mitigation plans and monitoring costs

   Staff provided some information on the benefits of monitoring and the chances of mitigation success. The City has established a five-year monitoring period. The Department of Ecology and US Army Corps of Engineers also have monitoring requirements for some wetland impacts, which could be up to 10 years. There was a lengthy discussion on this topic. One of the issues raised pertained to a property owner developing their property that is adjacent to property that has a wetland. Staff clarified that if buffers extend on their property, they will need to address potential impacts to the buffers from the proposed development; further, they may need to get access rights to delineate the wetland. It was noted that the buffers are not in

good condition. There was discussion on the mitigation plans, performance standards, monitoring requirements and what happens once the monitoring period ends. There was also discussion regarding the types of projects that require a Federal permit in Tukwila.

Decision: Option 3 - Adopt the standard buffer widths recommended by the Department of Ecology but allow alternative buffer if impact minimization measures are taken AND buffer is replanted.

2. Exempt wetland

Commissioner Stark made inquiry regarding why there is not a buffer mitigation with option 1. Commissioner Strander said in the discussion at the November 8, 2018 work session that option 3 seemed to have more options for the property owner. There was also discussion on wetland mosaic.

Decision: Option 1 - Keep the existing code and exempt wetlands up to 1,000 sq. ft. with mitigation for wetland impacts.

Note: Four of the five Commissioners were in consensus with staff's recommendation. Commissioner Strander was opposed and in favor of option 3.

3. Non-conforming provisions

Part 1 - Vertical Expansion

Decision: Option 1 - Allow existing buildings to expand vertically to add upper stories in exchange for buffer enhancement.

Part 2 - Lateral Expansion

Commissioners Strander and Watters were opposed to limiting it to a one-time expansion allowance and were in consensus with establishing a cap on the overall expansion. Commissioner Stark said option 1 needed some additional language and wanted to know if staff would draft the language. Staff said that they would draft and return with language. The PC were in consensus.

Staff noted the following suggestions made by the consultant:

- Add a provision stating that expansion is only allowed on legally permitted property.
- Expansions should be excluded for detached accessory structures.
- To qualify for expansion along the sides there is a threshold of 50% of the existing intrusion but no more than 500 sq. ft. with the assumption that 75% of the buffer is in place.
- To qualify for expansion along the side opposite to the critical area, the maximum threshold of 500 sq. ft. could be raised to 1,000 sq. ft.

Decision: Option 1 - Allow expansion along the existing building lines in exchange for buffer enhancement but limit it to a one-time expansion and limit the square footage of a new intrusion into the buffer to less than 50%of the current intrusion. Further, this option could be limited to situations where the buffer width is at least 75% of the

required buffer. **Note:** the PC were in consensus to also add the following language, "500 sq. ft. on either side and 1,000 sq. ft. away from the buffer zone."

Part 3 – Enclosing within existing footprint (e.g., enclosing a carport or adding a roof over decks)

Decision: Option 1 - Allow enclosing within existing footprint.

4. Geologically Hazardous Areas

This section of the code is administered by the Public Works Department and their opinion is not to establish one standard setback for all slopes. Instead the setback should be established by the geotechnical engineer after site conditions are determined for each site.

Decision: To be administered case-by-case.

Staff will complete a final strikethrough/underline document, release it for public review and then schedule a PC public hearing on this item in April.

Director's Report:

- Staff reminded the PC to respond to staff's inquiry regarding their availability for a second meeting on April 11th.
- The Shoreline Master Program will be on the March PC agenda.
- Staff informed the PC about Sound Transit's Bus Rapid Transit project that was approved as part of ST3 by the voters and includes frequent bus service from Burien to Lynnwood with a stop along SR518 to connect Tukwila International Boulevard station.

Adjourned: 8:15 PM

Submitted: By Wynetta Bivens
Planning Commission Secretary

Adopted: 3/28/19

PLANNING COMMISSION (PC) MINUTES

Date: April 11, 2019
Time: 6:30 PM
Location: Council Chambers

Present: Vice Chair Heidi Watters; Commissioners Mike Hansen, Louise Strander, Sharon Mann, Karen Simmons and Dixie Stark

Absent: Chair Dennis Martinez

Staff: Department of Community Development (DCD) Planning Supervisor Minnie Dhaliwal, Urban Environmentalist Andrea Cummins; and Shana Markstrom for Planning Commission Secretary Wynetta Bivens

Adopt Minutes: **Commissioner Hansen** requested amendments to the March 28, 2019 minutes, regarding his statement about public access He clarified that his comments related to public access were for access on public property and not private property.

Commissioner Mann made a motion to adopt the March 28, 2019 minutes as amended. Commissioner Simmons seconded the motion. The motion passed with five in favor, Commissioner Stark opposed.

Vice Chair Watters opened the public hearing and swore in those wishing to provide testimony.

CASE NUMBER: L18-0056 Critical Areas Code Update
APPLICANT: The City of Tukwila

Minnie Dhaliwal, Planning Supervisor, DCD, gave the presentation for staff. She provided an overview of the proposed changes to the Critical Areas Code (CAC). She stated since the purpose of the meeting was to hear from the public, she would be brief and quickly go over the process and the proposed changes. She noted that there are two code amendments going on presently. The hearing on the Shoreline Management Plan (SMP) regarding the Green and Duwamish River was held on March 28th; and tonight, is the CAC update. The CAC update includes regulations pertaining to wetlands, streams, steep slopes, abandoned coal mines, and fish and wildlife habitat areas. This specifically involves Tukwila Municipal Code (TMC) 18.45 and 18.70. She stated the reason the code is being updated now is because the City is required to keep up with the State law and the last update was in 2010. She said the update will bring the City's wetland rating system in line with the State's system per the Department of Ecology's (DOE) guidance.

PROPOSED CHANGES:

- Wetland rating and widths are based on habitat score; buffer averaging replaces buffer reduction; interrupted buffer provisions added; fee in lieu provisions added. Also, included is a vegetation retention and tree replacement section.
- Ms. Dhaliwal provided examples to help explain the changes regarding categories, habitat scores and how these impact buffer size. She compared the old methodology to the new methodology and explained that site condition, updated wetland category combined with habitat scores will impact the new buffers. She explained that while some current buffers will decrease others will increase.

- Classification of streams will be consistent with the Washington Department of Fish and Wildlife (WDFW). Buffer averaging will substitute for buffer reduction and interrupted buffer provisions will be added.
- Steep slopes regulations will include when peer review of the geotechnical report is required; tree and vegetation retention on slopes will be required; and reference to mapping sources such as liquefaction and landslide hazards will be added.
- Reference added to Special Hazard Flood Areas TMC Chapter 16.52; and floodplain habitat assessment requirements included.
- Fish and wildlife conservation areas made consistent with Growth Management Act's (GMA) definition. A requirement for habitat assessment has also been added.
- Housekeeping items included amending or adding the following sections: vesting; expiration of decisions related to critical areas; permitted "uses" changed to "activities"; vegetation protection section added; reorganization of mitigation sequencing section; penalties section added; non-conforming provisions amended and an inventory of critical areas update and maintenance section added.

Ms. Dhaliwal briefed the Commissioners on the progress of the project, which was started in October 2018 and there have been two work sessions since then. After the public hearing tonight staff will come back to the PC with a summary of public comments including staff responses. After the PC deliberation and recommendation, this item will go before the City Council. The City Council will then have a public hearing and make the final decision. She entered into the record four comment letters from the public

PUBLIC COMMENTS:

Don Scanlon, resident, said he thinks there is an error in regard to the change in Section 18.45.110 where a section pertaining to upgrade to culverts was taken out, he said it should be put back in. Storm water is different from ditch water and culverts that connect small water bodies to streams. While people are talking about Orca and Salmon conservation these little ditches and streams are where water flow starts. Addressing the culvert issue is important for risk mitigation as there is currently a lawsuit regarding culverts between the State and the Tribes. Eventually this will be handled at the City level and this could hurt us in the future if we aren't prepared.

Nancy Rogers, representing Segale Properties, stated she submitted a comment letter. She stated that the Tukwila South project is vested not only due to the development agreement but because we did a sensitive areas master plan (SAMP), now a critical areas master plan (CAMP). She said there are two areas that could be improved. 1) Add language clarifying that when a developer creates a master plan to enhance wetlands or mitigation areas, they are not penalized later by having a larger buffer imposed on their developable land. 2) Vesting provision in 18.45.190 should be amended to be more flexible.

Commissioner Mann asked a clarifying question about the vesting date. Ms. Rogers stated that she is suggesting that for five years following final plat approval you have the right to build on the plat according to the rules that were in affect at the time of plat approval

Kevin Broderick, architect representing Vietnamese Martyr's Church, said applicants should be vested to the codes under which the application was started.

Todd Smith, resident, said the process is hypocritical. He said the City owns a lot of property they don't take care of, but private people have to take care of their property. He further wanted to know what the "science" was upon which the stated changes were based. How are the buffer distances any different from 10 years ago? Is this update just a staff thing? He said, the City should have to take care of the property they manage just like the residents are required to.

Joseph Ayala, property owner, said the City is forcing fraudulent charges on his property located at 13610 Macadam Rd. He said the City is charging them for drainage onto their property from city projects. He requested the City consider the surrounding projects when levying charges. He said he

also has to pay charges for an arborist and these mounting charges are overwhelming. He felt he was being singled out by code enforcement as a minority owner.

Ion Manea, resident, made several points and requested the following changes:

- Provide a definition of "sensitive" vs "critical" in the TMC.
- The difference between the new TMC 18.45.30 G1 (new code) and G4 (old code) results in some cases, in an unfair, unjust and illegal confiscation without compensation of property due to the small size of the parcel. It also seems to conflict with other areas of the code and SMP. He recommended reviewing the buffer percentages and how they are calculated.
- Maintain current 50% buffer reduction rather than new proposal of 75%.
- 18.45.110B2 regarding operations, remove "confine or floodplain" text.
- 18.45.110CD makes a double standard for public drainage vs other kinds of projects.
- 18.45.184.F all unavoidable impact is confusing. Exclude this provision.
- 18.45.194. D4 Instead of $1,000 per tree, should be market value for the tree(s) as defined by an arborist.

There were no additional comments.

The public hearing was closed.

DELIBERATION:

Staff answered questions from the commissioners regarding the difference between terms "critical" and "sensitive", and how people can know in which area their property is located. There was extensive discussion about culvert impact and vesting impact as well as how the permit application timing would impact vesting.

QUESTIONS:

Commissioner Mann asked staff to state the reasoning for the change to "critical" from "sensitive".

Minnie Dhaliwal stated that the Growth Management Act (GMA) defines critical areas so we are just being consistent with the State law and other cities and it is only a naming convention. The meaning is the same.

Commissioner Mann asked several questions regarding the meaning and determination of special hazard flood areas. Ms. Dhaliwal explained that TMC has Title 16 Special Hazard Flood Areas and Public Works Department requested the verbiage for consistency with Title 16. Further, the proposed amendments add habitat assessment requirement if you are in those areas. Commissioner Mann requested a reference to Title 16 be included and Ms. Dhaliwal agreed.

Commissioner Strander asked staff to address discussion about alteration and mitigation, specifically referring to the letter regarding the culverts. Ms. Dhaliwal read the item, which was crossed out. Ms. Cummins said it wasn't the first time it had been brought up and that it should be put back in as written in 2010 since it is still viable.

Commissioner Strander asked if the testimony heard tonight will be brought before the PC. Staff said they would summarize the comments and staffs' responsive suggestions in a matrix; and return to the PC on May 23rd.

Commissioner Strander asked staff to address the vesting issue and approval time period. Ms. Dhaliwal said it is complicated and there are two parts to the comments from Nancy Rogers:

1) The first had to do with the utilization of an approved SAMP. For example, in the Tukwila South property mentioned tonight, staff looked at the whole site comprehensively, some small wetlands were allowed to be filled in exchange for mitigation in other areas such as an off-channel habitat area. She gave examples and summarized that since there was overall net

environmental gain, the proposal was approved under the SAMP provisions. The City attorney will review, but we understand the idea that if you do the mitigation on these larger projects you shouldn't get penalized by larger buffers. It seems that the DOE has not adequately dealt with some of these mitigation sites and their buffers. There is more guidance in the shoreline areas that we will try to research.

2) The second part is the vesting. Vice Chair Watters asked about how long the provisions would last. Ms. Dhaliwal said Washington State has doctrine on this, but they were still trying to work out the details. She pointed out that the City was trying to add flexibility and that Ms. Rogers was suggesting instead of one year you get five years after final plat approval. She mentioned that shoreline will be somewhat different than critical areas and this will also be looked at by the City attorney.

Vice Chair Watters asked for clarity on how often the code needs to be updated. Ms. Dhaliwal advised that the DOE requires updates at least once every eight years, but that changes may be made more frequently than that. Commissioner Mann discussed how the building and utility permits can impact the timeline for platting process, saying that five years can go quickly. Ms. Dhaliwal clarified the platting process. Commissioner Mann wondered how that timeframe would work if the buffer ended up encompassing 50% of their property. Ms. Dhaliwal said this is exactly what staff is trying to fix. There was discussion about tying it to the size or value of the project. There was discussion about when the buffer expands into the building and how the non-conforming code would apply in these cases. Staff summarized that their goal was to loosen the non-conforming regulations.

Commissioner Strander asked for clarification on the science behind the size of the buffers. Ms. Cummins discussed that it is calculated per the best available science utilizing state compilation of current projects. It is an on-going process, so it goes back every eight years and is a very extensive process by the DOE.

Vice Chair Watters asked for clarification about comments received from a citizen regarding drainage onto his property making it a wetland. Ms. Dhaliwal pointed out that she had displayed the parcel on the map earlier and recalled it was stated that the wetland was created because of drainage coming onto his property. She explained that the map shows a stream so there is water flow. She further explained that in order to be classified as a regulated wetland it must have three things: hydric soil, vegetation and hydrology.

Vice Chair Watters asked if there was anything staff would like to address regarding the letter from Karen Walters of the Muckleshoot Tribe. Ms. Dhaliwal summarized comments received from Karen Walters, which included keeping the inventory of streams current to reflect any changes in culverts; addressing total maximum daily load (TMDL) studies on shade and temperature; and allowing offsite mitigation for stream impacts. Staff explained that the results of TMDL studies ultimately urged DOE to determine that the Green River is too hot for the fish, so its banks need to be planted with trees to provide shade. Commissioner Watters asked if the proposed buffers will help this. Staff clarified that at present, off-site stream banking program is not available.

Vice Chair Watters wondered if we could predict regulations. Staff said that prediction is hard, which is why we do updates in eight-year increments. This makes better data available, better mapping, etc.

Commissioner Mann asked about fees for studies. Ms. Dhaliwal stated that Ms. Cummins currently reviews the studies and the service is included in the application fee. If the City hires an outside consultant to do peer review, then there is a charge associated with that. The applicant receives a quote prior to commencement of work. The applicant is charged for any peer review associated with geotechnical reports.

Commissioner Mann then asked whether a paragraph that had been under procedures section had been moved someplace else? Ms. Dhaliwal said there were no procedures under that section, instead it was just a jumbled-up paragraph that was removed.

Commissioner Mann asked if toxic runoff can run into the wetlands. Ms. Dhaliwal clarified no toxic runoff is allowed, clean storm water may be allowed, and it is handled by storm water regulations. The table in this area is straight from the DOE, but the verbiage will be polished to more accurately reflect this.

Commissioner Mann asked about acreage requirements. Ms. Cummins responded that it is a ratio. The property would be assessed for impact (acreage or square footage) then apply the ratio due to the mitigation you are doing. For instance, enhancement has a different ratio than restoration. Commissioner Mann was suggested the word "acreage" be replaced with "square footage".

Vice Chair Watters asked that fertilizer, herbicides and pesticides be addressed regarding wetlands. Staff agreed to work on verbiage.

Vice Chair Watters asked about verbiage regarding public use and access. She is concerned about being restrictive with regards to education and balancing it with ecology as the buffers are huge. Staff asked some clarifying questions and discussed working on the verbiage.

Commissioner Hansen requested discussion on the best way to go through any additional comments from the Commissioners. The Commissioners discussed and agreed to submit comments to DCD by Friday, April 19. Staff will incorporate the Commissioners recommendations in the matrix that will be provided for the May 23rd meeting.

DIRECTOR'S REPORT:

- City Council is holding a public hearing on April 22nd on a development agreement for the Homestead project, which is for 18 affordable homes on a vacant lot behind Riverton United Methodist Church. The design review, sub-division and platting process will come to the Planning Commission and will be a quasi-judicial matter.
- The regular PC meeting is on April 25th, and the agenda includes Shoreline Code update.
- The May 23rd meeting is on the Critical Areas Code update
- In June the PC will hear the design review of Fire Station 52

Adjourned: 8:55 PM

Submitted by Shana Markstrom, substitute for Wynetta Bivens
Planning Commission Secretary

Adopted: 4/25/19

PLANNING COMMISSION (PC) MINUTES

Date: May 23, 2019
Time: 6:30 PM
Location: Council Chambers

Present: Chair Dennis Martinez; Vice Chair Heidi Watters; Commissioners Mike Hansen, Sharon Mann and Dixie Stark

Absent: Commissioners Louise Strander and Karen Simmons

Staff: Department of Community Development (DCD) Planning Supervisor Minnie Dhaliwal, Senior Planner Lynn Miranda and Planning Commission Secretary Wynetta Bivens

Adopt Minutes Commissioner Mann made a motion to adopt the April 25, 2019 minutes. Commissioner Hansen seconded the motion. Motion passed.

Chair Dennis Martinez opened the public hearing and swore in those wishing to provide testimony.

CASE NUMBER:	L19-0051 (Code Amendment)
APPLICANT:	City of Tukwila
REQUEST:	Zoning Code amendments to clarify that multifamily uses permitted outright in the Tukwila South Overlay (TSO) include duplexes, triplexes, fourplexes, townhouses, senior citizen housing, and assisted living facilities for seniors.
LOCATION:	TSO zone
SEPA DETERMINATION:	Tukwila South Project Draft Environmental Impact Statement (DEIS) was issued April 5, 2005. The Final EIS was issued on July 7, 2005. An Addendum to the Final EIS was issued on September 23, 2005.

Lynn Miranda, Senior Planner, DCD gave the presentation for staff. She provided background information. She said Segale created a master plan for the whole TSO area, and that master plan was adopted in the development agreement. To implement the master plan the TSO Zoning Standards were adopted in 2009. The TSO standards can be applied to any areas covered as part of the master plan. She said the TSO overlay supersedes the underling zoning. She said although a variety of low to high rise multifamily structures, including duplexes, triplexes, fourplexes and townhouses were envisioned as part of the master plan when it was adopted, they were not listed as permitted uses when the TSO zoning was adopted. Staff is requesting the PC forward a recommendation to the City Council that TMC Table 18-6 be amended to allow townhouses, duplexes, triplexes and fourplexes as a permitted use in the TSO zone with a requirement that these forms of multifamily dwellings are

allowed after a residential design manual is adopted consistent with current requirements for other forms of multifamily in the TSO zone.

Some questions raised by the Commissioners were: why this code amendment was not approved administratively, questions about the process including inquiring when the residential design guidelines would be adopted, and whether there was something controversial about the proposed amendment.

Minnie Dhaliwal, Planning Supervisor, DCD, addressed questions, and noted there was nothing controversial about the proposed amendment.

TESTIMONY:

Mike Pruett, Segale Properties, provided clarification for the Commissioners. He said townhouses were clearly anticipated in the adopted master plan and Development Agreement. He said they were coordinating with a developer who was interested in building townhouses but could not because Table 18-6 did not explicitly indicate that townhouses are a permitted use in TSO zone. He said Segale Properties had also worked with the City to allow multifamily uses on a portion of their property adjacent to the City of SeaTac, but realized instead of the piecemeal approach of coming up with residential design guidelines they needed to prepare them for the entire TSO area, so they are currently working on design standards and design guidelines for residential development. Once the design standards are adopted projects will go through the design review process to make sure they meet the adopted requirements. Mr. Pruett said he thinks that the townhouse uses that were adopted as part of the master plan were left off Table 18-6.

There was no further testimony.

The public hearing was closed.

Commissioner Mann asked if there was any further discussion. If not, she was ready to make a motion. There was no further discussion.

MOTION:

Commissioner Mann made a motion to approve case number L19-0051 (Code Amendment) to allow townhouses, duplexes, triplexes and fourplexes in the TSO zone as a permitted use with the requirement that these forms of multifamily dwellings are allowed after a residential design manual is adopted, consistent with current requirements for other forms of multifamily uses in the TSO zone, and forward to the City Council for their review. Commissioner Hansen seconded the motion. Motion passed.

CASE NUMBER: L18-0056 Critical Areas Code Update
APPLICANT: The City of Tukwila

The public hearing was held and closed on April 11, 2019. Planning Commission started, deliberations by reviewing the comments and staff recommendations listed in the matrix (Attachment B of the staff report).

Matrix - Proposed 18.45 Edits

DELIBERATIONS CONTINUED:

Row 1, Section 18.45.110	Commissioner Mann moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Watters seconded the motion. Motion passed.
Row 2, Section 18.45.160	This item was deferred to the next meeting.
Row 3, Section 18.45.190.C	Commissioner Mann moved to amend the Public Review Draft TMC to read as recommended by staff and shown in Attachment B. Commissioner Stark seconded the motion. Motion passed.
Row 4, Section 18.45.100 &18.45.030	Commissioner Watters moved to amend the Public Review Draft TMC to read as shown in Attachment B. Commissioner Stark seconded the motion. Motion passed.
Row 5, Section 18.45.100. E. 1.g	Commissioner Watters moved to amend the Public Review Draft TMC to read as shown on Attachment B with the exception that letter f. reads, "Buffer averaging shall not adversely affect water quality". Commissioner Mann seconded the motion. Motion passed.
Row 6, Section 18.45.110. C. 1.F	Commissioner Hansen moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Watters seconded the motion. Motion passed.
Row 7, Section 18.45.30. E.3	Commissioner Stark moved to amend the Public Review Draft TMC to read as shown with the exception to strike the word "add" following the word "alter" on Attachment B. Commissioner Hansen seconded the motion. Motion passed.
Row 8, Section 18.45.100.E	No change.
Row 9, Section 18.45.110B.2	No change.
Row 10, Section 18.45.110.C. d	Commissioner Mann moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Stark seconded the motion. Motion passed.
Row 11, Section 18.45.180.4.f	No change.
Row 12, Section 18.45.195.D.3.b	No change.

Row 13, Section 18.45.90.D. d	Commissioner Hansen moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Stark seconded the motion. Motion passed.
Row 14, Section 18.45.70. A.6	Commissioner Hansen moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Watters seconded the motion. Motion passed.
Row 15, Section 18.45.158. B.3	Commissioner Hansen moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Watters seconded the motion. Motion passed.
Row 16, Section 18.45.158. D.3	Commissioner Hansen moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Watters seconded the motion. Motion passed.
Row 17, Section 18.45.158. E	Commissioner Watters moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Hansen seconded the motion. Motion passed.
Row 18 Shoreline vesting	Email from Nancy Rogers regarding vesting language for shoreline code. No change.
Row 19, Section 18.06.720	Commissioner Mann moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Hansen seconded the motion. Motion passed.
Row 20, Section 16.52.030 (32)	No change.
Row 21 Section 18.45.30.B	Commissioner Watters moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Hansen seconded the motion. Motion passed.
Row 22, Section 18.45.30.G	No change.
Row 23, Section 18.45.40. B.12	No change.
Row 24, Section 18.45.40. D.1	No change.
Row 25, Section 18.45.40. E	No change.
Row 26, Section 18.45.80.B	Commissioner Watters moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Stark seconded the motion. Motion passed.
Row 27, Section 18.45.158. C.8	Commissioner Hansen moved to amend the Public Review Draft TMC to read as shown on Attachment B. Commissioner Watters seconded the motion. Motion passed four to one. Commissioner Mann was opposed.
Row 28, Section 18.45.158. D.3	No change.
Row 29, Section 18.45.158. D.8	No change.
Row 30, Section 18.45. 090.C.2.c	Commissioner Mann moved to amend the Public Review Draft TMC to replace 'acreage' with 'square feet" as shown

	on Attachment B. Commissioner Stark seconded the motion. Motion passed
Row 31	Various sections of the code were updated to add clarity and were shown in highlighted text in Attachment E. No change.

Row 32, Tree Chapter, Landscape Code:

Staff handed out a table comparing different tree and vegetation management standards covered under the tree, landscaping, critical areas and shoreline codes. Staff requested policy direction from the PC on whether they should clean up the tree code and landscaping in addition to the shoreline and critical areas that have already been reviewed to make language more consistent in all four chapters. It was the consensus of the Commissioners for staff to clean up the two additional chapters of the code and return with staff's recommendations for the Commissioners to review.

Commissioner Watters expressed concerns regarding having duplicate standards in different areas of the code and capturing updates in all areas. Staff will review duplicates for potential consolidation.

OUTSTANDING ISSUES:

- SAMP and vesting issue
- Consistency of tree and vegetation management regulations in the Tree, Landscape, Critical Areas and Shoreline Chapter
- Re-numbering and formatting of the code to break up long sections.

Staff will return with a final version of the code that incorporates the recommendations made tonight and addressing the three outstanding issues noted above. PC will then make their final recommendation to the City Council.

DIRECTOR'S REPORT:

- June PC agenda – Design review for Fire Station 52 and Critical Areas wrap up, and Tree Code deliberations.

Adjourned: 9:30 PM

Submitted by Wynetta Bivens
Planning Commission Secretary

Adopted: June 27, 2019

PLANNING COMMISSION (PC) PUBLIC MEETING MINUTES

Date: June 27, 2019
Time: 5:30 PM
Location: Council Chambers

Present: Chair Dennis Martinez; Vice Chair Heidi Watters; Commissioners Mike Hansen, Louise Strander, Karen Simmons and Dixie Stark
Commissioner Sharon Mann – arrived at 6:20 PM

Staff: Department of Community Development (DCD) Planning Supervisor Minnie Dhaliwal, Environmentalist, Andrea Cummins and Planning Commission Secretary Wynetta Bivens

Adopt Minutes: Commissioner Mann made a motion to adopt the May 23, 2019 minutes. Commissioner Hansen seconded the motion. Motion passed.

Chair Dennis Martinez opened the public meeting:

PLANNING COMMISSION DELIBERATION

CASE NUMBER: L18-0056
APPLICANT: City of Tukwila
REQUEST: Critical Areas Code update. Planning Commission held a public hearing on this issue on April 11, 2019. Since then the Planning Commission started deliberations on May 23, 2019 and will continue deliberating at this meeting to finalize their recommendation to the City Council.
LOCATION: City Wide

Minnie Dhaliwal, Planning Supervisor, DCD, provided an overview. She noted that the following three items from the May 23, 2019 deliberations were scheduled to come back to the PC: 1) Consistency for the vegetation management for Shoreline, Critical Areas, the Tree Code and the Landscaping Code. The purpose is to provide clarity on each of the sections. There will be an applicability section added, clarification for topping and pruning, addition of the tree protection, as well as planting of shrubs and willow states to be counted for tree replacement to improve the buffer function on the riverbank. She said the only substantive changes are in the Tree Code which apply to single-family homes and are as follows: Tree removal shall be regulated based on tree size and not on canopy as homeowners find it hard to determine the species of the tree or determine whether it is large/medium/small canopy. It is easier for them to measure the diameter of the tree. She then walked the Commission through the four different chapters.

Andrea Cummins, DCD, Urban Environmentalist answered questions.

Commissioner Watters was interested in having examples on how to interpret the replacement ratios table in the code.

Commissioner Hansen agreed with the recommendation to have examples in the code and suggested directing individuals to worksheets. Staff agreed to include worksheets and examples in the tree permit application.

Commissioner Simmons suggested adding a time period as a point of reference for the 36-months in the footnote, staff agreed.

MOTIONS:

Attachment C-1

Commissioner Hansen moved to amend TMC 18.44 to read as shown in Attachment C-1 and forward it to City Council. Commissioner Stark seconded the motion. Motion passed.

Attachment C-2

Commissioner Hansen moved to amend TMC 18.45 to read as shown in Attachment C-2 and forward it to City Council. Commissioner Watters seconded the motion. Motion passed.

Attachment C-3

Commissioner Hansen moved to amend TMC 18.52 to read as shown in Attachment C-3 and forward it to City Council. Commissioner Stark seconded the motion. Motion passed.

Attachment C-4

REVISION:
Commissioner Hansen moved to approve TMC 18.54 in Attachment C-4 with the additional language to TMC 18.54.080, Table A, footnote, 1) add the phrase, "in a 36-month period"; 2) add a new sentence to read, "See tree permit application for additional details." 3) the table is amended in row three to read, "…greater than 18'' tree with number one, and no other trees." as amended by the PC and forward it to City Council. Commissioner Stark seconded the motion. Motion passed.

CRITICAL AREAS SECTION, 18.45.090

Commissioner Hansen moved to amend TMC 18.45.090 to read, as noted on page 9, "Wetland creation for restoration projects may only be approved if the applicant can show either, 1) that the adjoining property owners are agreeable to having wetland buffers extend onto or across their

property, or 2) that the on-site wetland buffer are sufficient to protect the functions and values of the wetland and the project as a whole resulting in net environmental benefit." Commissioner Watters seconded the motion. Motion passed.

VESTING PROVISIONS, CRITICAL AREAS MASTER PLAN

There was extensive discussion on the vesting provisions in the proposed Critical Areas Code and how it relates to Tukwila South Development Agreement.
The PC had numerous concerns.

Commissioner Hansen asked the PC chair to take a vote of the PC for deferring the decision to the City Council without a recommendation. The consensus of the PC with a unanimous vote was to move it on to the City Council without a recommendation, and forward a list of their concerns, such as:

- The PC does not know what all is in the development agreement.
- Uncomfortable not having full knowledge and casting a vote.
- Best to have the developer work with staff.
- Prefer to a legal opinion by the City Attorney.
- Since the Development Agreement was negotiated through the City Council process the decision on vesting should be made by the City Council
- The developer put a lot of work and money into the deal, but the PC were not there when the deal was made.

MOTION:

The PC decided not to make a formal ruling to forward a recommendation to the City Council, but deferred the decision making to the City Council. The PC requested that staff return with a bullet point summary of their concerns, which staff agreed to return with at the next PC meeting for their approval to forward to the City Council.

Adjourned: 7:00 PM

Submitted by Wynetta Bivens
Planning Commission Secretary

Adopted: 8/22/19