PLANNING COMMISSION
PUBLIC HEARING
AGENDA

Thursday, September 17, 2015
7:00 p.m.

Council Chamber · Shoreline City Hall
17500 Midvale Ave North

		Estimated Time
1.	**CALL TO ORDER**	7:00
2.	**ROLL CALL**	7:01
3.	**APPROVAL OF AGENDA**	7:02
4.	**APPROVAL OF MINUTES** a. Meeting Minutes from September 3, 2014 not available yet.	7:03

Public Comment and Testimony at Planning Commission

During General Public Comment, the Planning Commission will take public comment on any subject which is not specifically scheduled later on the agenda. During Public Hearings and Study Sessions, public testimony/comment occurs after initial questions by the Commission which follows the presentation of each staff report. In all cases, speakers are asked to come to the podium to have their comments recorded, state their first and last name, and city of residence. The Chair has discretion to limit or extend time limitations and the number of people permitted to speak. Generally, individuals may speak for three minutes or less, depending on the number of people wishing to speak. When representing the official position of an agency or City-recognized organization, a speaker will be given 5 minutes. Questions for staff will be directed to staff through the Commission.

5.	**GENERAL PUBLIC COMMENT**	7:05
6.	**PUBLIC HEARING** a. Critical Areas Ordinance Update - Staff Report • Staff Presentation • Public Testimony	7:10
7.	**DIRECTOR'S REPORT**	9:10
8.	**UNFINISHED BUSINESS**	9:14
9.	**NEW BUSINESS**	9:15
10.	**REPORTS OF COMMITTEES & COMMISSIONERS/ANNOUNCEMENTS**	9:16
11.	**AGENDA FOR OCTOBER 1, 2015** a. Development Code Amendments Public Hearing	9:18
12.	**ADJOURNMENT**	9:20

The Planning Commission meeting is wheelchair accessible. Any person requiring a disability accommodation should contact the City Clerk's Office at 801-2230 in advance for more information. For TTY telephone service call 546-0457. For up-to-date information on future agendas call 801-2236

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Planning Commission Meeting Date: September 17, 2015 Agenda Item

PLANNING COMMISSION AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	**Discussion of Critical Areas Ordinance Update - Introduction**
DEPARTMENT:	**Planning & Community Development**
PRESENTED BY:	**Juniper Nammi, AICP, Associate Planner** **Paul Cohen, Planning Manager**

☒ **Public Hearing** ☐ **Study Session** ☐ **Recommendation Only**
☐ **Discussion** ☐ **Update** ☐ **Other**

INTRODUCTION

The purpose of this meeting is to conduct a public hearing on the proposed amendments to the Shoreline Municipal Code (SMC) in:

- Chapter 20.80, Critical Areas (CAO);
- Related sections of Title 20, Development Code; and
- Shoreline Master Program, (SMP) Division II, Title 20.

The amendments are proposed to meet the State of Washington Growth Management Act (GMA) requirement to periodically review and, if necessary, update the critical area regulations for consistency with best available science (BAS). Staff is also proposing changes that will add clarity and predictability to administration of these regulations. Incorporation of the updated critical areas regulations into the SMP is recommended by staff to replace the 2006 CAO and related critical area regulations in the SMP, but not required by the GMA.

The purpose of this public hearing is to:

- Review the proposed amendments to the critical area ordinance (CAO), SMP, and related chapters in Title 20;
- Respond to questions regarding the proposed amendments;
- Gather public comment;
- Deliberate and, if necessary, ask further questions of staff; and
- Develop a recommendation to forward to Council.

Amendments to the SMC Title 20, Development Code, are processed as legislative decisions. Legislative decisions are non-project decisions made by the City Council under its authority to establish policies and regulations. The Planning Commission is the review authority for legislative decisions and is responsible for holding an open record Public Hearing on the official docket of proposed Development Code amendments and making a recommendation to the City Council on each amendment.

Approved By: **Project Manager** ____ **Planning Director** ____

BACKGROUND

The State of Washington Growth Management Act (GMA) requires the City of Shoreline to periodically update the Comprehensive Plan, Master Plans, and development regulations. The Critical Areas Ordinance (CAO) in Shoreline Municipal Code (SMC) Chapter 20.80 of the Development Code is the final section of development regulations requiring update under this process. The City is required to complete the current periodic update cycle in 2015 to remain in compliance with the GMA. The SMP was updated as required under the Shoreline Management Act in 2013.

SMC 20.30.350 states, "An amendment to the Development Code is a mechanism by which the City may bring its land use and development regulations into conformity with the Comprehensive Plan or respond to changing conditions or needs of the City." Development Code amendments may also be necessary to reduce confusion and clarify existing language, respond to regional and local policy changes, update references to other codes, eliminate redundant and inconsistent language, and codify Administrative Orders approved by the Director.

The decision criteria for a Development Code amendment in SMC 20.30.350 (B) states that the City Council may approve or approve with modifications a proposal for the text of the land use code if:

1. *The amendment is in accordance with the Comprehensive Plan; and*
2. *The amendment will not adversely affect the public health, safety or general welfare; and*
3. *The amendment is not contrary to the best interest of the citizens and property owners of the City of Shoreline.*

History of Shoreline Critical Areas Ordinance

The current Shoreline CAO was originally adopted in 2000 as SMC Chapter 20.80 with Ordinance 238. The City's first periodic update as mandated under the GMA was completed in 2006 with Ordinance 398. Since the original adoption in 2000, miscellaneous changes to the CAO were also made through the Development Code amendment process; the most recent of which was Ordinance 695 adopted in 2014. The critical area regulations as they currently exist were provided in the May 21, 2015, Planning Commission meeting packet.

The GMA requires at a minimum that the critical areas regulations be updated to be consistent with best available science for the respective critical areas that are regulated. In addition to State mandated changes City staff is also recommending changes to increase predictability and clarity in the existing regulations.

Critical areas, as mandated in the GMA, include:

- Wetlands
- Critical Aquifer Recharge areas
- Fish and Wildlife Habitat Conservation areas (including streams)
- Frequently Flooded areas, and
- Geologically Hazardous areas.

All critical areas must be designated and their functions and values protected using the best available scientific information - known as BAS.

Public Process
Brief presentations were made to the Parks Board (February 26, 2015) and the Council of Neighborhoods (March 4, 2015) regarding the required periodic update, what the Critical Area regulations are, and announcing the timeline for this project.

Two public meetings were held to solicit input from stakeholders for this project - May 5, 2015, at the Richmond Beach Library and May 14, 2015, at the North City Water District building. These meetings were open conversations about the existing regulations with the request for comments on how they could be improved. The comments from these two meetings were provided in summary tables with the June 4, 2015, Planning Commission meeting pact.

The Commission was introduced to the Critical Areas Ordinance periodic update requirements on May 21, 2015. Proposed changes to the following subchapters: general provisions, specific critical area types, critical areas regulations in the Shoreline Master Program, and related definitions and other Title 20 regulations were presented at the June 4, June 18, July 16 and August 20, 2015, Planning Commission meetings. Information regarding these meetings can be found in the staff reports and agenda packets for those meeting dates, which can be accessed through the following links:

May 21, 2015 – Critical Areas Ordinance Update project introduction
http://www.shorelinewa.gov/Home/Components/Calendar/Event/7684/182?toggle=allpast

June 4, 2015 – Critical Areas Ordinance – Wetlands and Shoreline Master Program
http://www.shorelinewa.gov/Home/Components/Calendar/Event/7685/182?toggle=allpast

June 18, 2015 – Critical Areas Ordinance – Geologic Hazards
http://www.shorelinewa.gov/Home/Components/Calendar/Event/7686/182?toggle=allpast

July 16, 2015 – Critical Areas Ordinance – Streams/Fish & Wildlife Habitat Conservation Areas
http://www.shorelinewa.gov/Home/Components/Calendar/Event/8060/182?toggle=allpast

August 20, 2015 – Critical Areas Ordinance – General Provisions and Misc Title 20 Changes
http://www.shorelinewa.gov/Home/Components/Calendar/Event/8092/182?toggle=allpast

Additional project information is available on the project webpage at: www.shorelinewa.gov/critical-areas.

Public comments received since the beginning of this process have been reviewed by staff and provided to Planning Commission for consideration. In response to comments, the schedule for this project was lengthened by a month, an alternate amendment to the geologic hazards subchapter was requested by Planning Commission, and a memo was provided on the implications of incorporating the updated critical areas regulations into the SMP. The formal public comment period for this project closes September 17, 2015, at the end of the public hearing.

City Council is scheduled to discuss the CAO update on October 5 and October 12 with adoption scheduled for November 2, 2015.

PROPOSAL & ANALYSIS

The CAO update project includes changes to the critical area regulations in SMC Chapter 20.80, other Title 20 chapters that reference or relate to critical areas, and a limited amendment to the SMP in order to incorporate the updated SMC Chapter 20.80 Critical Areas. To facilitate incorporation of the CAO into the SMP, the proposed Development Code amendments are organized into three ordinances:

- Ord. No. 723 - Critical Areas Ordinance (CAO) update (**Attachments A1 & A2**)
- Ord. No. 724 - Miscellaneous Title 20 Development Code amendments related to CAO (**Attachments B1 & B2**)
- Ord. No. 725 - Shoreline Master Program (SMP) Limited Amendment related to CAO (**Attachments C1 & C2**).

All three ordinances are provided in clean copy and legislative (strikethrough and underline) formats.

The CAO and miscellaneous Title 20 amendments must both be passed to meet the GMA periodic update requirements. The SMP Limited Amendment incorporates the CAO (Ord. 723) and the Floodplain Management ordinance (Ord. 641) into the Shoreline Master Program. The SMP ordinance is not required at this time. However, staff recommends that it be adopted for clarity and predictability in regulating development in the shoreline jurisdiction.

Staff revised the first draft code amendments to eliminate redundancy and confusion, organize the subchapters in a similar manner, and to ensure that the subchapters work together to effectively protect critical areas and mitigate the impacts of development. The following is a summary of the proposed amendments, with additional detail on items that have been revised from the original draft presented to Commission over the past four months.

Critical Areas Ordinance Update (Ord. 723)

The City of Shoreline critical area regulations require substantive update to incorporate best available science in all but two subchapters. Two sections do not require any substantive updates at this time – Flood Hazards and Critical Aquifer Recharge Areas. Substantive changes are required to regulations for Wetlands, Fish and Wildlife Habitat Conservation Areas/Streams, and Geologic Hazard Areas. Staff is also proposing changes that will add clarity to and specific standards for critical area report and plan submittal, and other administrative provisions. The following is a summary of the more significant changes in the revised draft critical areas regulations (**Attachment A1 – clean copy; Attachment A2 – legislative format**).

Critical Areas – General Provisions (Subchapter 1)

The general provisions in the CAO facilitate administration of the critical area regulations and set standards that apply to all types of critical areas can be found primarily in SMC Chapter 20.80, *Subchapter 1, Critical Areas – General Provisions*, but also include provisions in SMC Chapter 20.30 *Procedures and Administration.* Staff

reviewed the State's example codes and best practices adopted by neighboring jurisdictions in the region to identify code clarifications and process improvements for consideration.

Staff presented, on August 20, the following changes and additions to the General Provisions, Subchapter 1 (SMC 20.80.010 through 20.80.130), of the CAO:

- Reorganized to group related subsections together.
- Added new sections with standards for:
    - preapplication meetings,
    - best available science,
    - mitigation plan requirements,
    - financial guarantee requirements, and
    - code enforcement for critical areas violations.
- Updated terms for consistency with other subchapters outdated terms replaced, and cross references corrected.
- Deleted or revised exemptions and partial exemptions that allowed for unmitigated impacts to critical areas.
- Changed exemptions to be clear on what is exempt from Chapter 20.80 verses what is allowable without a critical area report, but must still comply with Chapter 20.80.
- Revised Notice to Title provisions to apply more broadly and native growth protection easement provisions added.

During the revision process the following additions or changes were made from the first draft of the amendments to this subchapter:

- Revised applicability section to clarify where the critical areas regulations apply, rather than generally in the whole City.
- Revised and expanded the existing *Alterations of critical areas* (20.80.050) to include general mitigation requirements for sequencing, timing, type, and location and renamed *Mitigation requirements*.
- Added new section (20.80.056), based on draft language from the City of Edmonds and that allows for a buffer reduction incentive for voluntary stream and wetland restoration projects. This supports current Stream restoration provisions in SMC 20.80.276 (D)(6).
- Revised critical area report and mitigation plan requirement sections incorporate provisions that apply to all types of critical areas previously located in other subchapters.
- Reorganized Notice to title provisions to be clear what form the notice to title and restrictions must take depending on the type of development application.
- Revisions made based on comments from Department of Ecology (Ecology) staff to facilitate incorporation of these standards into the SMP and meet State BAS requirements.

Additionally, penalties for violations of the critical areas regulations were revised in response to direction from Planning Commission. Commission asked that a range of penalty amount per square foot be included. Absent more detailed criteria for how the discretion for penalty amount would be determined, staff proposes to differentiate the penalty amount based on violation in the critical area itself and in the critical area buffer.

The $3.00 per square foot amount is at the low end of the range of what it currently costs to restore native vegetation in critical areas and $15.00 is at the upper end when restoration also requires grading according to information from Environmental Science Associates. Whether or not the penalty should be applied is discretionary and can take specific circumstances into consideration.

Geologic Hazard Areas (Subchapter 2)

The GMA specifically identifies the types of critical areas that cities and counties must include in their regulations. Geologic hazard areas, defined in WAC 365-190-120, are included as critical areas primarily due to the potential risk to public health and safety when development is proposed in or adjacent to these areas.

The majority of the new regulations proposed for the geologic hazard areas subchapter were originally derived from the recommendations provided by the City's consultant in the Geologic Hazards BAS memo (Wentworth, 2015). Provisions were added to provide clarity and predictability in the administration of these regulations. Some of the additions are modeled on the State Department of Commerce example code (CTED, 2007) and others are drawn from the regulations of cities in the region.

Staff presented the following changes and additions to the geologic hazards section of the CAO:

- Revised definitions of landslide hazards so potential impacts to geologic hazard areas from small projects, projects on smaller landslide hazard areas, or projects near areas of prior legal grading are reviewed and impacts mitigated;
- Provided clear standards for when alterations are allowed, allowed with mitigation, or require a reasonable use permit, special use permit, or shoreline variance.
- Added report requirements for geologic hazard areas critical area reports.
- Added new sections for Mapping, Development Standards, and CAO report requirements.

Planning Commission directed staff to provide an alternate amendment to the development standards for landslide hazard areas (SMC 20.80.224). This alternative was presented at the August 20 Commission meeting and Commission asked that Alternative 1, allowing for development in Very High Risk Landslide Hazard Areas be incorporated. Staff recommends modifying this alternative to include additional design standards and review requirements that would only apply to modification of Very High Risk Landslide Hazard Areas to minimize potential risks, rather than all landslide hazard areas. Specific language for neighborhood meeting, liability waiver, special inspections, and special contractor bonding were added to provide additional transparency, as well as assurances against increased risk when a landslide hazard area is modified.

In our research, there is a range of BAS for geologic hazards which amendments can draw from. The threat from some geologic hazard areas can be reduced or mitigated by engineering, design, or modified construction practices so that risks are minimized. State law does not specifically prohibit development on any type of geologic hazard areas, including steep slopes. The GMA tasks the City with deciding the level of public

safety risk which is acceptable within the City. Generally speaking, under the public duty doctrine, the City cannot be found liable for merely permitting development in its jurisdiction. It is the property owner and their geotechnical engineer that may be liable for failure of a slope and property damage.

At the August 20 Commission meeting, staff recommended against allowing development in Very High Risk Landslide Hazard areas due to increased public safety risk and that development in all other less steep slopes, erosion, and seismic hazards may be acceptable with a complete geotechnical analysis. The science and standards of practice used for analysis of landslide hazards do not include probability modeling and cannot adequately quantify the relative risk of the hazard before, during, and after alteration of the landslide hazard area. While the current standards of practice do demonstrate that a proposed development should be stable if built as designed, there are limitations to the factors considered by the qualified professional, human error introduced in design and construction, and factors that influence slope stability that are beyond the control of the property owner or qualified professional.

Commission directed staff at the August 20 meeting to revise the draft ordinance to allow for alteration of Very High Risk Landslide Hazard Areas. Staff supports this recommendation with the accompanying provisions that require a neighborhood meeting, liability waiver, special inspections, and special contractor bonding as well as third party review of the project in SMC 20.80.224(G). Staff especially needs the expertise of the third party reviewer to ensure that the geotechnical analysis submitted meets the standards of Code in Very High Risk Landslide Hazard Areas where risk may be elevated. The standards proposed are consistent with current standards of practice and the regulations are similar to those applied in other cities in the region where alteration of Very High Risk Landslide Hazard Areas are allowed.

The clarification of a distinct topographic break is needed for determining what level of design standards and review will apply to a proposed project that alters a landslide hazard area. This becomes really important as it will identify which projects will occur in Very High Risk Landslide Hazard Areas. Without a clear and consistent way to measure distinct topographic breaks discrepancies could arise where an applicant's geotechnical engineer concludes that a project is not located in a Very High Risk Landslide Hazard Area based on an alternate means of determining a distinctive break. Under the current proposal with recommended staff modifications, development is allowed in the Very High Risk Landslide Hazard Area the City just needs additional information and the expertise of a third party reviewer to confirm the applicant's geotechnical professional's opinion. A supplementary memo, from Todd Wentworth of AMEC Foster Wheeler, will be provided in the desk packet for the public hearing that further substantiates the basis for defining a distinct break based on the minimum possible buffer width for Very High Risk Landslide Hazard Areas.

In addition to adding the alternate language as directed by Planning Commission, the revised draft regulations include additional changes to the geologic hazard critical area report requirements and mitigation standards and requirements to eliminate redundancy with the proposed general provisions.

Fish & Wildlife Habitat Conservation Areas (Subchapter 3)

Fish and Wildlife Habitat Conservation Areas including streams are defined in WAC 365-190-130 and are identified as critical areas for the protection of sensitive fish and wildlife habitats needed to maintain populations of fish and wildlife species identified as important or at risk as well as the beneficial functions these ecosystems provide such as reducing erosion, flooding, water pollution and air pollution.

Staff presented, on July 16, the following changes and additions to the Fish and Wildlife Habitat Conservation Areas, Subchapter 3, of the CAO:

- Moved stream standards into Subchapter 3 *Fish and Wildlife Habitat Conservation Areas*, and delete Subchapter 7 *Streams* for better protection of habitat, update based on BAS, and consistency with regional codes in other jurisdictions.
- Updated the stream classifications for consistency with the Washington Department of Natural Resources (DNR) water typing system as recommended by state agency staff.
- Changed provisions for buffer reductions to be replaced with buffer averaging when enhancement is proposed. The total area of buffer may not be reduced consistent with BAS.
- Added provision allowing for development in buffer areas that are demonstrated to be physically separated and functionally isolated from the stream.
- Added new sections for Mapping, Development Standards, and CAO report requirements to improve clarity and integrate BAS.
- Provided clear standards for when alterations are allowed, allowed with mitigation, or require a reasonable use permit, special use permit, or shoreline variance.

Other changes to this subchapter add clarity, predictability, and incorporate BAS by explicitly including the DNR Priority Habitats and Species known to exist in the City and adding specific mapping resources to help identify potential critical area locations regulated under this subchapter. As with the other CAO subchapters, critical area report requirements are proposed to facilitate consistency in the reports received from qualified professionals.

During the revision process the following additions or changes were made from the first draft of the amendments to this subchapter:

- Revised FWHCA critical area report and mitigation plan requirement sections to eliminate redundancies of provisions that apply to all types of critical areas and added specific performance standards that were previously referenced primarily in the wetlands subchapter.
- Removed wetlands from this category based on direction from Ecology staff. They are adequately regulated in the wetlands subchapter and do not have to be regulated under the FWHCA provisions as well.
- Revised based on comments from Ecology staff to facilitate incorporation of these standards into the SMP and meet State BAS requirements.

Additional revisions may still be required to this section to meet state requirements for incorporation of these standards into the SMP. Final comments from Ecology staff are still pending.

Wetlands (Subchapter 4)

Currently the City has two distinctly different sets of regulations for wetlands. With the 2013 adoption of the City's Shoreline Master Program (SMP), the City incorporated best available science and included the Ecology wetland rating system and recommended buffer and modification standards in the SMP but the city-wide critical area regulations were not updated at that time.

At the June 4 Commission meeting staff proposed revisions to the wetlands section of the CAO that moved the regulations adopted in the SMP over into Chapter 20.80 Critical Areas with the following additions:

- Updated the rating system and function points references for consistency with the 2014 Update of the State's wetlands rating system;
- Added mapping references for clarity;
- Development standards section added based on policies in the SMP and SMC 20.80.340 *Alterations* in order to provide clear standards for when alterations are allowed, allowed with mitigation, or require a reasonable use permit, special use permit, or shoreline variance.
- Added report requirements for wetland critical area reports clarity and predictability so it is easier to determine when all the required information is included in a critical area report or not.
- Added provision allowing development in required buffers that are physically separated or functionally isolated where BAS and site specific investigation indicates there is no benefit to the critical area to protect or improve the functions of those areas.
- Retained the Wetlands Performance Standards and Monitoring and Contingency Plan requirements as standards to augment the compensatory mitigation plan requirements from the SMP for clarity and predictability.

During the revision process the following additions or changes were made from the first draft of the amendments to this subchapter:

- Reorganized subsections for consistency with the other subchapters for ease of finding specific regulations.
- Revised wetland critical area report and mitigation plan requirement sections to eliminate redundancies of provisions that apply to all types of critical areas.
- Revised based on comments from Ecology staff to facilitate incorporation of these standards into the SMP and meet State BAS requirements.

Flood Hazard Areas (Subchapter 5)

The Floodplain Management Ordinance (Ord. 641) updated Shoreline's Flood Hazard Area regulations to bring them into compliance with best available science and the Endangered Species Act by adopting the model code recommended by FEMA for this region of the country. These regulations are now located in SMC Chapter 13.12. No additional changes to this subchapter have been identified by City staff to comply with the Growth Management Act. The only changes proposed would rename the sections of

this subchapter, adding FLOOD HAZARD to the title of each section, for consistency with the new format of all the CAO subchapters. These labels are intended to make it easier to distinguish between similar sections for each type of critical area. No additional revisions were made to this section following the July 16 draft presentation.

Some of the administrative sections of these regulations will have to be excluded from incorporation into the SMP because they conflict with the administrative requirements of the SMP, which takes precedence. No changes will be made in SMC Chapter 13.12, but additional sections will be listed for exclusion in the proposed amendments to the SMP. Review of flood hazards must be processed under the SMP review procedures and permit processes when located within the shoreline jurisdiction.

Aquifer Recharge Areas (Subchapter 6)

There are no Critical Aquifer Recharge areas currently identified in Shoreline. The City does not currently use groundwater for supplying drinking water and neighboring Lake Forest Park does not have any of the critical recharge areas for their aquifers within Shoreline. No other neighboring city currently uses groundwater for drinking water. Groundwater aquifers within the City are used for supplying water to lakes, wetlands, and streams during the dry season, and for a few private wells that supply water for irrigation and possibly drinking water in isolated instances. Wetlands are thought to be the main groundwater recharge areas in the City.

Staff believes that current stormwater regulations combined with the wetland and stream provisions of the CAO adequately protect the existing aquifers. Staff recommends retaining the regulations for Aquifer Recharge Areas in the CAO in case future investigation identifies recharge areas within the City that must be protected for public water use in neighboring cities or if the City of Shoreline decides in the future to use groundwater for temporary or permanent drinking water supply. Groundwater quality is currently protected through other SMC provisions as required under the City's National Pollutant Discharge Elimination System (NPDES) permit. No additional changes are proposed at this time to incorporate Best Available Science to the Aquifer Recharge Areas subchapter.

The only changes proposed on July 16 renamed the sections of this subchapter, adding AQUIFER RECHARGE to the title of each section, for consistency with the new format of all the CAO subchapters. In addition, staff added a statement indicating that there are no identified critical aquifer recharge areas within the City of Shoreline at this time.

During the revision process the following additions or changes were made from the first draft of the amendments to this subchapter:

- Added stormwater management and groundwater recharge to the list of activities that must follow Ecology's best management practices to meet code update requirements of the City's NPDES permit.

Streams (Subchapter 7)

This subchapter is proposed for deletion and relevant standards and requirements incorporated into the FWHCA provisions (Subchapter 3). No additional revisions were made to this section following the July 16 draft presentation.

Miscellaneous Title 20 Amendments (Ord. 724)
The administrative provisions and definitions for critical areas regulation, as well as clearing, grading, and tree removal standards, are integrated with sections in Title 20. Therefore, additional changes are required in other Chapters of Title 20 for a complete update of the critical areas regulations. Additionally, critical areas regulations are referenced in a number of the Title 20 provisions and some of these references require updating. The following is a summary of the changes proposed to SMC Chapter 20.20 *Definitions*, Chapter 20.30 *Procedures and Administration*, Chapter 20.40 *Zoning and Use Provisions*, and Chapter 20.50 *General Development Standards* (**Attachment B1 – clean copy; Attachment B2 – legislative format**). Most important from Chapter 20.30 are sections 20.30.333 and 20.30.336 which provide criteria for Critical Area Special Use and Critical Area Reasonable Use permits. A number of other provisions throughout SMC Title 20 Development Code also address critical areas or cross reference the provisions in SMC Chapter 20.80. The majority of these changes were presented at the August 20 Commission meeting, however changes to definitions were presented with each subchapter they were related to over the past four Commission meetings on this topic.

Definitions related to critical areas are found throughout SMC Chapter 20.20.The proposed changes to definitions include adding definitions that were previously missing, deleting definitions that were classifying critical areas, eliminating redundant definitions between general definitions in Chapter 20.20 and SMP definitions in Chapter 20.210, and updating definitions for consistency with BAS and current terminology, and clarifying definitions that have been confusing or incomplete. Additional information about the specific basis for proposed changes to definitions can be found in the staff reports from the previous Commission meetings.

During the revision process the following additions or changes were made to definitions from the first draft of these amendments:

- Added revisions to enhancement, grading, native growth protection area, salmonid, and streams.
- Made wording changes to the first draft of definitions in response to internal and external review comments.

On August 20, staff presented the following changes and additions to Chapter 20.30, Chapter 20.40, and Chapter 20.50 in SMC Title 20 Development Code:

- Updated terms such as “steep slopes” and “sensitive areas” for accuracy.
- Added or updated code cross references for consistency with changes to critical area chapter for clarity and accuracy.
- Added decision criteria for Critical Area Special Use Permits and Critical Area Reasonable Use Permits based on model code and for better incorporation of BAS.
- Revised code enforcement provisions modifying civil penalties that apply to critical areas code violations.
- Relocated exemption for invasive species removal in parks from Clearing and Grading regulations in SMC 20.50.310 to exemptions from Chapter 20.80 in SMC 20.80.030 and added cross reference for clearing and grading permit exemption.

- Added reference to national standards for pruning of protected trees and to allow for pruning to enhance views without removing or topping the tree.

During the revision process the following additions or changes were made to these Title 20 Chapters from the first draft of these amendments:

- Revised the temporary use permit criteria to clearly indicate that the TUP process is not applicable within the shoreline jurisdiction.
- Wording of revisions to the general civil penalties language in SMC 20.30.770(D)(2) modified to reduce confusion but does not change the intent.
- Other minor wording adjustments for clarity and consistency.

Shoreline Master Program Limited Amendment (Ord. 725)

The Shoreline Master Program (SMP) is required by the Shoreline Management Act (SMA) was updated in 2013 to meet SMA requirements. The purpose of the SMP is to adequately manage shorelines to protect ecological functions and values, public safety, and private property rights. The jurisdiction of the SMP is an overlay from the middle of Puget Sound between the north and south boundaries of the City to the shoreline and 200 foot landward from the Ordinary High Water Mark (OHWM) of Puget Sound (designated Shorelines of the State). The SMP contains many of the same types of regulations that the general Development Code includes, but the SMP requires more oversight and is more limited due to the need to protect the ecological functions and public's interest in the shorelines' values.

Critical area regulations are required to be included into the SMP directly or by incorporation of other ordinances. The City adopted the 2006 revision of Chapter 20.80 Critical Areas by incorporation into the SMP in SMC 20.230.030(A)(1) and exempted sections that did not meet the requirements of the SMA in SMC 20.230.030(A)(1)(a-h).

At the time of the 2013 SMP update the City's wetland regulations did not meet the Ecology requirements for incorporating Best Available Science, so Chapter 20.80 SMC, Subchapter 4 was excluded from incorporation in the SMP. The Flood Hazard Area regulations were updated independently during the SMP update process, however due to time and budget constraints the updated Flood Hazards regulations in Chapter 20.80 SMC, Subchapter 5 were not incorporated into the SMP. Alternate policies and regulations for wetlands and flood hazard areas were adopted in the SMP in SMC 20.230.030(C) and (D) giving the City two separate sets of regulations for these critical area types.

Update of the critical areas regulations in the SMP is not required at this time. Staff recommends that the updated regulations be incorporated into the SMP primarily to provide the best customer service possible for critical area reviews that would come from having one set of critical area regulations to administer, rather than two. The implications of the proposed limited amendment to the SMP were provided in a memo to Commission for the August 20 meeting.

It is important to note that the SMP amendments will not go into effect until the adopted ordinances are reviewed and approved by Ecology. Additional changes may be required by Ecology, following adoption, before they will approve the adopted amendments. City

staff is working with Ecology staff to review and incorporate any required changes prior to the scheduled November 2 adoption in order to minimize or eliminate the need to come back to these ordinances again to meet SMP incorporation requirements. Comments from Ecology are still pending, but should be received in time to incorporate required changes prior to adoption by Council. Primarily, exclusions of additional sections may be required, as well as, some clarification of the FWHCA standards for marine habitats. Any future changes to regulations incorporated into the SMP (Chapter 20.80, Chapter 13.12, and related definitions in Chapter 20.20) would require a limited amendment to the SMP or code interpretation approval by Ecology, otherwise, those changes would not be incorporated in the SMP.

The proposed limited amendment to the Shoreline Master Program, originally presented to Commission on June 4, is meant to eliminate duplicate regulations and incorporate by reference the updated Critical Areas regulations for all types of critical areas. The revised draft of these changes is included with this staff report (**Attachment C1 – clean copy; Attachment C2 – legislative format**). Adoption of this ordinance is not required for compliance with the GMA.

The following is a summary of the revisions proposed to the SMP critical area regulations and definitions.

- Seven SMP definitions deleted and moved/edited in Chapter 20.20 where the definitions for general development and the shoreline jurisdiction could be the same.
- Policies and regulations specifically for floodplain management and wetlands were proposed for deletion to be replaced by the revised CAO.

During the revision process the following additions or changes were made to the SMP from the first draft of these amendments:

- Regulation language regarding surface water control moved from an Environmental-Water policy under 20.230.020(C), *Policies* down to *Regulations*. Additionally, a provision for compliance with the adopted stormwater manual and the City's NPDES permit was added to 20.230.030(A) *General Regulations*. These changes were made in response to comments for better incorporation of Low Impact Development standards.
- The Floodplain Management ordinance (Ord. 641) was specifically added to the language incorporating the critical areas regulations. This is required to meet SMA rules about incorporating other ordinances.
- Additional provisions in Chapter 20.80 were identified and added to the list of sections not to be incorporated into the SMP based on initial direction from Ecology.
- Policies are required by the SMA rules for Wetlands and Flood Hazard Areas but are not adequately replaced by the updated CAO language, so these are identified for retention in the revised draft ordinance. Ecology will provide additional direction on how to simplify the policies to meet State requirements.

Additional revisions to these SMP regulations will be needed in response to Ecology staff review of the revised draft in order to receive approval of the SMP limited amendment from Ecology. These revisions will likely include further exceptions to the

incorporated ordinances such as the administrative provisions of the floodplain management ordinance and the allowed activities sections of the critical areas regulations. Both administration and exemptions within the shoreline jurisdiction are regulated only by the SMP in accordance with the SMA, so contradicting regulations cannot be incorporated into the SMP. The policies for critical areas in the SMP will also require additional changes to meet State requirements.

SCHEDULE

The current schedule for City Council study and adoption of the CAO update is:

- October 5 – Study Session 1
- October 12 – Study Session 2
- November 2 - Adoption

Due to the complexity of the proposed CAO changes, staff is recommending a delayed effective date for this ordinance of January 1, 2016. This would allow time for staff training, update of forms and handouts, and adjustment of projects being planned but not yet submitted. The proposed delayed implementation would be compatible with the GMA compliance requirements and coincide with the delayed effective date of the SMP limited amendment due to required review and approval by Ecology after adoption.

PUBLIC NOTICE AND COMMENT

Public notice of the proposal, public hearing, SEPA Determination and SMP limited amendment was provided on July 27, 2015. The notice was posted in the Seattle Times, on the City's website, on Shoreline Area News, and emailed to Parties of Record. Emails and Alert Shoreline notifications were sent to distribution lists on July 28, August 14, and August 28, 2015, letting people know that the SEPA checklist and Notice of Determination of Non-Significance were available at http://www.shorelinewa.gov/government/departments/planning-community-development/land-use-action-and-planning-notices, and about the public hearing and subsequent Council study and potential adoption. Public comments are due September 17, 2015, and will be provided to Commission via Plancom or in a desk packet.

RECOMMENDATION

Staff recommends the Commission amend if necessary and forward a recommendation to the City Council to adopt the following proposed Development Code amendment ordinances:

- Critical Areas Ordinance (CAO) update (Ord. No. 723);
- Miscellaneous Title 20 Development Code Amendments related to CAO (Ord. No. 724)
- Shoreline Master Program (SMP) Limited Amendment related to CAO (Ord. No. 725).

ATTACHMENTS

Attachment A1 – Ordinance No. 723_Critical Areas Ordinance_clean copy

Attachment A2 – Ordinance No. 723_Critical Areas Ordinance_legislative format
Attachment B1 – Ordinance No. 724_Miscellaneous Title 20 Changes_clean copy
Attachment B2 – Ordinance No. 724_Miscellaneous Title 20 Changes_legislative format
Attachment C1 – Ordinance No. 725_SMP Limited Amendment_clean copy
Attachment C2 – Ordinance No. 725_SMP Limited Amendment_legislative format

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Title 20

DEVELOPMENT CODE

Division I. Unified Development Code

Chapter 20.80

Critical Areas

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20.80.390 –
20.80.410 *Repealed.*

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20.80.430 AQUIFER RECHARGE - Classification.
20.80.440 AQUIFER RECHARGE - Alteration.
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Subchapter 1.

Critical Areas – General Provisions

20.80.010 Purpose.

A. The purpose of this chapter is to establish supplemental standards for the protection of critical areas, as defined in SMC 20.20.014, in compliance with the provisions of the Washington Growth Management Act of 1990 (Chapter 36.70A RCW), consistent with the Western Washington Phase II Municipal Stormwater Permit, and consistent with the goals and policies of the Shoreline Comprehensive Plan in accordance with the procedures of Chapter 20.30 SMC. The standards of this chapter incorporated into the Shoreline Master Program, in SMC 20.230.030(A) General Regulations (1), shall apply within the shoreline jurisdiction, where critical areas are present. If there are any conflicts or unclear distinctions between the Master Program and the City's critical areas regulations, the most restrictive requirements apply as determined by the City.

B. By identifying and regulating development and alterations to critical areas and their buffers, it is the intent of this chapter to:

1. Protect the public from injury, loss of life, property damage or financial losses due to flooding, erosion, landslide, seismic events, or soils subsidence;

2. Protect unique, fragile and valuable elements of the environment;

3. Reduce cumulative adverse environmental impacts to water quality, wetlands, streams and other aquatic resources, fish and wildlife habitat, landslide hazards and other geologically unstable features and protect the functions and values of critical areas from overall net loss;

4. Ensure the long-term protection of ground and surface water quality;

5. Alert members of the public, including appraisers, assessors, owners, potential buyers, or lessees, to the development limitations of critical areas and their required buffers;

6. Serve as a basis for exercise of the City's substantive authority under the State Environmental Policy Act (SEPA) and the City's Environmental Procedures (Chapter 20.30 SMC, Subchapter 8); and comply with the requirements of the Growth Management Act (Chapter 36.70A RCW) and its implementing rules;

7. Establish standards and procedures that are intended to protect critical areas while accommodating the rights of property owners to use their property in a reasonable manner; and

8. Provide for the management of critical areas to maintain their functions and values and to restore degraded ecosystems.

C. This Chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this Chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards. (Ord. 641 § 5 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(A), 2000).

20.80.015 Applicability.

A. Unless explicitly exempted, the provisions of this chapter shall apply to all land uses, and development activity and all structures and facilities within all zoning designations in the City of Shoreline, whether or not a permit or authorization is required, that are within the maximum buffer distance for each critical area type, even if the critical area is on adjacent property. All persons within the City shall comply with the requirements of this chapter.

B. The City shall not approve any permit or otherwise issue any authorization to alter the condition of any land,

water or vegetation or to construct or alter any structure or improvement without first assuring compliance with the requirements of this chapter.

C. Approval of a permit or development proposal pursuant to the provisions of this chapter does not discharge the obligation of the applicant to comply with the provisions of this chapter.

D. The provisions of this chapter shall apply to any forest practices over which the City has jurisdiction pursuant to Chapter 76.09 RCW and WAC Title 222. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(E), 2000. Formerly 20.80.050.).

20.80.020 Relationship to other regulations.

A. These critical area regulations shall apply as an overlay and in addition to zoning, land use, and other regulations established by the City of Shoreline. In the event of any conflict between these regulations and any other regulations of the City, the regulations which provide greater protection to the critical areas shall apply.

B. Areas characterized by particular critical areas may also be subject to other regulations established by this chapter due to the overlap or multiple functions of some critical areas. In the event of any conflict between regulations for particular critical areas in this chapter, the regulations which provide greater protection to critical areas shall apply.

C. These critical areas regulations shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA), as necessary and locally adopted. Any conditions required pursuant to this chapter shall be included in the SEPA review and threshold determination.

D. Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Substantial Development Permits, Hydraulic Permit Act (HPA) permits, Section 106 of the National Historic Preservation Act, U.S. Army Corps of Engineers Section 404 permits, National Pollution Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this chapter. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(K), 2000. Formerly 20.80.110.).

20.80.025 Critical areas maps.

A. The approximate location and extent of identified critical areas within the City's planning area are shown on the critical areas maps adopted as part of this chapter, including but not limited to the maps identified in sections SMC 20.80.222, 20.80.272 and 20.80.322. These maps shall be used for informational purposes only to assist property owners and other interested parties. Boundaries and locations indicated on the maps are generalized. Critical areas and their buffers may occur within the City which have not previously been mapped.

B. The actual presence or absence, type, extent, boundaries, and classification of critical areas shall be identified in the field by a qualified professional, and determined by the City, according to the procedures, definitions and criteria established by this chapter. In the event of any conflict between the critical area location or designation shown on the City's maps and the criteria or standards of this chapter, the criteria and standards shall prevail.

C. The critical areas maps shall be periodically updated by the City and shall reflect any permit activity, results of special studies and reports reviewed and approved by the City, amendments to the Comprehensive Plan Natural Environment Element, and Department identified errors and corrections. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(D), 2000. Formerly 20.80.040.).

20.80.030 Exemptions.

Notwithstanding the exemptions provided by this section, any otherwise exempt activities occurring in or near a critical area or critical area buffer should meet the purpose and intent of SMC 20.80.010 and should consider on-site alternatives that avoid or minimize impacts. To be exempt from this chapter does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a

necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense. The following activities shall be exempt from the provisions of this chapter, but are not exempt from applicable permits:

A. **Emergencies.** Alterations in response to emergencies which threaten the public health, safety and welfare or which pose an imminent risk of damage to private property as long as any alteration undertaken pursuant to this subsection is reported to the City as soon as possible. Only the minimum intervention necessary to reduce the risk to public health, safety, or welfare and/or the imminent risk of damage to private property shall be authorized by this exemption. The City shall confirm that an emergency exists and determine what, if any, additional applications and/or measures shall be required to protect the environment consistent with the provisions of this chapter, and to repair any damage to a preexisting resource. If the Director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement provisions of SMC 20.80.130 *Unauthorized critical area alterations* shall apply.

After the emergency, the person or agency undertaking the action shall fully fund and conduct necessary restoration and other mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical area report and restoration/mitigation plan. The person or agency undertaking the action shall apply for review, and the alteration, critical area report, and mitigation plan shall be reviewed by the City in accordance with the review procedures contained herein. Mitigation activities must be initiated within one (1) year of the date of the emergency;

B. **Utility Operation, Maintenance, Repair, or Replacement.** Public water, electric and natural gas distribution, public sewer collection, cable communications, telephone, utility and related activities undertaken pursuant to City-approved best management practices, and best available science with regard to protection of threatened and endangered species, as follows:

1. Normal and routine maintenance or repair of existing utility structures or rights-of-way;

2. Relocation of electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less, only when required by the City of Shoreline, which approves the new location of the facilities;

3. Replacement, operation, repair, modification or installation or construction in an improved City road right-of-way or City-authorized private roadway of all electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less;

4. Relocation of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances, only when required by the City of Shoreline, which approves the new location of the facilities;

5. Replacement, operation, repair, modification, relocation, installation or construction of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances when such facilities are located within an improved public right-of-way or City-authorized private roadway; and

6. Repair and maintenance of existing private connections to public utilities and private stormwater management facilities consistent with best practices. Revegetation of disturbed areas is required to be native vegetation, unless the existing, non-native vegetation is re-established with no change to type or extent.

C. **Roadway Operation, Maintenance, Repair, or Replacement.** Maintenance, operation, repair, modification or replacement of publicly improved roadways or City authorized private roadway, and associated stormwater drainage systems as long as any such alteration does not involve the expansion of roadways or related improvements into previously unimproved rights-of-way or portions of rights-of-way and does not alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater. Retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance;

D. **Recreation Areas Operation, Maintenance, Repair, or Replacement.** Maintenance, operation, repair, modification, or replacement of existing publicly improved recreation areas as long as any such activity does not involve the expansion of facilities and existing improvements into a previously unimproved portion of critical areas or required buffers. Maintenance, operation, repair, modification, and replacement of publicly improved recreation areas within designated fish and wildlife habitat areas shall be permitted if all activities are performed consistent with the development standards of this chapter, best available science or adaptive management plans as recognized by the City. Retention and replanting of native vegetation shall occur wherever possible in areas of land disturbance;

E. **Minor Conservation and Enhancement.** Minor conservation and enhancement of critical areas that does not alter the location, dimensions or size of the critical area or buffer, and results in improvement of the critical area functions, including the following invasive species removal activities:

1. Removal of noxious weeds or invasive vegetation as identified by the Washington State or King County Noxious Weed Control Boards in a wetland buffer, stream buffer, other fish and wildlife habitat conservation areas and buffers or geologic hazard area (excluding very high risk landslide hazard areas), or the area within a three-foot radius of a tree in very high risk landslide hazard areas and buffers is allowed when:

    a. Undertaken with hand labor, including handheld mechanical tools;

    b. When prescribed by the King County Noxious Weed Control Board, the use of riding mowers, light mechanical cultivating equipment, herbicides or biological control methods may be allowed only with permit and approval by the City on private property or when performed in accordance with SMC 20.80.085, *Pesticides, herbicides and fertilizers on City-owned property*;

    c. Plants that appear on the Washington State or King county Noxious Weed Board Lists must be handled and disposed of in accordance with the best management practices appropriate to that species and approved by the City when permit review is applicable;

    d. Areas cleared by removal of invasive plant species must be revegetated with site appropriate native species at natural densities and the site must be stabilized against erosion in accordance with the adopted stormwater manual;

    e. All work is performed above the ordinary high water mark and above the top of a stream bank; and

    f. The following limits must not be exceeded:

        i. Within City-owned property, no more than 3,000 square feet of soil may be exposed at any one time; or

        ii. Within private property, not more than 500 square feet of area may be cleared, as calculated cumulatively over one (1) year, without a permit and critical area report prepared by a qualified professional; or

2. Vegetation management consistent with a previously approved critical area mitigation, restoration, remediation, or enhancement plan that requires ongoing maintenance and vegetation management beyond final inspection and the required monitoring period for the permitted project;

F. **Active Hazard Trees.** Removal of active or imminent hazardous trees in accordance with SMC 20.50.310(A)(1)(c);

G. **Nonimminent Hazard Trees.** Removal of not active or imminent hazardous trees in accordance with the following:

1. For hazardous circumstances that are not active or imminent, such as suspected tree rot or diseased trees

or less obvious structural wind damage to limbs or trunks, a permit exemption request form must be submitted by the property owner together with a tree evaluation form prepared by a qualified professional arborist as defined in SMC 20.20.042. Both the permit exemption request form and tree evaluation form shall be provided by the Director;

2. The permit exemption request form shall include a grant of permission for the Director and/or qualified professionals under contract with or employed by the City to enter the subject property to evaluate the circumstances. Attached to the permit exemption request form shall be a risk assessment form that documents the hazard and which must be signed by a certified arborist or professional forester;

3. No permit exemption request shall be approved until the Director reviews the submitted forms and conducts a site visit. The Director may require third party review of the request be performed by a qualified professional under contract with or employed by the City at the applicant's expense, and may require that the subject tree(s) and vegetation be cordoned off with yellow warning tape during the review of the request for exemption;

4. Approval to cut or clear trees may only be given upon recommendation of the qualified professional arborist that the condition constitutes an actual threat to life or property in homes, private yards, buildings, public or private streets and driveways, sidewalks, improved utility corridors, or access for emergency vehicles and any trail as proposed by the property owner and approved by the Director for purposes of this section;

5. The Director shall authorize only such alteration to existing trees and vegetation as may be necessary to eliminate the hazard and shall condition authorization on means and methods of removal necessary to minimize environmental impacts, including replacement of any significant trees. The arborist shall include an assessment of whether a portion of the tree suitable for a snag for wildlife habitat may safely be retained. All work shall be done utilizing hand-held implements only, unless the property owner requests and the Director approves otherwise in writing. The Director may require that all or a portion of cut materials be left on site;

6. The trees shall be replaced within one year consistent with the provisions of SMC 20.50.360. Where nonsignificant trees are approved for removal as hazardous, replacement shall be one tree for each tree removed. Replacement tree may be planted at a different, nearby location on the same property if it can be determined that the planting in the same location would create a new hazard or potentially damage the critical area; and

7. If a tree to be removed provides priority habitat, such as an eagle perch, a qualified professional shall be consulted to determine timing and methods of removal that will minimize and mitigate impacts.

H. **Site Investigation.** Site investigative work and studies necessary for preparing land use applications, including soils tests, water quality studies, wildlife studies and similar tests and investigations; provided, that any disturbance of the critical area shall be the minimum necessary to carry out the work or studies;

I. **Passive Outdoor Activities.** When it can be demonstrated that there will be no undue adverse effect, the following activities may be allowed within critical areas and their buffers: educational activities, scientific research, and outdoor recreational activities, including but not limited to interpretive field trips, bird watching, public beach access including water recreation-related activities, bicycling and hiking, that will not have an undue adverse effect on the critical area;

J. **Normal Maintenance.** Normal and routine maintenance and operation of existing landscaping and gardens including pruning, beneficial to the tree, of protected trees consistent with SMC 20.50.350(E);

K. **Chemical Applications.** The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, provided that their use shall be restricted in accordance with state Department of Fish and Wildlife Management Recommendations and the regulations of the state Department of Agriculture and the U.S. Environmental Protection Agency;

L. **Minor Activities.** Minor activities not mentioned above and determined by the City to have minimal impacts to a critical area; and

M. **Utility Mitigation Projects.** Mitigation projects related to utilities construction in critical areas or their buffers. (Ord. 640 § 1 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(G), 2000. Formerly 20.80.070.).

20.80.040 Allowed activities.

A. **Critical Area Report.** Activities allowed under this section shall have been reviewed and permitted or approved by the City and any other agency with jurisdiction, but do not require submittal of a separate critical area report, unless such submittal was required previously for the underlying permit. The Director may apply conditions to the underlying permit or approval to ensure that the allowed activity is consistent with the provisions of this chapter to protect critical areas.

B. **Best Management Practices.** All allowed activities shall be conducted using the best management practices that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The City shall observe the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.

C. **Allowed Activities.** The following activities are allowed:

1. **Modifications to Existing Structures within Critical Areas.** Structural modification of, addition to, maintenance, repair, or replacement of legally nonconforming structures consistent with SMC 20.30.280, which do not meet the building setback or buffer requirements for wetlands, fish and wildlife habitat conservation areas, or geologic hazard areas if the modification, addition, replacement or related activity does not increase the existing building footprint of the structure or area of hardscape lying within the critical area or buffer. Within landslide hazard areas additions that add height to a nonconforming structure may only be allowed with review of a critical area report demonstrating that no increased risk of the hazard will occur. Where nonconforming structures are partially located within critical areas or their buffers additions are allowed with a critical area report delineating the critical area(s) and required buffers showing that the addition is located entirely outside the critical area or buffer;

2. **Demolition.** Demolition of structures located within critical areas or their buffers, excluding demolition of structures necessary to support or stabilize landslide hazard areas, subject to approval of a stormwater pollution prevention plan consistent with the adopted stormwater manual and clearing limits that will adequately protect the critical area.

3. **Permit Requests Subsequent to Previous Critical Area Review.** A permit or approval sought as part of a development proposal for which multiple permits are required is exempt from the provisions of this chapter, except for the notice to title provisions, as applicable if:

   a. The City of Shoreline has previously reviewed all critical areas on the site; and

   b. There is no material change in the development proposal since the prior review; and

   c. There is no new information available which may alter previous critical area review of the site or a particular critical area; and

   d. The permit or approval under which the prior review was conducted has not expired or, if no expiration date, no more than five years have lapsed since the issuance of that permit or approval; and

   e. The prior permit or approval, including any conditions, has been complied with. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(H), 2000. Formerly 20.80.080.).

20.80.045 Critical areas preapplication meeting.

A. A preapplication meeting, pursuant to SMC 20.30.080, is required prior to submitting an application for development or use of land or prior to starting a development activity or use of the land that may be regulated by the provisions of this chapter unless specifically exempted in SMC 20.80.030.

B. A determination may be provided through the preapplication meeting regarding whether critical area reports are required, and if so what level of detail and what elements may be necessary for the proposed project. This determination does not preclude the Director from requiring additional critical area report information during the review of the project. After a site visit and review of available information for the preapplication meeting the Director may determine:

1. **No Critical Areas Present.** If the Director's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed activity is unlikely to degrade the functions or values of a critical area, then the Director shall determine that the critical area review is complete and note in the preapplication meeting summary letter the reasons that no further review is required.

2. **Critical Areas Present, But No Impact.** If the Director determines that there are critical areas within or adjacent to the project area, but that the best available science shows that the proposed activity is unlikely to degrade the functions or values of the critical area, the Director may waive the requirement for a critical area report. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:

   a. There will be no alteration of the critical area or buffer;

   b. The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this chapter; and

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

   A summary of this analysis and the findings shall be included in the preapplication meeting summary letter and any staff report or decision on the underlying permit.

3. **Critical Areas May Be Affected by Proposal.** If the Director determines that a critical area or areas may be affected by the proposal, then the Director shall notify the applicant that a critical area report(s) must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report. Additionally, the Director may indicate the sections or report types that must be included in the critical report(s) consistent with SMC 20.80.080.

20.80. 050 Alteration of critical areas.

A. In general, critical areas shall be maintained in their natural state or current legally established condition, including undisturbed, native vegetation to maintain the functions, values, resources, and public health and safety for which they are protected. Alteration of critical areas, including their established buffers, may only be permitted subject to the criteria and standards in this chapter, and compliance with any Federal and/or State permits required. Unless otherwise provided in this chapter, if alteration of the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical areas report, so as to result in no overall net loss of critical area functions and values and no increased risk of hazards. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 2(A), 2000. Formerly 20.80.160.).

20.80.053 Mitigation Requirements. Mitigation shall be sufficient to maintain or compensate for the impacted functions and values of the critical area and to prevent risk from a hazard posed by a critical area. Mitigation shall not be implemented until after the Director has provided approval of a critical areas report that includes a mitigation plan.

A. **Mitigation Sequencing.** This section applies to mitigation required with all critical areas reviews, approvals,

and enforcement pursuant to this chapter. This section is supplemented with specific measures under subchapters for particular critical areas. Mitigation for specific development proposals may include a combination of the measures below and shall be designed and constructed in accordance with the provisions of this section. Before impacting any critical areas an applicant shall demonstrate that the following actions have been taken in the follow sequential order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of actions;

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment or by restoring or stabilizing the hazard area through natural, engineering, or other methods;

4. Reducing or eliminating the impact over time through 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, measuring and reporting the impact to the Director and taking appropriate corrective measures.

C. Applicants must first demonstrate an inability to avoid or reduce impacts before the use of actions to mitigate potential impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 2(B), 2000. Formerly 20.80.170.).

D. **Type, Location, and Timing of Mitigation.** Unless it is demonstrated that a higher level of ecological functioning or greater reduction of hazard risk would result from an alternative approach or as otherwise allowed in this chapter, mitigation for adverse impacts shall be in-kind, on-site, and prior to the activities that will disturbed the critical area. Mitigation measures that cannot be implemented prior to the critical area impacts shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

1. The Director may authorize a one-time temporary delay in completing construction or installation of the mitigation when the applicant provides a written explanation from a qualified professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the City.

20.80.056 Voluntary critical area restoration projects.

A. When a critical area restoration project is proposed that is not required as mitigation for a development proposal, the City may grant relief from standard critical area buffer requirements if the restoration project

involves:

1. The daylighting of a stream, or

2. Creation or expansion of a wetland that would increase the area of the wetland and/or wetland buffer

B. At the time a restoration project is proposed, a buffer shall be established that will apply to the restoration project boundary. Restoration project buffers shall be established according to the following requirements:

1. A buffer may be applied to the restored portion of the stream or wetland that is not less than seventy-five percent (75%) of the standard buffer associated with the type of stream or category of wetland; or,

2. The project proponent may request a reduced buffer of between fifty percent (50%) and seventy-five percent (75%) of the standard buffer associated with the type of stream or category of wetland. The following criteria will be used by the City in reviewing the request for a reduced buffer:

a. The Director determines that applying a seventy-five percent (75%) buffer would significantly limit the use of the property for existing or permitted uses, thus making the restoration project infeasible;

b. The proposed buffer relief is the minimum necessary to achieve the restoration project;

c. There will be a net environmental benefit from the restoration project with the reduced buffer;

d. Granting the proposed relief is consistent with the objectives of the critical area restoration project and consistent with purposes of the City's critical area regulations.

20.80.060 Best available science.

A. **Protect Functions and Values of Critical Areas With Special Consideration to Anadromous Fish.** Critical area reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and required buffers and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat, where applicable.

B. **Best Available Science to be Consistent With Criteria.** The best available science is that scientific information, obtained through a valid scientific process, that is applicable to the critical area prepared by local, state, or federal natural resource agencies, a qualified scientific professional, or team of qualified scientific professionals that is consistent with criteria established in WAC 365-195-900 through WAC 365-195-925 and RCW 36.70A.172.

C. **Characteristics of a Valid Scientific Process.** In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions, and in developing critical areas policies and development regulations that will be effective in protecting the functions and values of critical areas and buffers. To determine whether information received during the permit review process is reliable scientific information, the Director shall determine whether the source of the information displays the characteristics of a valid scientific process. Such characteristics are as follows:

1. **Peer Review.** The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed;

2. **Methods.** The methods used to obtain the information are clearly stated and reproducible. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to ensure their reliability and validity;

3. **Logical Conclusions and Reasonable Inferences.** The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained;

4. **Quantitative Analysis.** The data have been analyzed using appropriate statistical or quantitative methods;

5. **Context.** The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge; and

6. **References.** The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature, and other pertinent existing information.

D. **Nonscientific Information.** Nonscientific information, such as anecdotal observations, non-expert opinion, and hearsay, may supplement scientific information, but it is not an adequate substitute for valid and available scientific information.

E. **Absence of Valid Scientific Information.** Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the Director shall:

1. Take a "precautionary or a no-risk approach," that strictly limits development and land use activities until the uncertainty is sufficiently resolved; and

2. Require application of an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and nonregulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. An adaptive management program shall:

a. Address funding for the research component of the adaptive management program;

b. Change course based on the results and interpretation of new information that resolves uncertainties; and

c. Commit to the appropriate timeframe and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting protection of critical areas and anadromous fisheries.

20.80.070 Classification and rating of critical areas.

To promote consistent application of the standards and requirements of this chapter, critical areas within the City of Shoreline shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance. Classification of critical areas shall be determined by the City using the following tools:

A. Application of the criteria contained in these regulations;

B. Consideration of the critical area reports submitted by qualified professionals in connection with applications subject to these regulations; and

C. Review of maps adopted pursuant to this chapter. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 2(E), 2000. Formerly 20.80.200.).

20.80.080 Critical area report - Requirements.

A. **Report Required.** If uses, activities, or developments are proposed within, adjacent to, or are likely to impact critical areas or their buffers, an applicant shall provide site-specific information and analysis in the form of critical area report(s) as required in this chapter.. Critical area reports are required in order to identify the presence, extent, and classification/rating of potential critical areas, as well as to analyze, assess, and mitigate the potential adverse impact to or risk from critical areas for a development project. Critical area reports shall use standards for best available science in SMC 20.80.060. Critical area reports for two or more types of critical areas must meet the report requirements for each type of critical area. The expense of preparing the critical area report(s) shall be borne by the applicant. This provision is not intended to expand or limit an applicant's other obligations under WAC 197-11-100.

B. **Preparation by Qualified Professional.** Critical area report(s) shall be prepared by qualified professional(s) as defined in SMC 20.20.042, with the required training and experience specific to the type(s) of critical area(s) present consistent with the requirements of SMC 20.80.240, 20.80.290, and 20.80.340. Proof of licensing, credentials, and resume of the qualified professional(s) preparing the report must be submitted for review by the City to determine if the minimum qualifications are met.

C. **Third Party Review of Critical Area Reports.** Review of required critical area reports by a qualified professional under contract with or employed by the City will be required by the Director at the applicant's expense in any of the following circumstances:

1. The project requires a Critical Area Reasonable Use Permit (CARUP), Critical Area Special Use Permit (CASUP), or Shoreline Variance application; or

2. Third party review is specifically required by the provisions of this chapter for the critical area(s) or critical area buffer(s) potentially being impacted; or

3. When the Director determines such services are necessary to demonstrate compliance with the standards and guidelines of this chapter.

D. **Critical Area Report Types or Sections.** Critical area reports may be met in stages through multiple reports or combined in one report. A critical area report shall include one or more of the following sections or report types unless exempted by the Director and the extent of the potential critical area impacts. The scope and location of the proposed project will determine which report(s) alone or combined are sufficient to meet the critical area report requirements for the impacted critical area type(s). The typical sequence of required sections or reports that will fulfill the requirements of this section include:

1. **Reconnaissance.** The existence, general location, and type of critical areas in the vicinity (within 300 feet for wetlands and fish and wildlife habitat conservation areas and within 200 feet for geologic hazards, shorelines, flood plains, and aquifer recharge areas) of a project site. Determination of whether the project will adversely impact or be at risk from the potential critical areas based on maximum potential buffers and possible application of SMC 20.80.276(D)(7) or SMC 20.80.324(H)(10) should be addressed;

2. **Delineation.** The extent, boundaries, rating or classification, and applicable standard buffers of critical areas where the project area could potentially impact the critical area or its buffer including an assessment of the characteristics of or functions and values of the critical area and buffers identified;

3. **Analysis.** The proposal and impact assessment report documenting the potential project impacts to the critical area and buffers including a discussion of the efforts taken to avoid, minimize, and reduce potential impacts to those areas;

4. **Mitigation.** The potential impacts and mitigation measures designed to meet the requirements of this chapter, in SMC 20.80. 082 *Mitigation plan requirements,* and the standards for the specific critical areas impacted. Mitigation includes, but is not limited to, adjustments to required buffer sizes, best practices to minimize impacts, and critical area or buffer enhancement, restoration, or preservation plans. Mitigation plans include habitat management plans, revegetation, or replanting plans, and restoration plans;

5. **Maintenance and Monitoring.** The goals of the mitigation proposed, performance standards for success, monitoring methods and reporting schedule, maintenance methods and schedule, and contingency actions. Maintenance and monitoring plans must be consistent with the mitigation performance standards and requirements of this chapter, including SMC 20.80.250, 20.80.300, and 20.80.350.

E. **Minimum Report Contents.** At a minimum critical area reports shall contain the following:

1. The name and contact information of the applicant;

2. Provide adequate information to determine compliance with the requirements of the critical area regulations, Chapter 20.80 SMC, including critical area report, impact and hazard assessment, and mitigation requirements specific to each critical area type, as indicated in the corresponding sections of this chapter;

3. The dates, names, and qualifications of the qualified professional(s) preparing the report and documentation of any fieldwork performed on the site;

4. A description of the proposal, proposal location including address and parcel number(s), and a vicinity map for the project;

5. Identification of the development permit(s) requested and all other local, State, and/or Federal critical area-related permits required for the project;

6. A copy of the site plan for the development proposal including:

   a. A map to standard engineering scale depicting critical areas, buffers, the development proposal, and any areas to be altered. In addition to plan size site plans, a legible, reduced (8.5”x11”) copy will be required if noticing is required for the project; and

   b. A scaled depiction and description of the proposed storm water pollution prevention plan, consistent with the adopted stormwater manual, for the development and consideration of impacts to critical areas due to drainage alterations;

7. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, and buffers within the vicinity of the proposed project area (within 300 feet for wetlands and fish and wildlife habitat conservation areas and within 200 feet for geologic hazards, shorelines, floodplains, and aquifer recharge areas);

8 A statement specifying the accuracy of the report and all assumptions made and relied upon;

9. A description of the methodologies used to conduct the critical areas investigation, including references;

10. An assessment of the probable impacts to the critical areas resulting from the proposed development of the site based upon identified findings;

11. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC 20.80.053, Alteration of critical areas, to avoid, minimize, and mitigate impacts to critical areas; and

12. Plans for mitigation required to offset any critical areas impacts, in accordance with SMC 20.80.082 Mitigation plan requirements and the corresponding mitigation performance standards sections of this chapter and including a discussion of the applicable development standards and cost estimates for determination of financial guarantee requirements.

F. **Existing reports.** Unless otherwise provided, a critical areas report may incorporate, be supplemented by or composed, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Director. At the discretion of the Director,

reports previously compiled or submitted as part of a proposal for development may be used as a critical areas report to the extent that the requirements of this section and the report requirements for each specific critical area type are met. Critical areas reports shall be considered valid for five years; after such date the City shall determine whether a revision or additional assessment is necessary. Supplemental critical area report(s) may be required to provide information and analysis to address changes to the project scope and potential impacts or applicable regulations that have been made subsequent to existing, valid critical area reports.

G. **Modifications to report requirements.**

1. **Limitations to Study Area.** The Director may limit the required geographic area of the critical areas report as appropriate if:

   a. The applicant, with assistance from the City of Shoreline, cannot obtain permission to access properties adjacent to the project area; or

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

2. **Modifications to Required Contents.** The applicant may consult with the Director prior to or during preparation of the critical areas report to obtain approval of modifications to the required contents of the report 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. In some cases, such as when it is determined that no geologic hazard area is present, a full report may not be necessary to determine compliance with the critical area regulations, Chapter 20.80 SMC, and in those cases a letter or reconnaissance only report may be provided.

3. **Additional Information Requirements.** The Director may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with this chapter. Additional information that may be required includes, but is not limited to:

   a. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;

   b. Grading and drainage plans; and

   c. Information specific to the type, location, and nature of the critical area. (Ord. 581 § 1 (Exh. 1), 2010; Ord. 515 § 1, 2008; Ord. 406 § 1, 2006; Ord. 398 § 1, 2006).

20.80.082 Mitigation plan requirements. When mitigation is required, the applicant shall submit for approval by the City a mitigation plan as part of the critical area report. Mitigation plans must meet the minimum requirements of SMC 20.80.080 and the applicable mitigation performance standards and requirements for the impacted type(s) of critical area(s) and buffer(s), including but not limited to SMC 20.80.250, 20.80.300, and 20.80.350. When the mitigation plan is submitted separately from other types or sections of the required critical area report(s) the mitigation plan must meet the minimum content requirements of SMC 20.80.080(E) by inclusion or reference to other existing report(s). The mitigation plan shall include:

A. **Environmental Goals and Objectives.** The mitigation plan shall include a written report identifying environmental goals and objectives of the mitigation proposed and including:

1. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area; and

2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed.

B. **Performance Standards.** The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained at the end of the required monitoring period and whether or not the requirements of this chapter have been met.

C. **Detailed Construction Plans.** The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

1. The proposed construction sequence, timing, and duration;

2. Site plans showing grading and excavation details with minimum 2-foot contour intervals;

3. Erosion and sediment control features;

4. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and

5. Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

D. **Monitoring Program and Contingency Plan.**

1. A monitoring program shall be included in the mitigation plan and implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives of the mitigation plan are being met.

2. A contingency plan shall be established for indemnity in the event that the mitigation project is inadequate or fails. Contingency plans include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met. Corrective measures will be required by the City when the qualified professional indicates, in a monitoring report, that the contingency actions are needed to ensure project success by the end of the monitoring period. A performance and maintenance bond or other acceptable financial guarantee is required to ensure the applicant's compliance with the terms of the mitigation agreement consistent with SMC 20.80.120 Financial guarantee requirements.

3. Monitoring programs prepared to comply with this section shall include the following requirements:

a. Scientific procedures shall be used to establish the success or failure of the project. A protocol outlining the schedule for site monitoring (for example, monitoring shall occur in years 0 (as-built), 1, 3, and 5 after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met.

b. For vegetation determinations, permanent sampling points shall be established.

c. Vegetative success shall, at a minimum, equal 80 percent survival of planted trees and shrubs and 80 percent cover of desirable understory or emergent plant species at the end of the required monitoring period. Alternative standards for vegetative success, including (but not limited to) minimum survival standards following the first growing season, may be required after consideration of a recommendations provided in a critical area report or as otherwise required by the provisions of this chapter.

d. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. Monitoring reports on the current status of the mitigation project shall be submitted, consistent with SMC 20.80.082(E), to the City on the schedule identified in the monitoring plan, but not less than every other year. The reports are to be prepared by

a qualified professional and reviewed by the City or a qualified professional retained by the City and should include monitoring information on wildlife, vegetation, water quality, water flow, stormwater storage and conveyance, and existing or potential degradation, as applicable.

e. Monitoring programs shall be established for a period necessary to establish that performance standards have been met, but not for less than a minimum of five (5)years without approval from the Director. Monitoring programs for projects located within the shoreline jurisdiction must also comply with the standards in 20.230.020 and may require a longer monitoring period.

f. If necessary, failures in the mitigation project shall be corrected.

g. Dead or undesirable vegetation shall be replaced with appropriate plantings.

h. Damage caused by erosion, settling, or other geomorphological processes shall be repaired.

i. The mitigation project shall be redesigned (if necessary) and the new design shall be implemented and monitored, as in subsection (D)(3)(d) of this section.

j. Correction procedures shall be approved by a qualified professional and the City.

k. If the mitigation goals are not obtained within the initial monitoring period, the applicant remains responsible for restoration of the impacted values and functions or hazard risk reduction until the mitigation goals agreed to in the mitigation plan are achieved.

E. **Monitoring Reports.** Monitoring reports shall be submitted to the City consistent with the approved monitoring plan. The as-built report required prior to final inspection shall include documentation of departures from the original approved plans, construction supervision provided by the qualified professional, approved project goals and performance standards, baseline data for monitoring per the approved monitoring methods, photos from established photo points, and a site plan showing final mitigation as constructed or installed, monitoring points, and photo points. Subsequent monitoring reports shall include monitoring visit observations, documentation and analysis of monitoring data collected, photos from photo points, determination whether performance standards are being met, and maintenance and/or contingency action recommendations to ensure success of the project at the end of the monitoring period. The applicant shall be responsible for the cost (at the current hourly rate) of review of monitoring reports and site inspections during the monitoring period completed by the City or a qualified professional under contract with or employed by the City.

F. **Cost Estimates.** The mitigation plan shall include cost estimates that will be used by the City to calculate the amounts of financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with SMC 20.80.120 Financial guarantee requirements.

G. **Approved Mitigation Projects – Signature.** On completion of construction, an as-built report for any approved mitigation project shall be prepared and signed off by the applicant's qualified professional and approved by the City. Signature of the qualified professional on the required as-built report and approval by the City will indicate that the construction has been completed as planned.

20.80.085 Pesticides, herbicides and fertilizers on City-owned property.

Pesticides, herbicides and fertilizers which have been identified by State or Federal agencies as harmful to humans, wildlife, or fish, shall not be used in a City-owned riparian corridor, shoreline habitat or its buffer, wetland or its buffer, except as allowed by the Director for the following circumstances:

A. When the Director determines that an emergency situation exists where there is a serious threat to public safety, health, or the environment and that an otherwise prohibited application must be used as a last resort.

B. Compost or fertilizer may be used for native plant revegetation projects in any location.

C. Limited pesticide and herbicide use may be applied pursuant to the King County Noxious Weed Control Board best management practices specific to the species needing control when that is determined to be the best method of control for the location. Federal, state, and local regulations of pesticides and water quality must be followed, including requirements for pesticide applicator licensing from the Washington State Department of Agriculture. (Ord. 398 § 1, 2006)

20.80.090 Buffer areas.

The establishment of buffer areas shall be required for all development proposals and activities in or adjacent to critical areas. In all cases the standard buffer shall apply unless the Director determines that additional buffer width is necessary to protect the functions and values consistent with the provisions of this chapter and the recommendations of a qualified professional. The purpose of the buffer shall be to protect the integrity, function, value and resource of the subject critical area, and/or to protect life, property and resources from risks associated with development on unstable or critical lands. Buffers shall consist of an undisturbed area of native vegetation established to achieve the purpose of the buffer. If the buffer area has previously been disturbed, it shall be revegetated pursuant to an approved mitigation or restoration plan. Buffers shall be protected during construction by placement of a temporary barricade if determined necessary by the City, on-site notice for construction crews of the presence of the critical area, and implementation of appropriate erosion and sedimentation controls. Restrictive covenants or conservation easements may be required to preserve and protect buffer areas. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 2(C), 2000. Formerly 20.80.180.).

20.80.100 Notice to title. A critical area notice to title is required, when a permit or development application is submitted, as a condition of permit issuance or project approval, for development on any property containing a critical area or buffer. The purpose is to inform subsequent purchasers of real property of the existence of critical areas. This requirement can be met through recording of a Notice to Title prepared by the City, establishment of a Critical Area Tract, or recording of Native Growth Protection Area easement consistent with the following provisions.

A. **Notice to Title.** A notice to title is required when a permit is required for development on any property containing a critical area or buffer. The notice to title applicable to the property shall be approved by the Director and City Attorney for compliance with this provision and be filed by the property owner with the King County Recorder's Office. The title holder will have the right to challenge this notice and to have it extinguished if the critical area designation no longer applies. However, the titleholder shall be responsible for completing a critical area report, subject to approval by the Director, before the notice on title can be extinguished. The notice shall state that critical areas or buffers have been identified on the property and the fact that limitations on actions in or affecting the critical area or buffer may exist. The notice shall run with the land. A Critical Area Tract or Native Growth Protection Area easement shall be required to meet the notice to title requirement as follows:

1. **Critical Area Tract.** Subdivisions, short subdivisions, and binding site plans shall establish a separate critical areas tract as a permanent protective measure for wetlands, fish and wildlife habitat conservation areas, and landslide hazard areas and their buffers. The plat or binding site plan for the project shall clearly depict the critical areas tract, and shall include all of the subject critical area and any required buffer, any additional lands included voluntarily by the developer. Restrictions to development within the critical area tract shall be clearly noted on the plat or plan. Restrictions shall be consistent with this chapter for the entire critical area tract. Should the critical area tract include several types of critical areas, the developer may establish separate critical areas tracts; or

2. **Native Growth Protection Area.** NGPA easements shall be required on a property where no subdivision, short subdivision, or binding site plan is proposed or required. Unless otherwise required in this chapter, native growth protection area (NGPA) easements shall be recorded on title for all affected parcels prior to approval of a development agreement, issuance of a Master Development Plan Permit, or issuance of a site development or building permit when two (2) or more dwelling units and/or nonresidential development are proposed on one parcel to delineate and protect those contiguous wetlands, fish and wildlife habitat conservation, and landslide hazard critical areas and their buffers. The easement to be recorded shall clearly depict the critical area and the limits of the NGPA easement and shall include all of the subject critical area(s) and any required buffer(s). Restrictions to development

with in the NGPA easement shall be clearly noted in the easement and shall include the following:

a. That native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, limiting chemical applications of hazardous substances (pesticides, herbicides, fertilizers), maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and

b. The right of the City to enforce the terms of the restriction.

D. **Modifications and Waivers.** Where the standards in this chapter allow for development within the identified critical areas, the Director may modify the language or dimensions of the required critical area tract or native growth protection area easement for consistency with the extent of the development to be permitted.

E. **Proof of Notice.** The applicant shall submit proof that the notice has been recorded on title before the City approves any development permit, including master development plan permits, for the property or, in the case of subdivisions, short subdivisions, binding site plans, or development agreements, at or before recording. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(M), 2000. Formerly 20.80.130.).

20.80.110 Permanent field marking.

A. All critical areas tracts, easements, and dedications, or as recommended by a qualified professional, shall be clearly marked on the site using permanent markings, placed at least every fifty (50) feet, which include the following text:

City of Shoreline Designated Critical Area. Activities, including clearing and grading, removal of vegetation, pruning, cutting of trees or shrubs, planting of nonnative species, and other alterations may be prohibited. Help protect and care for this area. Please contact the City of Shoreline with questions or concerns.

B. It is the responsibility of the landowner to maintain in perpetuity and replace if necessary all permanent field markings. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(N), 2000. Formerly 20.80.140.).

20.80.120 Financial guarantee requirements.

Bonds and other financial guarantees and associated Performance Agreements or Maintenance/Defect/Monitoring agreements shall be required for projects with required mitigation or restoration of impacts to critical areas or critical area buffers consistent with the following:

A. A Performance agreement and bond or other acceptable financial guarantee is required from the applicant when mitigation required pursuant to a development proposal is not completed prior to final permit approval, such as final plat approval or final building inspection. The amount of the performance bond(s) shall equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).

B. A Performance agreement and bond or other acceptable financial guarantee is required from the applicant when restoration is required for remediation of a critical area violation. The amount of the performance bond(s) shall equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).

C. A Maintenance/Defect/Monitoring agreement and bond or other acceptable financial guarantee is required to ensure the applicant's compliance with the conditions of the approved mitigation plan pursuant to a development proposal or restoration plan for remediation of a violation. The amount of the maintenance bond(s) shall equal 25 percent of the cost of the mitigation project (after City mobilization is calculated) in addition to the cost for monitoring for a minimum of five years. The monitoring portion of the financial guarantee may be reduced in proportion to work successfully completed over the period of the bond. The bonding period shall coincide with the monitoring period.

20.80.130 Unauthorized critical area alterations.

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

B. **Requirement for Restoration Plan.** All development shall remain stopped until a restoration plan is prepared by the responsible party and an approved permit is issued by the City. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum requirements described in subsection (C). The Director may, at the responsible party's expense, seek expert advice, including but not limited to third party review by a qualified professional under contract with or employed by the City, in determining if the plan meets the minimum performance standards for restoration. Submittal, review, and approval of required restoration plans for remediation of violations of Chapter 20.80 SMC, Critical Areas shall be completed through a site development permit application process.

C. **Minimum Performance Standards for Restoration.**

1. For alterations to aquifer recharge areas, flood hazard areas, wetlands, and habitat conservation areas, the following minimum performance standards shall be met for the restoration, provided that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:

   a. The pre-violation function and values of the affected critical areas and buffers shall be restored, including water quality and habitat functions;

   b. The pre-violation soil types and configuration shall be replicated;

   c. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically, or pre-violation, found on the site in species types, sizes, and densities. The pre-violation functions and values should be replicated at the location of the alteration; and

   d. Information demonstrating compliance with the requirements in Section 20.80.082 Mitigation Plan Requirements and the applicable mitigation sections for the affected type(s) of critical area(s) and their buffer(s) shall be submitted to the Director with a complete site development permit application.

2. For alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

   a. The hazard shall be reduced to a level equal to, or less than, the pre-violation hazard;

   b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

   c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

D. **Site Investigation.** The Director is authorized to take such actions as are necessary to enforce this chapter. The Director shall prevent property credentials and obtain permission before entering onto private property.

E. **Penalties.** Any responsible party violating of any of the provisions of this chapter may be subject any applicable penalties per SMC 20.30.770 plus the following:

1. A square footage cost of three dollars ($3.00) per square foot of impacted critical area buffer; and a square footage cost of fifteen dollars ($15.00) per square foot of impacted critical area; and

2. A per tree penalty in the amount of $3,000 per non-significant tree and $9,000 per significant tree for trees removed from a critical area or critical area buffer in violation of the provisions of this chapter.

Subchapter 2.

Geologic Hazard Areas

20.80.210 GEOLOGIC HAZARDS - Designation and purpose.

A. Geologic hazard areas are those lands that are susceptible to erosion, landsliding, seismic, or other geological events as identified by WAC 365-190-120. These areas may not be suited for any development activities, because they may pose a threat to public health and safety, or environmental standards.

Areas susceptible to one or more of the following types of hazards shall be designated as Geologic Hazard areas:

1. Landslide hazard;

2. Seismic hazard;

3. Erosion hazard.

B. The primary purpose of geologic hazard area regulations is to avoid and minimize potential impacts to life and property from geologic hazards, conserve soil resources, and minimize structural damage relating to seismic hazards. This purpose shall be accomplished through appropriate levels of study and analysis, application of sound engineering principles, and regulation or limitation of land uses, including maintenance of existing vegetation, regulation of clearing and grading activities, and control of stormwater. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 3(A), 2000).

20.80.220 GEOLOGIC HAZARDS - Classification.

Geologic hazard areas shall be classified according to the criteria in this section as follows:

A. **Landslide Hazard Areas.** Landslide Hazard Areas are those areas potentially subject to landslide activity based on a combination of geologic, topographic and hydrogeologic factors as classified in SMC 20.80.220(B) with slopes 15 percent or steeper within a vertical elevation change of at least 10 feet or all areas of prior landslide activity regardless of slope. A slope is delineated by establishing its toe and top, and is measured by averaging the inclination over at least 10 feet of vertical relief (see Figure 20.80.220(B)). The edges of the geologic hazard are identified where the characteristics of the slope cross section change from one landslide hazard classification to another or no longer meet any classification.

1. The toe of a slope is a distinct topographic break which separates slopes inclined at less than 15 percent from slopes above that are 15 percent or steeper. A distinct topographic break is an area that extends at least 15 feet horizontally away from the slope and that slopes less than 15 percent; and

2. The top of a slope is a distinct topographic break which separates slopes inclined at less than 15 percent from slopes below that are 15 percent or steeper. A distinct topographic break is an area that is at least 15 feet horizontally away from the slope and that slopes less than 15 percent.

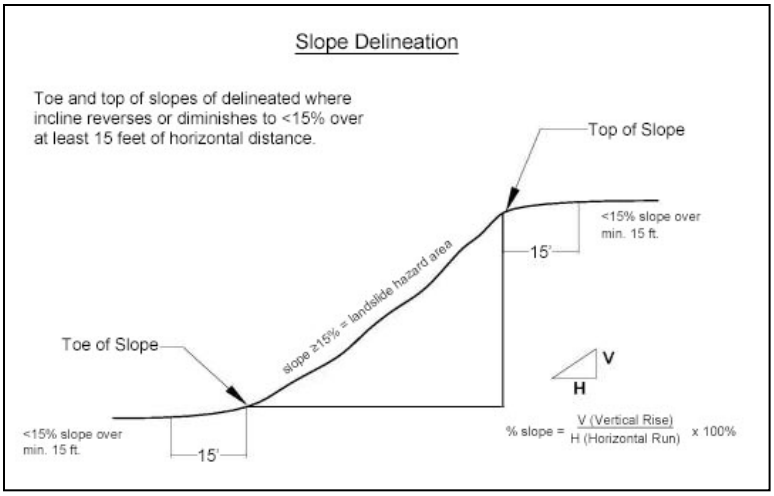

Figure 20.80.220(A): Illustration of slope calcuation for determination of top and toe of landslide hazard area.

3. Landslide hazard area classifications differentiated based on percent slope shall be delineated based on topographic change that extends at least 15 feet horizontally away from the slope and that slopes less than 40 percent, as determined by two (2) foot contour intervals, not averaging over the full landslide hazard area.

B. **Landslide Hazard Area Classification.** Landslide hazard areas are classified as follows:

1. Moderate to High Risk:

a. Areas with slopes between 15 percent and 40 percent and that are underlain by soils that consist largely of sand, gravel or glacial till that do not meet the criteria for Very High Risk areas in (3) below.

b. Areas with slopes between 15 percent and 40 percent that are underlain by soils consisting largely of silt and clay and do not meet the criteria for Very High Risk areas in (3) below; and

c. All slopes of 10 to 20 feet in height that are 40 percent slope or steeper and do not meet the criteria for Very High Risk in (3)(a) or (3)(b) below.

3. Very High Risk:

a. Areas with slopes steeper than 15 percent with zones of emergent water (e.g., springs or ground water seepage);

b. Areas of landslide activity (scarps, movement, or accumulated debris) regardless of slope; and

c. All slopes that are 40 percent or steeper and more than 20 feet in height. Slope height shall include all areas greater than 40 percent slope that are not separated by breaks greater than 15 feet wide (horizontal run) less than 40 percent slope, as illustrated in Figure 20.80.220(B).

[place holder for cross section and plan view illustrations differentiating Moderate to High, and Very High risk landslide hazard areas]

Figure 20.80.220(B): Illustration of landslide hazard area delineation.

C. **Seismic Hazard Areas.** Seismic hazard areas are lands that, due to a combination of soil and ground water

conditions, are subject to risk of ground shaking, lateral spreading, subsidence or liquefaction of soils during earthquakes. These areas are typically underlain by soft or loose saturated soils (such as alluvium) or peat deposits and have a shallow ground water table. These areas are designated as having "high" and "moderate to high" risk of liquefaction as mapped on the *Liquefaction Susceptibility and Site Class Maps of Western Washington State by County* by the Washington State Department of Natural Areas or areas located within landslide hazards areas.

D. **Erosion Hazard Areas.** Erosion hazard areas are lands or areas underlain by soils identified by the U.S. Department of Agriculture Natural Resources Conservation Service (formerly the Soil Conservation Service) as having "severe" or "very severe" erosion hazards. This includes, but is not limited to, the following group of soils when they occur on slopes of 15 percent or greater: Alderwood-Kitsap (AkF), Alderwood gravelly sandy loam (AgD), Kitsap silt loam (KpD), Everett (EvD) and Indianola (InD). (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 3(B), 2000).

20.80.222 GEOLOGIC HAZARDS – Mapping.

A. The approximate location and extent of geologic hazard areas are shown on City of Shoreline critical areas inventory. In addition, resources providing information on the location and extent of geologic hazard areas include:

1. Washington Department of Ecology coastal zone atlas (for marine bluffs);

2. U.S. Geological Survey geologic maps, landslide hazard maps, and seismic hazard maps;

3. Washington State Department of Natural Resources seismic hazard maps for Western Washington, including, but not limited to the *Liquefaction Susceptibility and Site Class Maps of Western Washington State by County*;

4. Washington State Department of Natural Resources slope stability maps;

5. Soils maps produced by the US Department of Agriculture, National Resources Conservation Service; and

6. Geologic hazard data layers maintained in the City of Shoreline geographic information system (GIS).

B. The critical areas inventory and the resources cited above are to be used as a guide for the City of Shoreline Planning & Community Development department, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

20.80.224 GEOLOGIC HAZARDS – Development standards.

A. Activities and uses shall be allowed in geologic hazard areas and their required buffers only as provided for in this chapter.

B. **Activities allowed in all geologic hazard areas and buffers.** The activities listed below are allowed in the identified geologic hazard areas types pursuant to SMC 20.80.040 *Allowed Activities*. Exemptions are listed in SMC 20.80.030, but do not apply within the shoreline jurisdiction. These activities do not require submission of a critical area report.

1. All allowed activities per SMC 20.80.040;

2. Installation of fences as allowed without a building permit in Chapter 20.50 Development standards;

3. Non-structural interior remodel, maintenance, or repair of structures which do not meet the standards of this chapter, if the maintenance or repair does not increase the footprint or height of the structure and there

is no increased risk to life or property as a result of the proposed maintenance or repair; and

4. **Erosion Hazard Areas.** If the site does not contain another type of critical area or critical area buffer and does not exceed any other threshold contained in SMC 20.50.320, then up to 1,500 square feet may be cleared on any lot in an erosion hazard area without a permit.

C. **Alteration.** The City shall approve, condition, or deny proposals in a geologic hazard area based upon the effective mitigation of risks posed to property, health and safety. The objective of mitigation measures shall be to render a site containing a geologic hazard as safe as one not containing such hazard. Conditions may include limitations of proposed uses, modification of density, alteration of site layout, and other appropriate changes to the proposal. Practices consistent with the adopted stormwater manual shall be incorporated into any project that alters geologic hazard areas to prevent increased risk of the hazard during and after construction.

Where potential impacts cannot be effectively mitigated to eliminate a significant risk to public health, safety and property, or important natural resources, the proposal shall be denied, except as granted by a critical area special use or critical area reasonable use permit per SMC 20.30.333 and 20.30.336, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction.

D. **Alteration of Moderate to High Risk Landslide Hazards.**
Development activities and uses that result in unavoidable alterations may be permitted in moderate to high risk landslide hazard areas or their buffers in accordance with an approved geologic hazard critical area report. The recommendations contained within the critical area report shall be incorporated into the proposed alteration of the landslide hazard area or their buffers.

The critical area report shall certify that the risk of damage from the proposal, both on-site and off-site, are minimal subject to the conditions set forth in the report, that the proposal will not increase the risk of occurrence of the potential landslide hazard, and that measures to eliminate or reduce risks have been incorporated into the report's recommendations and project development plans.

E. **Alteration of Very High Risk Landslide Hazard Areas.**
Alterations of a very high risk landslide hazard area and/or buffer may only occur for activities for which a critical area report with a hazards analysis is submitted and certifies that:

1. The development will not increase surface water discharge or sedimentation on site or to adjacent properties beyond pre-development conditions;

2. The development will not decrease slope stability on the site or on adjacent properties;

3. Such alterations will meet other critical areas regulations; and

4. The design criteria in subsection (F) are met.

F. **Design Criteria for Alteration of Very High Risk Landslide Hazard Areas.** Development within a landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative project design provides greater short and long-term slope stability while meeting all other provisions of this Chapter. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design criteria are:

1. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Proposed alteration of natural slopes, that does not include structures, shall not decrease the factor of safety for landslide occurrences below the limits of 1.3 for static conditions and 1.0 for seismic. Where the existing conditions are below these limits the proposed development shall increase the factor of safety to these limits or will not be permitted.

Analysis of dynamic conditions shall be based on the seismic event as established by the current version of the International Building Code;

2. New structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;

3. New 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;

4. New structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

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

6. Where the existing natural slope area cannot be retained undisturbed with native vegetation, the use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and

7. Development shall be designed to minimize impervious lot coverage and preserve native vegetation and trees to the maximum extent practicable.

G. **Additional Requirements for Alteration of Very High Hazard Landslide Areas.**

1. Prior to application the applicant shall meet the requirements of and conduct a neighborhood meeting for all property owners whose properties adjoin the subject property and properties that include part of the subject property's Very High Risk Landslide Hazard and its standard 50-foot buffer.

2. Prior to permit issuance the property owner shall sign and record on title a covenant with the City which acknowledges and accepts the risks, waives any rights to claims against the City, indemnifies and holds harmless the City against claims, losses, and damages, informs subsequent successors of the property of the risks and the covenant, advisability of obtaining added insurance, and record the covenant on title.

3. Prior to permit issuance the piling and excavation contractors shall submit insurance bonding documentation that include coverage for subsidence and underground property damage, listing the City as an additional insured. The Director may require adequate bonds and/or insurance to cover potential claims for property damage that may arise from or be related to excavation or fill within a landslide-prone area when the depth of the proposed excavation exceeds four feet (4') and the bottom of the proposed excavation is below the one hundred percent (100%) slope line forty-five (45) degrees from a horizontal line) from the property line. The Director may require such bonds and insurance in other circumstances where the Director determines that there is a potential for significant harm to a critical area or buffer during the construction process.

4. During permitted construction on Very High Risk Landslide Hazard Areas and buffers a qualified professional Geotechnical Special Inspector shall be a third party contractor and authorized as a deputy of the building official to insure that the development is built as permitted and to insure that slope safety problems are prevented.

5. If the building official has reasonable grounds to believe that an emergency exists because significant changes in conditions at a project site or in the surrounding area may have occurred since a permit was issued, increasing the risk of damage to the proposed development, to neighboring properties, or to the drainage basin, the Director may by letter or other reasonable means of notification suspend the permit until the applicant has submitted a letter of certification.

6. The building official may require a letter of certification based on such factors as the presence of known slides, indications of changed conditions at the site or the surrounding area, or other indications of

unstable soils.

a. The letter of certification shall be from the current project qualified professional geotechnical engineer of record stating that a qualified professional geotechnical engineer has inspected the site and area surrounding the proposed development within the sixty (60) days preceding submittal of the letter; and that:

b. In the project geotechnical engineer's professional opinion no significant changes in conditions at the site or surrounding area have occurred that render invalid or out-of-date the analysis and recommendations contained in the technical reports and other application materials previously submitted to the City as part of the application for the permit; or that

c. In the project geotechnical engineer's professional opinion, changes in conditions at the site or surrounding area have occurred that require revision to project criteria and that all technical reports and any necessary revised drawings that account for the changed conditions have been prepared and submitted.

H. **Alteration of Seismic Hazard Areas.** Development activities and uses in seismic hazard areas may be permitted, not subject to 20.80.050(1), based on review of a critical area report demonstrating that the project is consistent with SMC 20.80.050(2-6). The report must certify that the risk of damage from the proposal, both on-site and off-site, are minimal subject to the conditions set forth in the report, that the proposal will not increase the risk of occurrence of the potential hazard, and that measures to eliminate or reduce risks have been incorporated into the report's recommendations. The report must include the following:

1. For one-story and two-story detached residential structures a qualified professional shall conduct an evaluation of site response and liquefaction potential based on current mapping, site reconnaissance, research of nearby studies; or

2. For all other proposals, the applicant shall conduct an evaluation of site response and liquefaction potential including sufficient subsurface exploration to determine the site coefficient for use in the static lateral force procedure described in the International Building Code.

I. **Alteration of Erosion Hazard Areas.** Development activities and uses in erosion hazard areas may be permitted, not subject to 20.80.050(1), based on review of a critical area report demonstrating that the project is consistent with SMC 20.80.050(2-6) and the following provisions:

1. All development proposals on sites containing erosion hazard areas shall include a stormwater pollution prevention plan consistent with the requirements of the adopted stormwater manual and a mitigation plan to ensure revegetation and permanent stabilization of the site. Specific requirements for revegetation in mitigation plans shall be consistent with the mitigation plan requirements in SMC 20.80.082 and the mitigation performance standards for geologic hazard areas in SMC 20.80.250. Revegetation for site stabilization may be combined with required landscape, tree retention, and/or other critical area mitigation plans as appropriate.

2. All subdivisions, short subdivisions or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:

a. Except as provided in this section, existing vegetation shall be retained on all lots until building permits are approved for development on individual lots;

b. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to implement the revegetation plan in those areas that have been impacted prior to final inspection of the site development permit or the issuance of any building permit for the subject property;

c. Clearing of vegetation on individual lots may be allowed prior to building permit approval if the

City determines that:

i. Such clearing is a necessary part of a large scale grading plan,

ii. It is not feasible to perform such grading on an individual lot basis, and

iii. Drainage from the graded area will meet established water quality standards.

3. Where the City determines that erosion from a development site poses a significant risk of damage to downstream receiving water, the applicant shall be required to provide regular monitoring of surface water discharge from the site. If the project does not meet water quality standards, the City may suspend further development work on the site until such standards are met.

4. The City may require additional mitigation measures in erosion hazard areas, including, but not limited to, the restriction of major soil-disturbing activities associated with site development between October 1st and April 30th to meet the stated purpose contained in SMC 20.80.010 and 20.80.210.

5. The use of hazardous substances, pesticides and fertilizers in erosion hazard areas may be prohibited by the City.

20.80.230 GEOLOGIC HAZARDS – Required buffer areas.

A. Buffers for geologic hazard area shall be maintained as undisturbed native vegetation consistent with SMC 20.80.090. Building and other improvement setbacks will be required in addition to buffers as recommended by the qualified professional to allow for landscaping, access around structures for maintenance, and location of stormwater facilities at safe distances from geologic hazard areas where native vegetation is not necessary to reduce the risk of the hazard.

B. Required buffer widths for geologic hazard areas shall reflect the sensitivity of the hazard area and the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the area.

C. In determining the appropriate buffer width, the City shall consider the recommendations contained in a geotechnical critical area report required by these regulations.

D. For moderate to high landslide hazard areas, the critical area report shall recommend whether buffers should be required and the width of those buffers as well as recommending any additional setbacks for buildings and stormwater facilities adequate to certify no increase in the risk of the hazard.

E. For very high risk landslide hazard areas, the standard buffer shall be 50 feet from all edges of the landslide hazard area. Larger buffers may be required as needed to eliminate or minimize the risk to people and property based on a geotechnical critical area report. The standard buffer may be reduced when geotechnical studies demonstrate and the qualified professional certifies that the reduction will not increase the risk of hazard to people or property, on- or off-site, however the minimum shall be 15 feet.

F. Landslide hazard areas and their associated buffers shall be placed either in a separate tract on which development is prohibited, protected by execution of an easement, dedicated to a conservation organization or land trust, or similarly preserved through a permanent protective mechanism acceptable to the City. The location and limitations associated with the critical landslide hazard and its buffer shall be shown on the face of the deed or plat applicable to the property and shall be recorded with the King County Recorder's Office. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 3(C), 2000).

20.80.240 GEOLOGIC HAZARDS – Critical area report requirements.

A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a geologic hazard area, a critical area report shall be required. Critical area report

requirements for geologic hazard areas are met through submission to the Director of one or more geologic hazard critical area reports (also referred to as geotech or geotechnical engineering reports). In addition to the general critical areas report requirements of SMC 20.80.080, critical areas reports for geologic hazard areas must meet the requirements of this section. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

B. **Preparation by a Qualified Professional.** Critical areas reports for potential geologic hazard areas shall be prepared, stamped, and signed by a qualified geotechnical engineer or engineering geologist licensed in the state of Washington, with minimum required experience, per SMC 20.20.042, analyzing geologic, hydrologic, and ground water flow systems, and who has experience preparing reports for the relevant type of hazard. If mitigation measures are necessary, the report detailing the mitigation measures and design of the mitigation shall be prepared by a qualified professional with experience stabilizing geologic hazard areas with similar geotechnical properties and by a qualified vegetation ecologist, landscape architect or arborist with experience designing and monitoring vegetative stabilization of geologic hazard areas.

C. **Third Party Review Required.** Critical areas studies and reports on geologically hazardous areas shall be subject to third party review consistent with SMC 20.80.080(C) and in any of the additional following circumstances:

1. A buffer reduction or alteration of the critical area or buffer is proposed for a very high risk landslide hazard areas; or

2. Mitigation is required within a very high risk landslide hazard area following any alterations allowed in response to emergencies per SMC 20.80.030(A).

D. **Minimum Report Contents for Geologic Hazard Areas.** A critical area report for geologic hazard areas shall include a field investigation and contain an assessment of whether or not each type of geologic hazard identified in SMC 20.80.210 is present or not present and if the proposed development of the site will increase the risk of the hazard on or off site. The written critical area report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC 20.80.080(E);

2. Documentation of any fieldwork performed on the site, including field data sheets for soils, test pit locations, baseline hydrologic data, site photos, etc.;

3. A description of the methodologies used to conduct the geologic hazard areas delineations, classifications, hazards assessments and/or analyses of the proposal impacts including references;

4. **Site and Construction Plans.** The report shall include a copy of the site plans for the proposal, drawn at an engineering scale, showing:

   a. The type and extent of geologic hazard areas, any other critical areas, and buffers on, adjacent to, within 200 feet of, or that are likely to impact or be affected by the proposal;

   b. Proposed development, including the location of existing and proposed structures, fill, significant trees to be removed, vegetation to be removed, storage of materials, and drainage facilities;

   c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report;

   d. Height of slope, slope gradient, and cross-section of the project area;

   e. The location of springs, seeps, or other surface expressions of ground water on or within 200 feet of

the project area or that have the potential to affect or be affected by the proposal;

f. The location and description of surface water on or within 200 feet of the project area or that have the potential to be affected by the proposal; and

g. Clearing limits, including required tree protection consistent with SMC 20.50.370.

5. **Stormwater Pollution Prevention Plan (SWPPP)**. For any development proposed with land disturbing activities on a site containing a geologic hazard area, a stormwater pollution prevention plan (also known as an erosion and sediment control plan) shall be required. The SWPPP, in compliance with the requirements of SMC Chapter 13.10, shall be included in the critical area report or be referenced if it is prepared separately.

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

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

b. A summary of the existing site conditions, including:

i. the surface topography, existing features, and vegetation found in the project area and in all hazard areas addressed in the report;

ii. surface and subsurface geology and soils to sufficient depth based on data from site-specific explorations;

iii. geologic cross-section(s) displaying the critical design slope conditions;

iv. surface and ground water conditions; and

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

7. **Analysis of Proposal.** The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the identified hazard area(s), the subject property, and affected adjacent properties. The hazards analysis component of the critical areas report shall include the following based on the type(s) of geologic hazard areas identified:

a. An estimate of the present stability of the subject property, the stability of the subject property during construction, the stability of the subject property after all development activities are completed and a discussion of the relative risks and slide potential relating to adjacent properties during each stage of development including the effect construction and placement of structures, clearing, grading, and removal of vegetation will have on the slope over the estimated life of the structure;

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

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

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

e. Recommendations for the minimum buffer consistent with 20.80.230, or as recommended, and recommended minimum drainage and building setbacks from any geologic hazard based upon the geotechnical analysis. Buffers must be maintained consistent with SMC 20.80.090, however the qualified professional may recommend additional setbacks for drainage facilities or structures which do not have to be maintained as undisturbed native vegetation;

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

E. **Additional Technical Information Requirements for Landslide Hazard Areas**. The technical information required in a critical area report for a project within a landslide hazard area shall also include the following:

a. Compliance with the requirements of SMC 20.80.224(D) for alterations proposed in moderate to high risk landslide hazard areas;

b. Compliance with the requirements of SMC 20.80.22(E-G) for alterations proposed in very high risk landslide hazard areas;

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

d. Recommendations for drainage and subdrainage improvements;

e. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and

f. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate.

F. **Additional Technical Information Requirements for Seismic Hazard Areas.** The technical information required in a critical area report for a project within a seismic hazard area shall also include the following:

a. A complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement);

b. Additionally, a geotechnical engineering report for a seismic hazard area shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented; and

c. Any additional information or analysis necessary to demonstrate compliance with the standards for alteration in seismic hazard areas in SMC 20.80.224(H).

G. **Limited Report Requirements for Stable Erosion Hazard Areas.** When recommended by the qualified professional for sites only overlain by erosion hazard areas with suitable slope stability, and no other type of critical area or buffer, detailed critical areas report requirements may be waived. Report requirements for stable erosion hazard areas may be met through construction documents that shall include at a minimum a stormwater pollution plan prepared in compliance with requirements set forth in SMC Chapter 13.10.

H. **Mitigation of Long-Term Impacts.** When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the preexisting level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require

regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the preexisting conditions following abandonment of the activity.

I. **Additional Information.** When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.80.082 and the geologic hazards mitigation performance standards and requirements of SMC 20.80.250.

2. A request for consultation with the Washington Department of Fish and Wildlife (DFW) , Washington Department of Ecology (Ecology), local Native American Indian Tribes, or other appropriate agency; and

3. Detailed surface and subsurface hydrologic features both on and adjacent to the site. (Ord. 695 § 1 (Exh. A), 2014; Ord. 398 § 1, 2006; Ord. 352 § 1, 2004; Ord. 324 § 1, 2003; Ord. 299 § 1, 2002; Ord. 238 Ch. VIII § 3(D), 2000).

20.80.250 GEOLOGIC HAZARDS - Mitigation performance standards and requirements.

A. **Requirements for Mitigation.** Mitigation is required for proposed adverse impacts and increased risks of alteration of geologic hazard areas must be sufficient to result in no increased risk of the hazard consistent with the development standards in SMC 20.80.224. Mitigation plans shall be submitted as part of the required critical area report consistent with the requirements of SMC 20.80.080, 20.80.082, and 20.80.240 and this section. When revegetation is required as part of the mitigation, then the standards of SMC 20.80.350(H) shall be applied, excluding those standards that are wetland specific.

B. **Preference of Mitigation Actions.** Methods to achieve mitigation for alterations of geologic hazard areas shall be approached in the following order of preference:

1. **Protection.** Mitigation measure that increase the protection of the identified geologic hazard areas include but are not limited to:

a. Increased or enhanced buffers;

b. Setbacks for permanent and temporary structures;

c. Reduced project scope; and

f. Retention of existing vegetation;

2. **Restoration.** Restoration of native vegetation.

3. **Engineered Stabilization.** Engineered design of geologic hazard stabilization to ensure no increased risk of the hazard due to the proposal with preference for bioengineering over structural engineered solutions.

C. **Performance Standards.** The following performance standards shall apply to any mitigations for development proposed within geologic:

1. Geotechnical studies shall be prepared by a qualified professional to identify and evaluate potential hazards and to formulate mitigation measures;

2. Construction methods will reduce or not adversely affect geologic hazards;

3. Site planning to minimize disruption of existing topography and natural vegetation;

4. Significant trees shall be preserved, unless removal is unavoidable or otherwise allowed under the provisions of this chapter;

5. Minimize impervious surface coverage.

6. Replant disturbed areas as soon as feasible pursuant to an approved landscape plan. When planting is required, the following standards shall apply:

   a. Native species, indigenous to the region, shall be used in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers;

   b. Plant selection shall be consistent with the existing or projected site conditions, including slope aspect, moisture, and shading;

   c. Plants should be commercially available or available from local sources;

   d. Plant species high in food and cover value for fish and wildlife shall be used;

   e. Mostly perennial species should be planted;

   f. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided;

   g. Plant selection, densities, and placement of plants must be determined by a qualified professional and shown on the design plans;

   h. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City;

   i. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;

   j. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process;

   k. An irrigation system shall be installed, if necessary, for the initial establishment period; and

   l. The heterogeneity and structural diversity of vegetation shall be emphasized in landscaping;

7. Clearing and grading regulations as set forth by the City, in SMC 20.50.290 through 20.50.370, shall be followed.

8. The use of retaining walls that allow maintenance of existing natural slope areas are preferred over graded slopes.

9. All construction specifications and methods shall be approved by a qualified professional and the City.

10. Construction management shall be provided by a qualified professional. Ongoing work on-site shall be inspected by the City.

11. Site drainage design and temporary erosion and sedimentation controls, pursuant to an approved stormwater pollution prevention plan consistent with the adopted stormwater manual, shall be implemented during and after construction.

12. Undevelopable geologic hazard areas larger than one-half acre shall be placed in a separate tract, provided this requirement does not make the lot nonconforming.

13. A monitoring program shall be prepared for construction activities permitted in geologic hazard areas.

14. Development shall not increase instability or create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion and adequate mitigation must be incorporated in to the project design to comply with the requirements of SMC 20.80.224 and 20.80.230. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 3(E), 2000).

Subchapter 3.

Fish and Wildlife Habitat Conservation Areas

20.80.260 FISH AND WILDLIFE HABITAT - Description and purpose.

A. Fish and wildlife habitat conservation areas (or habitat conservation areas) are lands managed for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. Fish and wildlife habitat conservation areas include areas with which State and Federal designated threatened, endangered, and sensitive species have a primary association as well as priority species and habitats listed by the Washington State Department of Fish and Wildlife, including corridors which connect priority habitat, and those areas which provide habitat for species of local significance which have been or may be identified in the City of Shoreline Comprehensive Plan. Fish and wildlife habitat conservation areas also include stream areas and buffers which provide important habitat corridors; help maintain water quality; store and convey stormwater and floodwater; recharge groundwater; and serve as areas for recreation, education, scientific study, and aesthetic appreciation.

B. The purpose of fish and wildlife habitat conservation areas shall be to protect and conserve the habitat of fish and wildlife species and thereby maintain or increase their populations. The primary purpose of this section is to minimize development impacts to habitat conservation areas and to:

1. Protect federal and state listed habitats and species and give special attention to protection and enhancement of anadromous fish populations; and

2. Maintain a diversity of species and habitat within the City; and

3. Coordinate habitat protection to maintain and provide habitat connections; and

4. Help maintain air and water quality and control erosion.

(Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(A), 2000).

20.80.270 FISH AND WILDLIFE HABITAT – Classification and designation.

Fish and wildlife habitat conservation areas are those areas designated by the City based on review of the best available science; input from Washington Department of Fish and Wildlife, Washington Department of Ecology, U.S. Army Corps of Engineers, and other agencies; and any of the following criteria:

A. **Areas where State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.**

1. Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current listing status. Federally designated endangered and threatened species known to be identified and mapped by DFW in Shoreline include but may not be limited to the following:

a. Chinook *(Oncrhynchus tshawytscha)*;

b. Coho *(Oncrhynchus kisutch)*; and

c. Southern Resident Orca or Killer Whales *(Orcinus orca).*

2. State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the state of Washington identified by the Washington Department of Fish and Wildlife, that are in danger

of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species) and WAC 232-12-011 (state threatened and sensitive species). The state Department of Fish and Wildlife maintains the most current listing and should be consulted for current listing status. State designated endangered, threatened, and sensitive species known to be identified and mapped by DFW in Shoreline include but may not be limited to the following:

a. Northern goshawk *(Accipiter gentilis)*;

b. Osprey *(Pandion haliaetus)*; and

c. Purple martin *(Progne subis*).

B. **State Priority Habitats and Areas Associated With State Priority Species.** Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the State Department of Fish and Wildlife (DFW). Priority habitats and species known to be identified and mapped by DFW in Shoreline include but may not be limited to the following:

1. Biodiversity areas and corridors identified and mapped along Boeing Creek and in and around Innis Arden Reserve Park;

2. Chinook/Fall Chinook *(Oncrhynchus tshawytscha)*;

3. Coho *(Oncrhynchus kisutch)*;

4. Dungeness crab;

5. Estuarine intertidal aquatic habitat;

6. Geoduck;

7. Northern goshawk *(Accipiter gentilis)*;

8. Pacific sand lance *(Ammodytes hexapterus)*;

9. Purple martin *(Progne subis*);

10. Resident coastal cutthroat *(Oncrhynchus clarki)*;

11. Surf smelt *(Hypomesus pretiosus)*;

12. Waterfowl concentrations at Ronald Bog (Ronald Bog is not a shoreline of the state subject to the SMP); and

13. Winter steelhead *(Oncrhynchus mykiss).*

C. **Commercial and Recreational Shellfish Areas.** These areas include all public and private tidelands or bedlands suitable for shellfish harvest, including shellfish protection districts established pursuant to Chapter 90.72 RCW.

D. **Kelp and Eelgrass Beds and Herring and Smelt Spawning Areas.**

E. **Waters of the State.** Waters of the state include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-031.

Streams are those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses, unless they are used by fish or are used to convey streams naturally occurring prior to construction. A channel or bed need not contain water year-round; provided that there is evidence of at least intermittent flow during years of normal rainfall. Streams shall be classified in accordance with the Washington Department of Natural Resources water typing system (WAC 222-16-030) hereby adopted in its entirety by reference and summarized as follows:

1. **Type S:** streams inventoried as "shorelines of the state" under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW;

2. **Type F:** streams which contain fish habitat;

3. **Type Np:** perennial nonfish habitat streams;

4. **Type Ns:** seasonal nonfish habitat streams; and

5. **Piped stream segments:** those segments of streams, regardless of their type, that are fully enclosed in an underground pipe or culvert.

6. Not all streams that are known to exist with fish habitat support anadromous fish populations, or have the potential for anadromous fish occurrence because of obstructions, blockages or access restrictions resulting from existing conditions. Therefore, in order to provide special consideration of and increased protection for anadromous fish in the application of development standards, Shoreline streams shall be further classified as follows:

   a. **Anadromous fishbearing streams.** These streams include:

      i. Streams where naturally recurring use by anadromous fish populations has been documented by a government agency;

      ii. Streams that are fish passable or have the potential to be fish passable by anadromous populations, including those from Lake Washington or Puget Sound, as determined by a qualified professional based on review of stream flow, gradient and natural barriers (i.e. natural features that exceed jumping height for salmonids), and criteria for fish passability established by the Washington Department of Fish and Wildlife; and

      iii. Streams that are planned for restoration in a six-year capital improvement plan adopted by a government agency or planned for removal of the private dams that will result in a fish passable connection to Lake Washington or Puget Sound; and

   b. **Nonanadromous fishbearing streams.** These include streams which contain existing or potential fish habitat, but do not have the potential for anadromous fish use due to natural barriers to fish passage, including streams that contain resident or isolated fish populations.

   The general areas and stream reaches with access for anadromous fish are indicated in the City of Shoreline Stream and Wetland Inventory and Assessment (2004) and basin plans. The potential for anadromous fish access shall be confirmed in the field by a qualified professional as part of a critical area report.

F. The City designates all areas that meet one or more of the above criteria, regardless of any formal identification, as critical areas and as such they are subject to the provisions of this chapter. They shall be managed consistent

with best available science; including the Washington State Department of Fish and Wildlife's Management Recommendations for Priority Habitat and Species. The following fish and wildlife habitat conservation areas are specifically designated and this designation does not preclude designation of additional areas as provided in subsection (A) of this section:

1. All regulated streams and their associated buffers as determined by a qualified specialist.

2. The waters, bed and shoreline of Puget Sound up to the ordinary high water mark. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(B), 2000).

20.80.272 FISH AND WILDLIFE HABITAT - Mapping.

A. **Mapping.** The approximate location and extent of fish and wildlife habitat areas are shown in the following maps and inventories herby adopted:

1. Washington Department of Fish and Wildlife Priority Habitat and Species maps;

2. Washington State Department of Natural Resources, Official Water Type Reference maps, as amended;

3. Washington State Department of Natural Resources Puget Sound Intertidal Habitat Inventory maps;

4. Washington State Department of Natural Resources Shorezone Inventory;

5. Washington State Department of Natural Resources Natural Heritage Program mapping data;

6. Washington State Department of Health Annual Inventory of Shellfish Harvest Areas;

7. Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors reports published by the Washington Conservation Commission;

8. Washington State Department of Natural Resources State Natural Area Preserves and Natural Resource Conservation Area maps; and

9. Fish and Wildlife habitat data layers, such as stream and wetland data, maintained in the City of Shoreline geographic information system (GIS).

B. The inventories and cited resources are to be used as a guide for the City of Shoreline, project applicants, and/or property owners, and may be continuously updated as new fish and wildlife habitat conservation areas are identified or critical area reports are submitted for known habitat conservation areas. They are a reference and do not provide a final critical area designation.

20.80.274 FISH AND WILDLIFE HABITAT - General development standards.

A. Activities and uses shall be prohibited in fish and wildlife habitat conservation areas and associated buffers, except as provided for in this subchapter. Unless specifically exempted under SMC 20.80.030 and or allowed under 20.80.040 or subsection C below or SMC 20.80.276, development activities and uses that result in alteration of fish and wildlife habitat conservation areas shall be subject to the critical area reasonable use and special use provisions of SMC 20.30.333 and 20.30.336 or subject to the provisions of the Shoreline Master Program where located within the shoreline jurisdiction.

B. Any proposed alterations permitted, consistent with special use or reasonable use review, to fish and wildlife habitat conservation area shall require the preparation of a habitat conservation area mitigation plan (commonly referred to as a habitat management plan to mitigate for the adverse impacts of the proposal, consistent with the requirements of the Washington State Department of Fish and Wildlife Priority Habitat Program. The habitat management plan shall be prepared by a qualified professional and reviewed and approved by the City, consistent with the standards for mitigation plans in SMC 20.80.082 and 20.80.300.

C. **Activities Allowed in Fish and Wildlife Habitat Conservation Areas.** These activities listed below are allowed in fish and wildlife habitat conservation areas subject to applicable permit approvals. Additional exemptions are listed in the provisions of SMC 20.80.030 and 20.80.040. These activities do not require the submission of a critical area report and are exempt from monitoring and financial guarantee requirements, except where such activities result in a loss of the functions and values of a fish and wildlife habitat conservation area or related buffer. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing habitat conservation area.

2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the habitat conservation area by changing existing topography, water conditions, or water sources.

3. Permitted alteration to a legally constructed structure existing within a fish and wildlife habitat conservation area buffer that does not increase the footprint of the development or hardscape or increase the impact to a fish and wildlife habitat conservation area.

4. Buildings and structures (excluding fences and arbors) are prohibited within the required 10 foot stream buffers for a piped stream segment. Other development activities, such as paving, stormwater facilities, clearing (including tree removal) and grading are allowed if no other critical area or buffer is present.

D. **Non-indigenous Species.** No plant, wildlife, or fish species not indigenous to the region shall be introduced into a fish and wildlife habitat conservation area unless authorized by a state or federal permit or approval.

E. **Mitigation and Contiguous Corridors.** Mitigation sites shall be located to preserve or achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

F. **Approvals of Activities.** The Director shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on the best available science and may include, but are not limited to, the following:

1. Establishment of buffers;

2. Preservation of important vegetation and/or habitat features such as snags and downed wood specific to

the priority wildlife species in the habitat conservation area;

3. Limitation of access to the habitat area, including fencing to deter unauthorized access;

4. Seasonal restriction of construction activities;

5. Establishment of a duration and timetable for periodic review of mitigation activities; and

6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

G. **Mitigation and Equivalent or Greater Biological Functions.** Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic and hydrologic functions and shall include mitigation for adverse impacts upstream from, downstream from, or within the same shoreline reach as the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis. Mitigation shall be located on-site except when demonstrated that a higher level of ecological functioning would result from an off-site location. Mitigation shall be detailed in a fish and wildlife habitat conservation area mitigation plan consistent with the requirements of SMC 20.80.300.

H. **Approvals and the Best Available Science.** Any approval of alterations or impacts to a habitat conservation area shall be supported by the best available science.

I. **Buffers.**

1. **Establishment of Buffers.** The Director shall require the establishment of buffer areas for activities adjacent to habitat conservation areas in order to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the management recommendations issued by the Washington Department of Fish and Wildlife.

2. **Seasonal Restrictions.** When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.

3. **Habitat Buffer Averaging.** The Director may allow the recommended habitat area buffer width to be reduced in accordance with a critical area report, the best available science, and the management recommendations issued by the Washington Department of Fish and Wildlife, only if:

a. It will not reduce stream or habitat functions;

b. It will not adversely affect fish and wildlife habitat;

c. It will provide additional natural resource protection, such as buffer enhancement;

d. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

e. The buffer area width is not reduced by more than twenty-five percent (25%) in any location.

J. **Signs and Fencing of Habitat Conservation Areas.**

1. **Temporary Markers.** The outer perimeter of the fish and wildlife habitat conservation area or buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary “clearing limits” fencing in such a way as to ensure that no unauthorized intrusion will occur.

The marking is subject to inspection by the Director prior to the commencement of permitted activities during the preconstruction meeting required under SMC 20.50.330(E). This temporary marking and fencing shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent Signs.** As a condition of any permit or authorization issued pursuant to this chapter, the Director may require that applicant to install permanent signs along the boundary of a habitat conservation area or buffer, when recommended in a critical area report or otherwise required by the provisions of this chapter.

   a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another material of equal durability and nonhazardous material. Signs must be posted at an interval of one per lot or every fifty (50) feet, whichever is less and must be maintained by the property owner in perpetuity. The signs shall be worded consistent with the text specified in SMC 20.80.110 or with alternative language approved by the Director.

   b. The provisions of subsection (a) of this section may be modified as necessary to assure protection of sensitive features or wildlife.

3. **Fencing.** Fencing installed as part of a proposed activity or as required in this subsection shall be design so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts. Permanent fencing shall be required at the outer edge of the critical area buffer under the following circumstances, provided that the Director may waived this requirement:

   a. As part of any development proposal for subdivisions, short plats, multifamily, mixed use, and commercial development where the Director determines that such fencing is necessary to protect the functions of the critical area, provided that breaks in permanent fencing may be allowed for access to allowed uses (SMC 20.80.274(C) and 20.80.280(D));

   b. As part of development proposals for parks where the adjacent proposed use is active recreation and the Director determines that such fencing is necessary to protect the functions of the critical area;

   c. When buffer averaging is part of a development proposal;

   d. When buffer reductions are part of a development proposal; or

   e. At the Director's discretion to protect the values and functions of a critical area as demonstrated in a critical area report. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area.

   f. The applicant shall be required to install a permanent fence around the habitat conservation area or buffer when domestic grazing animals, only as allowed under SMC 20.40.240, are present or may be introduced on site.

K. **Subdivisions.** The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:

1. Land that is located wholly within a habitat conservation area or its buffer may not be subdivided;

2. Land that is located partially within a habitat conservation area or its buffer may be divided provided that the developable portion of each new lot and its access is located outside of the habitat conservation area or

its buffer and meets the minimum lot size requirements of SMC 20.50.020.

3. Access roads and utilities serving the proposed subdivision may be permitted within the habitat conservation area and associated buffers only if the applicant's qualified professionals demonstrate and the City determines that no other feasible alternative exists, all unavoidable impacts are fully mitigated, and when consistent with this chapter.

20.80.276 FISH AND WILDLIFE HABITAT – Specific habitat development standards.

In addition to the provision in SMC 20.80.274, the following development standards apply to the specific habitat types identified below.

A. Endangered, Threatened, and Sensitive Species.

1. No development shall be allowed within a fish and wildlife habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by the Washington Department of Fish and Wildlife or applicable state or federal agency.

2. Whenever activities are proposed adjacent to a fish and wildlife habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and approved by the City. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Washington Department of Fish and Wildlife for animal species, the Washington State Department of Natural Resources for plant species, and other appropriate federal or state agencies.

B. **Anadromous Fish.**

1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:

   a. Subsection A above applies to anadromous fish where those populations are identified as endangered, threatened or sensitive species;

   b. Activities shall be timed to occur only during the allowable work window as designated by the Washington Department of Fish and Wildlife for the applicable species;

   c. An alternative alignment or location for the activity is not feasible;

   d. The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;

   e. Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to an approved critical area report; and

   f. Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved critical area report.

2. Structures that prevent migration shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided, consistent with RCW 77.57.030, that allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.

3. Fills, when authorized by the City and all applicable Joint Aquatic Resource Permit Application approvals, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable

impacts and shall only be allowed for a water-dependent use.

C. **Wetland Habitats.** All proposed activities within or adjacent to habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in SMC Chapter 20.80, Subchapter 4. Wetlands. If non-wetlands habitat and wetlands are present at the same location, the provisions of this subchapter or the Wetlands subchapter, whichever provides greater protection to the habitat, apply.

D. **Streams.** Activities, uses and alterations of streams shall be prohibited subject to the reasonable use provisions (SMC 20.30.336) or special use provisions (SMC 20.30.333), unless otherwise allowed by the exemptions or allowed activities provisions of this chapter, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II. No alteration to a stream buffer shall be permitted unless consistent with the provisions of this chapter and the specific standards for development outlined below.

1. **Type S and Type F-anadromous streams.** Development activities and uses that result in alteration of Type S and Type F-anadromous streams and their associated buffers shall be prohibited subject to the critical area reasonable use and critical area special use provisions of SMC 20.30.333 and 20.30.336, unless otherwise allowed by the exemptions or allowed activities provisions of this chapter, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction.

2. **Type F-nonanadromous and Type Np streams.** Development activities and uses that result in alteration of Type F-nonanadromous and Type Np streams are prohibited subject to the critical area reasonable use and critical area special use provisions of SMC 20.30.333 and 20.30.336, unless otherwise allowed by the exemptions or allowed activities provisions of this chapter, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction.

3. **Type Ns streams.** Development activities and uses that result in unavoidable impacts may be permitted in Type Ns streams and associated buffers in accordance with an approved critical area(s) report and compensatory mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the loss of acreage and functions of wetland and buffers shall be provided in compliance with the mitigation performance standards and requirements of these regulations.

4. **Stream Crossing.** Crossing of streams may be permitted based on the findings in a critical area report, subject to the limitation in subsections 1, 2, and 3 above, and consistent with the following:

a. **Bridges.** Bridges shall be used to cross Type S and Type F-anadromous streams. Culverted crossings and other obstructive means of crossing Type S and Type F-anadromous streams shall be prohibited; and

b. **Culverts.** Culverts are allowable for crossing of Type F-nonanadromous, Np, and Ns streams when fish passage will not be impaired and when the following design criteria and conditions are met:

i. Oversized culverts, that allow for fish passage and floodplain or wetland connectivity, will be installed;

ii. Culverts for Type F streams must be designed for fish passage that will allow natural stream functions and processes to occur (i.e. sediment, wood, and debris transport) where appropriate;

iii. Gravel substrate will be placed in the bottom of the culvert to a minimum depth of one foot for Type F streams;

iv. A maintenance covenant shall be recorded on title with King County that requires the property owner to at all times, keep any culvert free of debris and sediment to allow free passage of water and, if applicable, fish; and

v. The City may require that a culvert be removed from a stream as a condition of approval, unless it is demonstrated conclusively that the culvert is not detrimental to fish habitat or water quality, or removal would be detrimental to fish or wildlife habitat or water quality.

5. **Relocation.** Relocation of a Type S, F, or Np stream may be allowed, subject to the limitation in subsections 1 and 2 above, and only when the proposed relocation is part of an approved mitigation or rehabilitation plan, will result in equal or better habitat and water quality, and will not diminish the flow capacity of the stream. Relocation of a Type Ns stream may be allowed, subject to the limitation in subsections 3 above, and only when the proposed relocation will result in equal or better habitat and water quality and will not diminish the flow capacity of the stream.

6. **Restoring Piped Watercourses.** The City allows the voluntary opening of previously channelized/culverted streams and the rehabilitation and restoration of streams. Restoring piped watercourses may be approved consistent with the following:

a. When piped watercourse sections are restored, a protective buffer shall be required of the stream section. The buffer distance shall be consistent with the buffer relief that may be granted consistent with SMC 20.80.055 *Voluntary critical area restoration projects*. The stream and buffer area shall include habitat improvements and measures to prevent erosion, landslide, and water quality impacts. Opened channels shall be designed to support fish and wildlife habitat and all uninhibited fish access, unless determined to be unfeasible as demonstrated in a restoration plan reviewed and approved by the City;

b. Removal of pipes conveying streams shall only occur when the City determines that the proposal will result in a new improvement of water quality and ecological functions and will not significantly increase the threat of erosion, flooding, slope stability, or other hazards; and

c. Where the buffer of the restored stream would extend onto an adjacent property, the applicant shall obtain a written agreement from the affected neighboring property owner prior to the City approving the restoration of the piped watercourse.

20.80.280 FISH AND WILDLIFE HABITAT - Required buffer areas.

A. Buffer widths for fish and wildlife habitat areas shall be based on consideration of the following factors: species-specific recommendations of the Washington State Department of Fish and Wildlife; recommendations contained in a habitat management plan submitted by a qualified professional; and the nature and intensity of land uses and activities occurring on the land adjacent to the site.

B. Low impact uses and activities which are consistent with the purpose and function of the habitat buffer and do not detract from its integrity may be permitted within the buffer depending on the sensitivity of the habitat area. Examples of uses and activities which may be permitted in appropriate cases include trails that are pervious, viewing platforms, low impact stormwater management facilities such as bio-swales, and other similar uses and activities; provided, that any impacts to the buffer resulting from such permitted facilities shall be fully mitigated.

C. **Standard Required Stream Buffer Widths.** Buffer widths shall reflect the sensitivity of the stream type, the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the stream area. Stream buffers shall be measured from the ordinary high water mark (OHWM) or the top of the bank, if the OHWM cannot be determined. Buffers shall be measured with rounded ends where streams enter or exit piped segments.

1. The following buffers are established for streams based upon the Washington State Department of Natural Resources water typing system and further classification based on anadromous or nonanadromous fish presence for the Type F streams:

Table 20.80.280(1)

Stream Type	Standard Buffer Width (ft)
Type S	150
Type F - anadromous	115
Type F - nonanadromous	75
Type Np	65
Type Ns	45
Piped Stream Segments	10

2. **Increased Stream Buffer Widths.** The recommended stream buffer widths shall be increased, as follows:

   a. When the qualified professional determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;

   b. When the flood hazard area exceeds the recommended stream buffer width, the stream buffer area shall extend to the outer edge of the flood hazard area;

   c. When a channel migration zone is present, the stream buffer width shall be measured from the outer edge of the channel migration zone;

   d. When the habitat area is in an area of high blowdown potential, the stream buffer width shall be expanded an additional fifty (50) feet on the windward side; or

   e. When the habitat area is within an erosion or landslide hazard area, or buffer, the stream buffer width shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.

3. **Stream Buffer Width Averaging with Enhancement.** The Director may allow the recommended stream buffer width to be reduced in accordance with an approved critical area report and the best available science on a case-by-case basis by averaging buffer widths. Any allowance for averaging buffer widths shall only be granted based on the development and implementation of a buffer enhancement plan for areas of buffer degradation consistent with the provisions in subsection 4 below. Only those portions of the stream buffer existing within the project area or subject parcel shall be considered in the total buffer area for buffer averaging. Averaging of buffer widths may only be allowed where a qualified professional demonstrates that:

   a. The width reduction and buffer enhancement plan provides evidence that the stream or habitat functions, including those of nonfish habitat and riparian wildlife, will be;

      i. Increased or maintained through plan implementation for those streams where existing buffer vegetation is generally intact native vegetation; or

      ii. Increased through plan implementation for those streams where existing buffer vegetation is inadequate to protect the functions and values of the stream;

   b. The total area contained in the buffer area of each stream on the development proposal site is not decreased after averaging;

   c. The recommended riparian habitat area width is not reduced by more than twenty-five percent (25%) in any one location; and

d. The width reduction will not be located within another critical area or associated buffer.

4. **Stream Buffer Enhancement Measures**. The measures determined most applicable and/or appropriate will be considered in buffer averaging requirements. These include but are not limited to:

a. Removal of fish barriers to restore accessibility to fish.

b. Enhancement of fish habitat using log structures incorporated as part of a fish habitat enhancement plan.

c. Enhancement of fish and wildlife habitat structures that are likely to be used by wildlife, including wood duck houses, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.

d. Additional enhancement measures may include:

i. Planting native vegetation within the buffer area, especially vegetation that would increase value for fish and wildlife, increase stream bank or slope stability, improve water quality, or provide aesthetic/recreational value; or

ii. Creation of a surface channel where a stream was previously underground, in a culvert or pipe. Surface channels which are "daylighted" shall be located within a buffer area and shall be designed with energy dissipating functions or channel roughness features such as meanders and rootwads to reduce future bank failures or nearby flooding;

iii. Removal or modification of existing stream culverts (such as at road crossings) to improve fish passage, stream habitat, and flow capabilities; or

iv. Upgrading of retention/detention facilities or other drainage facilities beyond required levels.

D. **Stream Buffer Allowed Uses and Alteration.** Activities and uses shall be prohibited in stream buffers, except as provided for in this chapter. Stream buffers shall be maintained as undisturbed or restored natural vegetation. No clearing or grading activities are allowed within required stream buffers except as allowed under SMC 20.80.030, 20.80.040, 20.80.274, or consistent with an approved buffer enhancement plan consistent with the provisions of this subchapter. No structures or improvements shall be permitted within the stream buffer area, including buildings, decks, docks, except as otherwise permitted or required under the Shoreline Master Program, SMC Title 20, Division II, or under one of the following circumstances:

1. When the improvements are part of an approved rehabilitation or mitigation plan; or

2. For the construction of new roads and utilities, and accessory structures, when no feasible alternative location exists; or

3. **Trails.** The construction of trails over and in the buffer of piped stream segments, and the construction of trails near other stream segments consistent with the following criteria:

a. Trails should be constructed of pervious surface, with preference for natural materials. Raised boardwalks utilizing nontreated pilings may be acceptable;

b. Trails shall be designed in a manner that minimizes impact on the stream system;

c. Trails shall have a maximum trail corridor width of 5 feet; and

d. Trails should be located within the outer 25 percent of the buffer, i.e., that portion of the buffer that is farther away from the stream and located to avoid removal of significant trees; or

4. The construction of footbridges that minimize the impact to the stream system; or

5. **Informational Signs.** The construction and placement of informational signs or educational demonstration facilities limited to no more than one square yard surface area and four feet high, provided there is no permanent infringement on stream flow; or

6. **Stormwater Management Facilities.** The establishment of low impact stormwater management facilities, such as stormwater dispersion outfalls and bioswales, may be allowed within stream buffers consistent with the adopted stormwater manual; provided that:

   a. No other location is feasible;

   b. Pipes and conveyance facilities will be in in the outer twenty-five percent (25%) of the standard buffer area as set forth in Table 20.80.280(1);

   c. Stormwater dispersion outfalls, bioswales, bioretention facilities, and other low impact facilities consistent with the adopted stormwater manual may be allowed anywhere within stream buffers when determined by a qualified professional that the location of the facility will enhance the buffer area and protect the stream; and

   d. Such facilities are designed consistent with the requirements of SMC 20.70.330.

7. **Development Proposals within Physically Separated and Functionally Isolated Stream Buffers.** Consistent with the definition of "buffers" (SMC 20.20.012), areas that are functionally isolated and physically separated from stream due to existing, legally established roadways and railroads or other legally established structures or paved areas eight (8) feet or more in width that occurs between the area in question and the stream shall be considered physically isolated and functionally separated stream buffer. Once determined by the Director based on a submitted critical area report to be a physically separated and functionally isolated stream buffer, development proposals shall be allowed in these areas.

(Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(C), 2000).

20.80.290 FISH AND WILDLIFE HABITAT - Critical area report requirements.

A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a fish and wildlife habitat conservation area, a critical area report shall be required. Critical area report requirements for fish and wildlife habitat conservation areas are generally met through submission to the Director of one or more fish and wildlife habitat critical area reports. In addition to the general critical area report requirements of SMC 20.80.080, critical area reports for fish and wildlife habitat conservation areas must meet the requirements of this section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

B. **Preparation by a Qualified Professional.** Critical areas reports for a habitat conservation area shall be prepared and signed by a qualified professional who is a biologist, ecologist, or other scientist with the minimum required experience, per SMC 20.20.042, related to the specific type(s) of fish and wildlife habitats identified.

C. **Third Party Review Required.** Critical areas studies and reports on fish and wildlife habitat conservation areas shall be subject to third party review consistent with SMC 20.80.080(C) and in any of the additional following circumstances:

   1. Mitigation is required for impacts to Type S, Type F, or Type Np streams and/or buffers; or

   2. Mitigation is required for impacts to Type Ns streams.

D. **Minimum Report Contents for Fish and Wildlife Habitat Conservation Areas.** The written critical area report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC 20.80.080(E);

2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, water typing and other habitat conservation area classification, baseline hydrologic data, site photos, etc;

3. A description of the methodologies used to conduct the delineations, classifications, or impact analyses including reference;

4. **Site Plans.** A copy of the site plan sheet(s) for the project must be included with the written report and must include, at a minimum:

   a. Maps (to scale) depicting delineated and surveyed fish and wildlife habitat conservation areas and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to fish and wildlife habitat conservation areas and/or buffers (include square footage estimates); and

   b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the fish and wildlife habitat conservation areas associated with anticipated hydroperiod alterations from the project.

5. **Habitat Assessmen**t. A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:

   a. Detailed description of vegetation on and adjacent to the project area and its associated buffer;

   b. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;

   c. A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;

   d. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;

   e. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with SMC 20.80.055 ;

   f. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs; and

6. **Additional Technical Information Requirements for Streams.** Critical area reports for streams must be consistent with the specific development standards for streams in SMC 20.80.276 and 20.80.280 and may be met through submission of one or more specific report types. If stream buffer enhancement is proposed to average stream buffer width, a stream buffer enhancement plan must be submitted in addition to other critical area report requirements of this section. If no project impacts are anticipated and standard stream buffer width are retained, a stream delineation report, general critical areas report or other reports alone or in combination may be submitted as consistent with the specific requirements of

this section. In addition to the basic critical area report requirements for fish and wildlife habitat conservation areas provided in subsections (A) through (C) of this section, technical information on streams shall include the following information at a minimum:

a. A written assessment and accompanying maps of the stream and associated hydrologic features within 200 feet of the project area, including the following information at a minimum:

i. Stream survey showing the field delineated ordinary high water mark(s);

ii. Standard stream buffer boundary;

iii. Boundary for proposed stream buffers averaging, if applicable;

iv. Vegetative, faunal, and hydrologic characteristics;

v. Soil and substrate conditions; and

vi. Topographic elevations, at two-foot contours;

b. A detailed description and functional assessment of the stream buffer under existing conditions pertaining to the protection of stream functions, fish habitat and, in particular, potential anadromous fisheries;

c. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and stream functions;

d. Proposed buffer enhancement, if needed, including a written assessment and accompanying maps and planting plans for buffer areas to be enhanced, including the following information at a minimum:

i. A description of existing buffer conditions;

ii. A description of proposed buffer conditions and how proposed conditions will increase buffer functions in terms of stream and fish habitat protection;

iii. Performance standards for measuring enhancement success through a monitoring period of at least five years; and

iv. Provisions for monitoring and submission of monitoring reports documenting buffer conditions as compared to performance standards for enhancement success;

e. A discussion of ongoing management practices that will protect stream functions and habitat value through maintenance of vegetation density within the stream buffer.

E. **Additional Information.** When appropriate due to the type of habitat or species present or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.80.082 and the fish and wildlife habitat mitigation performance standards and requirements of SMC 20.80.300.

2. Third party review to include any recommendations as appropriate by a qualified professional under contract with or employed by the City may be required at the applicant's expense of the critical area report analysis and the effectiveness of any proposed mitigating measures or programs;

3. A request for consultation with the Washington Department of Fish and Wildlife (DFW), Washington Department of Ecology (Ecology), local Native American Indian Tribes or other appropriate agency;

4. Copies of the Joint Aquatic Resource Permit Application (JARPA) and related approvals, such as a Hydraulic Project Approval (HPA) from the DFW, when applicable to the project; and

5. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

20.80.300 FISH AND WILDLIFE HABITAT - Mitigation performance standards and requirements.

A. **Requirements for Mitigation.** Where impacts cannot be avoided, and the applicant has exhausted feasible design alternatives, the applicant or property owner shall seek to implement other appropriate mitigation actions in compliance with the intent, standards and criteria of this section. Mitigation provisions shall be applied through the critical area reasonable use or critical area special use provisions in SMC 20.30.333 and 20.30.336, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction, unless mitigated alterations are specifically allowed by the provisions of this subchapter. In an individual case, these actions may include consideration of alternative site plans and layouts, reductions in the density or scope of the proposal, and/or implementation of the performance standards listed in this section.

B. **Additional Requirements for Stream Mitigation.** Significant adverse impacts to stream area functions and values shall be mitigated. Mitigation actions shall be implemented in the preferred sequence: Avoidance, minimization, restoration and replacement. Proposals which include less preferred and/or compensatory mitigation shall demonstrate that:

1. All feasible and reasonable measures will be taken to reduce impacts and losses to the stream, or to avoid impacts where avoidance is required by these regulations;

2. The restored, created or enhanced stream area or buffer will be available and persistent as the stream or buffer area it replaces; and

3. No overall net loss will occur in stream functions and values.

C. **Compensating for Lost or Impacted Functions.** Mitigation of alterations to fish and wildlife habitat shall achieve equivalent or greater biologic and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site on a per function basis. Mitigation shall be located on-site except when demonstrated that a higher level of ecological functioning would result from an off-site location. A mitigation plan may include the following:

1. Native vegetation planting plan;

2. Retention, enhancement or restoration plan of specific habitat features;

3. Plans for control of nonnative invasive plant or wildlife species; and

4. Stipulations for use of innovative, sustainable building practices.

D. **Preference of Mitigation Actions.** Methods to achieve compensation for fish and wildlife habitat functions shall be approached in the following order of preference:

1. **Protection.** Mitigation measure that increase the protection of the identified habitat conservation areas may include but are not limited to:

a. Increased or enhanced buffers;

b. Setbacks for permanent and temporary structures;

c. Reduced project scope;

d. Limitations on construction hours;

e. Limitations on hours of operation; and/or

f. Relocation of access;

2. **Restoration.** Restoration of degraded habitat.

3. **Creation.** Creation (establishment) of wildlife habitat on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when the site conditions are conducive to the habitat type that is anticipated in the design.

4. **Enhancement.** Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

5. **Preservation.** Preservation of high quality, at-risk fish and wildlife habitat as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high quality, at-risk fish and wildlife habitat may be considered as the sole means of compensation for habitat impacts when the following criteria are met:

a. Habitat impacts will not have a significant adverse impact on habitat for listed fish, or other ESA listed species;

b. There is no net loss of habitat functions within the watershed or basin;

c. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low functioning systems; and

d. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

E. **Location and Timing of Stream Mitigation.**

1. Mitigation shall be provided on-site, unless on-site mitigation is not scientifically feasible due to the physical features of the property. The burden of proof shall be on the applicant to demonstrate that mitigation cannot be provided on-site.

2. When mitigation cannot be provided on-site, mitigation shall be provided in the immediate vicinity of the permitted activity on property owned or controlled by the applicant such as an easement, provided such mitigation is beneficial to the critical area and associated resources. It is the responsibility of the applicant to obtain title to off-site mitigation areas. Mitigation on City-owned property, or similar publically owned property for which title is not available, through a City mitigation program may be considered if programmatic mitigation areas have been identified.

3. In-kind mitigation shall be provided except when the applicant demonstrates and the City concurs that greater functional and habitat value can be achieved through out-of-kind mitigation.

4. Only when it is determined by the City that subsections (B)(1), (2), and (3) of this section are inappropriate and impractical shall off-site, out-of-kind mitigation be considered.

5. When stream mitigation is permitted by these regulations on-site or off-site, the mitigation project shall occur near an adequate water supply (stream, groundwater) with a hydrologic connection to the mitigation area to ensure successful development or restoration.

6. Any agreed upon mitigation proposal shall be completed prior to project construction, unless a phased schedule, that assures completion concurrent with project construction, has been approved by the City.

7. Restored or created streams, where permitted by these regulations, shall be an equivalent or higher stream value or function than the altered stream.

F. **Performance Standards.** The following mitigation measures shall be reflected in fish and wildlife habitat conservation area mitigation planning:

1. The maintenance and protection of habitat values shall be considered a priority in site planning and design;

2. Buildings and structures shall be located in a manner that preserves and minimizes adverse impacts to important habitat areas. This may include clustering buildings and locating fences outside of habitat areas;

3. Retained habitat shall be integrated into open space and landscaping;

4. Where possible, habitat and vegetated open space shall be consolidated in contiguous blocks;

5. Habitat shall be located contiguous to other habitat areas, open space or landscaped areas both on- and off-site to contribute to a continuous system or corridor that provides connections to adjacent habitat areas;

6. When planting is required, the following standards shall apply:

a. Native species, indigenous to the region, shall be used in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers;

b. Plant selection shall be consistent with the existing or projected site conditions, including slope aspect, moisture, and shading;

c. Plants should be commercially available or available from local sources;

d. Plant species high in food and cover value for fish and wildlife shall be used;

e. Mostly perennial species should be planted;

f. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided;

g. Plant selection, densities, and placement of plants must be determined by a qualified professional and shown on the design plans;

h. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City;

i. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;

j. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process; and

k. An irrigation system shall be installed, if necessary, for the initial establishment period;

7. The heterogeneity and structural diversity of vegetation shall be emphasized in landscaping; and

8. Significant trees shall be preserved.

9. All construction specifications and methods shall be approved by a qualified professional and the City.

10. Construction management shall be provided by a qualified professional. Ongoing work on-site shall be inspected by the City. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(E), 2000).

H. **Mitigation Plan.** Mitigation plans shall be submitted as part of the required critical area report consistent with the requirements of SMC 20.80.080, 20.80.082, and 20.80.290 and this section. When revegetation is required as part of the mitigation, then the standards of SMC 20.80.350(H) shall be applied, excluding those standards that are wetland specific.

I. **Monitoring Program and Contingency Plan.** A monitoring program shall be implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives are being met. The monitoring program will be established consistent with the guidelines contained in SMC 20.80.082(D).

Subchapter 4.

Wetlands

20.80.310 WETLANDS – Purpose.

A. Wetlands are those areas that are inundated or saturated by surface or ground 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 swamps, marshes, bogs, and similar areas.

Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, bio-swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands.

B. Wetlands help to maintain water quality; store and convey stormwater and floodwater; recharge ground water; provide important fish and wildlife habitat; and serve as areas for recreation, education, scientific study and aesthetic appreciation.

C. The City's overall goal shall be to achieve no net loss of wetlands. This goal shall be implemented through retention of the function, value and acreage of wetlands within the City. Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment, chemical nutrient and toxic pollutants; provide shading to maintain desirable water temperatures; provide habitat for wildlife; protect wetland resources from harmful intrusion; and generally preserve the ecological integrity of the wetland area.

D. The primary purpose of the wetland regulations is to avoid detrimental wetland impacts and achieve a goal of no net loss of wetland function, value and acreage; and where possible enhance and restore wetlands. (Ord. 695 § 1 (Exh. A), 2014; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 5(A), 2000).

20.80.320 WETLANDS - Designation and rating.

A. **Designation.** All areas meeting the definition of a wetland and identification criteria as wetlands pursuant to SMC 20.80.322 of this section, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.

B. **Rating.** All wetlands shall be rated by a qualified professional according to the current Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington 2014 (Ecology Publication No. 14-06-029, or as revised). Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the City, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities.

1. **Category I.** Category I wetlands are those that represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a high level of functions. The following types of wetlands are Category I:

a. Relatively undisturbed estuarine wetlands larger than one acre;

b. Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR;

c. Bogs;

d. Mature and old-growth forested wetlands larger than one acre;

e. Wetlands in coastal lagoons; and

f. Wetlands that perform many functions well (scoring 23 points or more based on functions).

2. **Category II.** Category II wetlands are those that are difficult, though not impossible to replace and provide high levels of some functions. The following types of wetlands are Category II:

a. Estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre;

b. Interdunal wetlands larger than one acre or those found in a mosaic of wetlands; and

c. Wetlands with a moderately high level of functions (scoring between 20 and 22 points).

3. **Category III.** Category III wetlands are those with a moderate level of functions, generally have been disturbed in some ways, can often be adequately replaced with a well-planned mitigation project, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. The following types of wetlands are Category III:

a. Wetlands with a moderate level of functions (scoring between 16 and 19 points); or

b. Interdunal wetlands between 0.1 and one acre.

4. **Category IV.** Category IV wetlands are those with the lowest levels of functions (scoring below 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and also need to be protected.

C. **Illegal Modifications.** Wetland rating categories shall not change due to illegal modifications or alterations.

D. At the time of adoption of the updated critical areas regulations, Chapter 20.80, Critical Areas, in November 2015, there were no identified Category I wetlands identified within the City of Shoreline. If this category of wetland is subsequently identified any applicable standards may be added or modified by the Director based on Washington State guidance on protection of the identified type of resource where the adopted regulations do not address the specified type of wetland.

20.80.322 WETLANDS – Mapping and delineation.

A. **Mapping.** The approximate location and extent of wetlands are shown in the following maps and inventories:

1. *City of Shoreline, Basin Characterization Reports and Stream and Wetland Inventory and Assessment, Tetra Tech (May 2004);*
2. City of Shoreline stormwater basin plans as completed and updated;
3. Wetland data layer maintained in the City of Shoreline geographic information system (GIS);
4. Soils maps produced by the US Department of Agriculture, National Resources Conservation Service; and
5. the *National Wetlands Inventory*, produced by the US Fish & Wildlife Service.

B. **Reference Only.** The inventories and cited resources are to be used as a guide for the City of Shoreline, project applicants, and/or property owners, and may be continuously updated as new wetlands are identified or critical area reports are submitted for known wetlands. They are a reference and do not provide a final critical area

designation.

C. Identification and Delineation. Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved Federal wetland delineation manual and applicable regional supplements per WAC 173-22-035. The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional. Wetland delineations are valid for five years; after such date the Director shall determine whether a revision or additional assessment is necessary.

20.80.324 WETLANDS – Development standards.

A. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this chapter.

B. **Activities Allowed in Wetlands.** The activities listed below are allowed in wetlands. Exemptions are listed in, the provisions established in SMC 20.80.030 and additional allowed activities in 20.80.040, but do not apply within the shoreline jurisdiction. These activities do not require submission of a critical area report, except where such activities result in a loss of the functions and values of a wetland or wetland buffer. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.

2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

3. Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column will be disturbed.

4. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and hand-held equipment unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than 500 square feet of area may be cleared, as calculated cumulatively over one (1) year, on private property without a permit. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds or the King County Noxious Weed List must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

5. Permitted alteration to a legally constructed structure existing within a wetland or wetland buffer that does not increase the footprint of the development or hardscape or increase the impact to a wetland or wetland buffer.

C. **Category I wetlands.** Development activities and uses that result in alteration of Category I wetlands and their associated buffers shall be prohibited subject to the reasonable use provisions and special use provision of SMC 20.30.333 and 20.30.336, unless otherwise allowed by the exemptions or allowed activities provisions of this chapter, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction.

D. **Category II and III wetlands.** Development activities and uses that result in alteration of Category II and III wetlands is prohibited, unless the applicant can demonstrate that:

1. The basic project proposed cannot reasonably be accomplished on another site or sites in the general region while still successfully avoiding or resulting in less adverse impact on a wetland;

2. All on-site alternative designs that would avoid or result in less adverse impact on a wetland or its buffer, such as a reduction to the size, scope, configuration, or density of the project are not feasible; and

3. Full compensation for the loss of acreage and functions of wetland and buffers due to unavoidable impacts shall be provided in compliance with the mitigation performance standards and requirements of this chapter.

E. **Category IV wetlands.** Development activities and uses that result in unavoidable impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical area(s) report and compensatory mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the loss of acreage and functions of wetland and buffers shall be provided in compliance with the mitigation performance standards and requirements of these regulations.

F. **Small, hydrologically isolated Category IV wetlands.** The Director may allow small, hydrologically isolated Category IV wetlands to be exempt from the avoidance sequencing provisions of SMC 20.80.055 and SMC 20.80.324(D) and allow alteration of such wetlands provided that a submitted critical area report and mitigation plan provides evidence that all of the following conditions are met:

1. The wetland is less than one thousand (1,000) square feet in area;

2. The wetland is a low quality Category IV wetland with a habitat score of less than 3 points in the adopted rating system;

3. The wetland does not contain habitat identified as essential for local populations of priority species identified by the Washington Department of Fish and Wildlife or species of local importance which are regulated as fish and wildlife habitat conservation areas in Chapter 20.80, Subchapter 3;

4. The wetland is not associated with riparian areas or buffers;

5. The wetland is not part of a wetland mosaic; and

5. A mitigation plan to replace lost wetland functions and values is developed, approved, and implemented consistent with SMC 20.80.350.

G. **Subdivisions.** The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:

1. Land that is located wholly within a wetland or its buffer may not be subdivided; and

2. Land that is located partially within a wetland or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is:

a. Located outside of the wetland and its buffer; and

b. Meets the minimum lot size requirements of SMC 20.50.020.

20.80.330 WETLANDS - Required buffer areas.

A. **Buffer Requirements.** The standard buffer widths in Table 20.30.330(A)(1) have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington.

1. The use of the standard buffer widths requires the implementation of the measures in Table 20.80.330(A)(2), where applicable, to minimize the impacts of the adjacent land uses.

2. If an applicant chooses not to apply the mitigation measures in Table 20.80.330(A)(2), then a 33 percent increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.

3. The standard buffer widths assume that the buffer is relatively intact native plant community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the existing buffer is bare ground, sparsely vegetated, or vegetated with nonnative or invasive species that do not perform needed functions, then the applicant must either develop and implement a wetland buffer restoration or enhancement plan to maintain the standard width to create the appropriate plant community or the buffer must be widened to ensure that adequate functions of the buffer are provided.

Table 20.80.330(A)(1) Wetland Buffer Requirements

Wetland Category	Buffer Width According to Habitat Score			
	Habitat Score of 3-4	Habitat Score of 5	Habitat Score of 6-7	Habitat Score of 8-9
Category I: Based on total score or Forested	75 ft	105 ft	165 ft	225 ft
Category I: Estuarine	150 ft (no change based on habitat scores)			
Category II: Based on total score	75 ft	105 ft	165 ft	225 ft
Category III (all)	60 ft	105 ft	165 ft	225 ft
Category IV (all)	40 ft (no change based on habitat scores)			

Table 20.80.330(A)(2) Required measures to minimize impacts to wetlands (Measures are required, where applicable to a specific proposal)

Disturbance	Activities and Uses that Cause Disturbances	Required Measures to Minimize Impacts
Lights	• Parking lots • Warehouses • Manufacturing • Residential	• Direct lights away from wetland.
Noise	• Manufacturing • Residential	• Locate activity that generates noise away from wetland.

Disturbance	Activities and Uses that Cause Disturbances	Required Measures to Minimize Impacts
		• 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 ft heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.
Toxic runoff*	• Parking lots • Roads • Manufacturing • Residential areas • Application of agricultural pesticides • Landscaping	• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered. • Establish covenants limiting use of pesticides and fertilizers within 150 ft of wetland. • Apply integrated pest management.
Stormwater runoff	• Parking lots • Roads • Manufacturing • Residential areas • Commercial • Landscaping	• 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 techniques (per PSAT publication on LID techniques).
Change in water regime	• Impermeable surfaces • Lawns • Tilling	• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns.
Pets and human disturbance	• Residential areas	• 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	• Tilled fields	• Use best management practices to control dust.
Disruption of corridors or connections		• Maintain connections to off-site areas that are undisturbed. • Restore corridors.
* These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site.		

5. **Increased Wetland Buffer Area Width.** Buffer widths shall be increased on a case-by-case basis as determined by the Director when a larger buffer is necessary to protect wetland functions and values. This determination shall be supported by a critical area report showing that it is reasonably related to protection of the functions and values of the wetland. The critical area report must include, but not be limited to, the following criteria:

   a. The wetland is used by a plant or animal species listed by the Federal government or the State as endangered, threatened, candidate, sensitive, monitored or documented priority species or habitats, or essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or

   b. The adjacent land has slopes greater than 15 percent or is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or

   c. The adjacent land has minimal vegetative cover. In lieu of increasing the buffer width where exiting buffer vegetation is inadequate to protect the wetland functions and values, development and implementation of a wetland buffer restoration/enhancement plan in accordance with SMC

20.80.350 may be substituted.

6. Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:

   a. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a "dual-rated" wetland with a Category I area adjacent to a lower rated area;

   b. 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 from a qualified wetland professional;

   c. The total area of the buffer after averaging is equal to the area required without averaging; and

   d. The buffer at its narrowest point is never less than either three-fourths 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.

7. Averaging through a Critical Area Reasonable Use Permit consistent with SMC 20.30.333 or Critical Area Special Use Permit consistent with SMC 20.30.336 or a Shoreline Variance consistent with 20.220.040 may be permitted when all of the following are met:

   a. There are no feasible alternatives to the site design that could be accomplished without buffer averaging;

   b. The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report from a qualified wetland professional;

   c. The total buffer area after averaging is equal to the area required without averaging; and

   d. The buffer at its narrowest point is never less than either three-fourths 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.

B. To facilitate long-range planning using a landscape approach, the Director may identify and preassess wetlands using the rating system and establish appropriate wetland buffer widths for such wetlands. The Director will prepare maps of wetlands that have been preassessed in this manner.

C. **Measurement of Wetland Buffers.** All buffers shall be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.

D. **Buffers on Mitigation Sites.** All mitigation sites shall have buffers consistent with the buffer requirements of this chapter. Buffers shall be based on the expected or target category of the proposed wetland mitigation site.

E. **Buffer Maintenance.** Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive nonnative weeds is required for the duration of the mitigation bond (SMC 20.80.350(H)(2)(a)(viii)).

F. **Impacts to Buffers.** Requirements for the compensation for impacts to buffers are outlined in SMC 20.80.350 of this section.

G. **Overlapping Critical Area Buffers.** If buffers for two contiguous critical areas overlap (such as buffers for a stream and a wetland), the wider buffer applies.

H. **Allowed Wetland Buffer Uses.** The following uses may be allowed within a wetland buffer in accordance with the review procedures of this chapter, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

1. **Conservation and Restoration Activities.** Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

2. **Passive Recreation.** Passive recreation facilities designed and in accordance with an approved critical area report, including:

   a. Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent (25%) of the wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five (5) feet in width for pedestrian use only. Raised boardwalks utilizing nontreated pilings may be acceptable; and/or

   b. Wildlife viewing structures.

3. Educational and scientific research activities.

4. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.

5. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops, and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

6. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.

7. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and hand-held equipment unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than1,500 square feet of area may be cleared, as calculated cumulatively over one (1) year, on private property without a permit. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds or the King County Noxious Weed List must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at

natural densities is allowed in conjunction with removal of invasive plant species.

8. **Stormwater Management Facilities.** Stormwater management facilities are limited to stormwater dispersion outfalls, bioswales, and other low impact facilities consistent with the adopted stormwater manual. They may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only; provided, that:

   a. No other location is feasible;

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

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

9. **Nonconforming Uses.** Repair and maintenance of nonconforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.

10. **Development Proposals within Physically Separated and Functionally Isolated Wetland Buffers.** Consistent with the definition of "buffers" (SMC 20.20.012), areas that are functionally isolated and physically separated from wetland due to existing, legally established roadways, paved trails eight (8) feet or more in width, or other legally established structures or paved areas eight (8) feet or more in width that occurs between the area in question and the wetland shall be considered physically isolated and functionally separated wetland buffer. Once determined by the Director based on a submitted critical area report to be a physically separated and functionally isolated wetland buffer, development proposals shall be allowed in these areas.

I. **Signs and Fencing of Wetlands and Buffers.**

1. **Temporary Markers.** The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary "clearing limits" fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Director prior to the commencement of permitted activities during the preconstruction meeting required under SMC 20.50.330(E). This temporary marking and fencing shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent Signs.** As a condition of any permit or authorization issued pursuant to this chapter, the Director may require the applicant to install permanent signs along the boundary of a wetland or buffer, when recommended in a critical area report or otherwise required by the provisions of this chapter.

   a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another nontreated material of equal durability. Signs must be posted at an interval of one per lot or every fifty (50) feet, whichever is less, and must be maintained by the property owner in perpetuity. The signs shall be worded consistent with the text specified in SMC 20.80.110 or with alternative language approved by the Director.

   b. The provisions of subsection (a) of this section may be modified as necessary to assure protection of sensitive features.

3. **Fencing.** Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that

minimizes impacts to the wetland and associated habitat. Permanent fencing shall be required at the outer edge of the critical area buffer under the following circumstances, provided that the Director may waive this requirement:

a. As part of any development proposal for subdivisions, short plats, multifamily, mixed use, and commercial development where the Director determines that such fencing is necessary to protect the functions of the critical area, provided that breaks in permanent fencing may be allowed for access to permitted buffer uses (SMC 20.80.330(H));

b. As part of development proposals for parks where the adjacent proposed use is active recreation and the Director determines that such fencing is necessary to protect the functions of the critical area;

c. When buffer averaging is part of a development proposal;

d. When buffer reductions are part of a development proposal; or

f. At the Director's discretion to protect the values and functions of a critical area as demonstrated in a critical area report. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area.

f. The applicant shall be required to install a permanent fence around the wetland buffer when domestic grazing animals, only as allowed under SMC 20.40.240, are present or may be introduced on site.

20.80.340 WETLANDS - Critical area report requirements.

A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a wetland, a wetland critical area report shall be required. Critical area report requirements for wetland areas are generally met through submission to the Director of one or more wetland critical area reports. In addition to the general critical area report requirements of SMC 20.80.080, critical area reports for wetlands must meet the requirements of this section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

B. **Preparation by a Qualified Professional.** Critical area reports for wetlands shall be prepared and signed by a qualified professional who is a certified wetland scientist or a non-certified wetland scientist with the minimum required experience, per SMC 20.20.042, in the field of wetland science and with experience preparing wetland delineation, impact assessments, and mitigation plans.

C. **Third Party Review Required.** Critical areas studies and reports on wetland areas shall be subject to third party review consistent with SMC 20.80.080(C) and in any of the additional following circumstances:

1. Compensatory mitigation is required for impacts to Category I, II, or III wetlands and or buffers; or

2. Compensatory mitigation is required for impacts to Category IV wetlands.

D. **Minimum Report Contents for Wetlands.** The written critical area report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC 20.80.080(E);

2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, site photos, etc;

3. A description of the methodologies used to conduct the wetland delineations, ratings, or impact analyses including references;

4. **Site Plans.** A copy of the site plan sheet(s) for the project must be included with the written report and must include, at a minimum:

    a. Maps (to scale) depicting delineated and surveyed wetland(s) and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to wetlands and/or buffers (include square footage estimates); and

    b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project.

5. For each wetland identified on site and within 300 feet of the project site provide: the wetland rating, including a description of and score for each function, per wetland ratings (SMC 20.80.320(B)); required buffers (SMC 20.80.330); hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site;

6. A description of the proposed actions, including an estimation of acreages of impacts to wetlands and buffers based on the field delineation and survey and an analysis of site development alternatives, including a no-development alternative;

7. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development;

8. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC 20.80.053(A) Mitigation Sequencing to avoid, minimize, and mitigate impacts to critical areas and a discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land-use activity;

9. A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions; and

10. An evaluation of the functions of the wetland and adjacent buffer. Include reference for the method used and data sheets.

F. **Additional Information.** When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.80.082 and the wetland mitigation performance standards and requirements of SMC 20.80.350.

2. A request for consultation with the Washington Department of Fish and Wildlife (DFW) , Washington Department of Ecology (Ecology), local Native American Indian Tribes, or other appropriate agency;

3. Copies of the Joint Aquatic Resource Permit Application (JARPA) and related approvals, such as a Hydraulic Project Approval (HPA) from the DFW, when applicable to the project; and

4. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

20.80.350 WETLANDS – Compensatory mitigation performance standards and requirements.

A. **Requirements for Compensatory Mitigation.**

1. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1), Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised.

2. Mitigation ratios shall be consistent with SMC 20.80.350(G).

3. Mitigation requirements may also be determined using the credit/debit tool described in "Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Operational Draft" (Ecology Publication No. 10-06-011, February 2011, or as revised) consistent with SMC 20.80.350(G).

B. **Compensating for Lost or Impacted Functions.** Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:

1. The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or

2. Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.

C. **Preference of Mitigation Actions.** Methods to achieve compensation for wetland functions shall be approached in the following order of preference:

1. **Restoration.** Restoration of wetlands.

2. **Creation.** Creation (establishment) of wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to

the wetland community that is anticipated in the design.

3. **Enhancement.** Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

4. **Preservation.** Preservation of high quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high quality, at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

   a. Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA listed species;

   b. There is no net loss of habitat functions within the watershed or basin;

   c. Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost; and

   d. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low functioning system (Category III or IV wetland).

   e. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

D. **Type and Location of Compensatory Mitigation.** Unless it is demonstrated that a higher level of ecological functioning would result from an alternative approach, compensatory mitigation for ecological functions shall be either in kind and on site, or in kind and within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration except when all of the following apply:

1. There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);

2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and

3. Off-site locations shall be in the same sub-drainage basin unless watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site.

4. The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.

E. **Wetland Mitigation Ratios[1].**

Table 20.80.350(G). Wetland mitigation ratios apply when impacts to wetlands cannot be avoided or are otherwise allowed consistent with the provisions of this chapter.

Category and Type of Wetland[2]	Creation or Reestablishment	Rehabilitation	Enhancement	Preservation
Category I: Based on total score for functions	4:1	8:1	16:1	20:1
Category I: Mature forested	6:1	12:1	24:1	24:1
Category I: Estuarine	Case-by-case	6:1	Case-by-case	Case-by-case
Category II: Based on total score for functions	3:1	6:1	12:1	20:1
Category III (all)	2:1	4:1	8:1	15:1
Category IV (all)	1.5:1	3:1	6:1	10:1

[1] Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or reestablishment. See Table 1a or 1b, Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance – Version 1 (Ecology Publication No. 06-06-011a, Olympia, WA, March 2006 or as revised).

[2] Category and rating of wetland as determined consistent with SMC 20.80.320(B).

F. **Buffer Mitigation Ratios.** Impacts to buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

G. **Mitigation Performance Standards.** The performance standards in this section shall be incorporated into mitigation plans submitted to the City for impacts to critical areas. The following performance standards shall apply to any mitigations proposed within Category I, II, III and IV wetlands and their buffers. Modifications to these performance standards consistent with the guidance in *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised) may be considered for approval by the Director as alternatives to the following standards.*

1. Plants indigenous to the region (not introduced or foreign species) shall be used.

2. Plant selection shall be consistent with the existing or projected hydrologic regime, including base water levels and stormwater event fluctuations.

3. Plants should be commercially available or available from local sources.

4. Plant species high in food and cover value for fish and wildlife shall be used.

5. Mostly perennial species should be planted.

6. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided.

7. Plant selection must be approved by a qualified professional.

8. The following standards shall apply to wetland design and construction:

   a. Water depth shall not exceed six and one-half feet (two meters).

   b. The grade or slope that water flows through the wetland shall not exceed six percent.

   c. Slopes within the wetland basin and the buffer zone shall not be steeper than 3:1 (horizontal to vertical).

   d. The wetland (excluding the buffer area) should not contain more than 60 percent open water as measured at the seasonal high water mark.

9. Substrate should consist of a minimum of one foot, in depth, of clean (uncontaminated with chemicals or solid/hazardous wastes) inorganic/organic materials.

10. Planting densities and placement of plants should be determined by a qualified professional and shown on the design plans.

11. The planting plan shall be approved by the City.

12. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City.

13. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock.

14. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process.

15. An irrigation system shall be installed, if necessary, for the initial establishment period.

16. All construction specifications and methods shall be approved by a qualified professional and the City.

17. Construction management shall be provided by a qualified professional. Ongoing work on-site shall be inspected by the City.

H. **Compensatory Mitigation Plan.** When a project involves wetland and/or buffer impacts, a compensatory mitigation plan as part of the required critical area report. Compensatory wetland mitigation plans must meet the minimum requirements SMC 20.80.082 and demonstrate compliance with SMC 20.80.053. Full guidance can be found in *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised)*. The mitigation plan must meet the following additional standards:

   1. Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding land uses, and functions. Also

describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on wetland ratings (SMC 20.80.320(B));

2. Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are not undertaken (i.e., how would this site progress through natural succession?);

3. A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands;
4. A description of the proposed mitigation construction activities, construction/installation notes, and timing of activities;

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

6. Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas.

7. The scaled plan sheets for the compensatory mitigation must contain, at a minimum:

    a. Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions;

    b. Existing topography, ground-proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be impacted, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation;

    c. Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions;

    d. Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes;

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

    f. A plant schedule for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, typical plant installation details and notes, total number of each species by community type, timing of installation; and

g. Performance standards (measurable standards reflective of years post-installation) for upland and wetland communities, monitoring plan, contingency plan, and maintenance schedule, and actions. Standards for success shall be established based on the performance standards identified and the functions and values being mitigated based on the guidance in *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised).*

(Ord. 581 § 1 (Exh. 1), 2010; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 5(E), 2000).

Subchapter 5.

Flood Hazard Areas

20.80.360 FLOOD HAZARD - Description and purpose.

A. A flood hazard area consists of the special flood hazard areas and protected areas as defined in Chapter 13.12 SMC, which comprise the regulatory floodplain.

B. It is the purpose of these regulations to ensure that the City of Shoreline meets the requirements of the National Flood Insurance Program and maintains the City as an eligible community for Federal flood insurance benefits. (Ord. 641 § 5 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(A), 2000).

20.80.370 FLOOD HAZARD - Classification.

Flood hazard areas shall be determined pursuant to the requirements of the floodplain management regulations, Chapter 13.12 SMC, which include, at a minimum, all lands identified on the 100-year floodplain designations of the current Federal Emergency Management Agency (FEMA) flood insurance rate map for King County as identified in SMC 13.12.300. (Ord. 641 § 5 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(B), 2000).

20.80.380 FLOOD HAZARD - Development limitations.

All development within designated flood hazard areas shall comply with Chapter 13.12 SMC, Floodplain Management, as now or hereafter amended, and is not subject to the regulations of this chapter. (Ord. 641 § 5 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(C), 2000).

20.80.390 Zero-rise floodway – Development standards and permitted alterations.

Repealed by Ord. 641. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(D), 2000).

20.80.400 FEMA floodway – Development standards and permitted alterations.

Repealed by Ord. 641. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(E), 2000).

20.80.410 Flood hazard areas – Certification by engineer or surveyor.

Repealed by Ord. 641. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(F), 2000).

Subchapter 6.

Aquifer Recharge Areas

20.80.420 AQUIFER RECHARGE - Description and purpose.

A. Aquifer recharge areas provide a source of potable water and contribute to stream discharge during periods of low flow. Urban-type pollutants may enter watercourse supplies through potential infiltration of pollutants through the soil to ground water aquifers.

B. The primary purpose of aquifer recharge area regulations is to protect aquifer recharge areas by providing for regulation of land use activities that pose a risk of potential aquifer contamination and to minimize impacts through the application of strict performance standards. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 7(A), 2000).

C. At the time of adoption of the updated critical areas regulations, Chapter 20.80 SMC, Critical Areas, in November 2015, there were no identified critical aquifer recharge areas identified within the City of Shoreline.

20.80.430 AQUIFER RECHARGE - Classification.

Aquifer recharge areas shall be classified based on the soil and ground water conditions and risks to surface water during periods of low hydrology. Classification depends on the combined effects of hydrogeological susceptibility to contamination and contaminant loading potential, and includes upland areas underlain by soils consisting largely of silt, clay or glacial till, upland areas underlain by soils consisting largely of sand and gravel, and wellhead protection areas and areas underlain by soils consisting largely of sand and gravel in which there is a predominantly downward or lateral component to ground water flow. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 7(B), 2000).

20.80.440 AQUIFER RECHARGE - Alteration.

The following land uses and activities shall require implementation of Best Management Practices (BMPs) as established by the Department of Ecology:

A. Land uses and activities that involve the use, storage, transport or disposal of significant quantities of chemicals, substances or materials that are toxic, dangerous or hazardous, as those terms are defined by State and Federal regulations.

B. On-site community sewage disposal systems.

C. Underground storage of chemicals.

D. Petroleum pipelines.

E. Solid waste landfills.

F. Stormwater management, including infiltration, and groundwater recharge. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 7(C), 2000).

20.80.450 AQUIFER RECHARGE - Performance standards and requirements.

Any uses or activities located in an aquifer recharge area, as defined within this subchapter, that involve the use, storage, transport or disposal of significant quantities of chemicals, substances, or materials that are toxic, dangerous or hazardous, as those terms are defined by State and Federal regulations, shall comply with the following additional standards:

A. Underground storage of chemicals, substances or materials that are toxic, hazardous or dangerous is discouraged.

B. Any chemicals, substances or materials that are toxic, hazardous or dangerous shall be segregated and stored in receptacles or containers that meet State and Federal standards.

C. Storage containers shall be located in a designated, secured area that is paved and able to contain leaks and spills, and shall be surrounded by a containment dike.

D. Secondary containment devices shall be constructed around storage areas to retard the spread of any spills and a monitoring system should be implemented.

E. A written operations plan shall be developed, including procedures for loading/unloading liquids and for training of employees in proper materials handling.

F. An emergency response/spill clean-up plan shall be prepared and employees properly trained to react to accidental spills.

G. Any aboveground storage tanks shall be located within a diked containment area on an impervious surface. The tanks shall include overfill protection systems and positive controls on outlets to prevent uncontrolled discharges.

H. Development should be clustered and impervious surfaces limited where possible.

I. No waste liquids or chemicals of any kind shall be discharged to storm sewers.

J. All development shall implement Best Management Practices (BMPs) for water quality, as approved by the City, including the standards contained within the adopted stormwater manual, such as biofiltration swales and use of oil-water separators, and BMPs appropriate to the particular use proposed. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 7(D), 2000).

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Title 20

DEVELOPMENT CODE

Division I. Unified Development Code

Chapter 20.80

Critical Areas

NOTE: Changes are indicated as follows –
Insertions are single underline
Deletions are ~~single strikethrough~~
Existing language moved from another section is double underline
Existing language deleted and moved to new location in the code is ~~double strikethrough~~

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Subchapter 1.

Critical Areas – General Provisions

20.80.010 Purpose.

A. The purpose of this chapter is to establish supplemental standards for the protection of critical areas, as defined in SMC 20.20.014, in compliance with the provisions of the Washington Growth Management Act of 1990 (Chapter 36.70A RCW), consistent with the Western Washington Phase II Municipal Stormwater Permit, and consistent with the goals and policies of the Shoreline Comprehensive Plan in accordance with the procedures of Chapter 20.30 SMC. The standards of this chapter incorporated into the Shoreline Master Program, in SMC 20.230.030(A) General Regulations (1), shall apply within the shoreline jurisdiction, where critical areas are present. If there are any conflicts or unclear distinctions between the Master Program and the City's critical areas regulations, the most restrictive requirements apply as determined by the City.

B. By identifying and regulating development and alterations to critical areas and their buffers, it is the intent of this chapter to:

1. Protect the public from injury, loss of life, property damage or financial losses due to flooding, erosion, landslide, seismic events, or soils subsidence ~~or steep slope failure~~;

2. Protect unique, fragile and valuable elements of the environment;

3. Reduce cumulative adverse environmental impacts to water quality, wetlands, streams and other aquatic resources, fish and wildlife habitat, ~~steep slopes~~ landslide hazards and other geologically unstable features and protect the functions and values of critical areas from overall net loss;

4. Ensure the long-term protection of ground and surface water quality;

5. Alert members of the public, including appraisers, assessors, owners, potential buyers, or lessees, to the development limitations of critical areas and their required buffers;

6. Serve as a basis for exercise of the City's substantive authority under the State Environmental Policy Act (SEPA) and the City's Environmental Procedures (Chapter 20.30 SMC, Subchapter 8); and comply with the requirements of the Growth Management Act (Chapter 36.70A RCW) and its implementing rules;

7. Establish standards and procedures that are intended to protect ~~environmentally~~ critical areas while accommodating the rights of property owners to use their property in a reasonable manner; and

8. Provide for the management of critical areas to maintain their functions and values and to restore degraded ecosystems.

C. This Chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this Chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards. (Ord. 641 § 5 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(A), 2000).

20.80.0~~2~~15 Applicability.

A. Unless explicitly exempted, the provisions of this chapter shall apply to all land uses, and development activity and all structures and facilities within all zoning designations in the City of Shoreline, whether or not a permit or authorization is required, that are within the maximum buffer distance for each critical area type, even if the critical area is on adjacent property. All persons within the City shall comply with the requirements of this chapter.

B. The City shall not approve any permit or otherwise issue any authorization to alter the condition of any land,

water or vegetation or to construct or alter any structure or improvement without first assuring compliance with the requirements of this chapter.

C. Approval of a permit or development proposal pursuant to the provisions of this chapter does not discharge the obligation of the applicant to comply with the provisions of this chapter.

D. The provisions of this chapter shall apply to any forest practices over which the City has jurisdiction pursuant to Chapter 76.09 RCW and WAC Title 222. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(E), 2000. Formerly 20.80.050.).

20.80.045~~2~~0 Relationship to other regulations.

A. These critical area regulations shall apply as an overlay and in addition to zoning, land use, and other regulations established by the City of Shoreline. In the event of any conflict between these regulations and any other regulations of the City, the regulations which provide greater protection to the ~~environmentally~~ critical areas shall apply.

B. Areas characterized by particular critical areas may also be subject to other regulations established by this chapter due to the overlap or multiple functions of some critical areas. ~~Wetlands, for example, may be defined and regulated according to the provisions for fish and wildlife habitat conservation areas contained in this chapter, as well as provisions regulating wetlands.~~ In the event of any conflict between regulations for particular critical areas in this chapter, the regulations which provide greater protection to ~~environmentally~~ critical areas shall apply.

C. These critical areas regulations shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA), as necessary and locally adopted. Any conditions required pursuant to this chapter shall be included in the SEPA review and threshold determination.

D. Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Substantial Development Permits, Hydraulic Permit Act (HPA) permits, Section 106 of the National Historic Preservation Act, U.S. Army Corps of Engineers Section 404 permits, National Pollution Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this chapter. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(K), 2000. Formerly 20.80.110.).

20.80.02~~0~~5 Critical areas maps.

A. The approximate location and extent of identified critical areas within the City's planning area are shown on the critical areas maps adopted as part of this chapter, including but not limited to the maps identified in sections SMC 20.80.222, 20.80.272 and 20.80.322. These maps shall be used for informational purposes only to assist property owners and other interested parties. Boundaries and locations indicated on the maps are generalized. Critical areas and their buffers may occur within the City which have not previously been mapped.

B. The actual presence or absence, type, extent, boundaries, and classification of critical areas shall be identified in the field by a qualified professional, and determined by the City, according to the procedures, definitions and criteria established by this chapter. In the event of any conflict between the critical area location or designation shown on the City's maps and the criteria or standards of this chapter, the criteria and standards shall prevail.

C. The critical areas maps shall be periodically updated by the City and shall reflect any permit activity, results of special studies and reports reviewed and approved by the City, amendments to the Comprehensive Plan ~~Environmental~~ Natural Environment Element, and Department identified errors and corrections. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(D), 2000. Formerly 20.80.040.).

~~**20.80.025 Applicability.**~~

~~A. Unless explicitly exempted, the provisions of this chapter shall apply to all land uses and within all zoning~~

~~designations in the City of Shoreline. All persons within the City shall comply with the requirements of this chapter.~~

~~B. The City shall not approve any permit or otherwise issue any authorization to alter the condition of any land, water or vegetation or to construct or alter any structure or improvement without first assuring compliance with the requirements of this chapter.~~

~~C. Approval of a development proposal pursuant to the provisions of this chapter does not discharge the obligation of the applicant to comply with the provisions of this chapter.~~

~~D. The provisions of this chapter shall apply to any forest practices over which the City has jurisdiction pursuant to Chapter 76.09 RCW and WAC Title 222. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(E), 2000. Formerly 20.80.050.).~~

20.80.030 Exemptions.

Notwithstanding the exemptions provided by this section, any otherwise exempt activities occurring in or near a critical area or critical area buffer should meet the purpose and intent of SMC 20.80.010 and should consider on-site alternatives that avoid or minimize impacts. To be exempt from this chapter does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense. The following activities shall be exempt from the provisions of this chapter, but are not exempt from applicable permits:

A. **Emergencies.** Alterations in response to emergencies which threaten the public health, safety and welfare or which pose an imminent risk of damage to private property as long as any alteration undertaken pursuant to this subsection is reported to the City as soon as possible. Only the minimum intervention necessary to reduce the risk to public health, safety, or welfare and/or the imminent risk of damage to private property shall be authorized by this exemption. The City shall confirm that an emergency exists and determine what, if any, additional applications and/or measures shall be required to protect the environment consistent with the provisions of this chapter, and to repair any damage to a preexisting resource. If the Director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement provisions of SMC 20.80.130 *Unauthorized critical area alterations* shall apply.

After the emergency, the person or agency undertaking the action shall fully fund and conduct necessary restoration and other mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical area report and restoration/mitigation plan. The person or agency undertaking the action shall apply for review, and the alteration, critical area report, and mitigation plan shall be reviewed by the City in accordance with the review procedures contained herein. Mitigation activities must be initiated within one (1) year of the date of the emergency;

B. **Utility Operation, Maintenance, Repair, or Replacement.** Public water, electric and natural gas distribution, public sewer collection, cable communications, telephone, utility and related activities undertaken pursuant to City-approved best management practices, and best available science with regard to protection of threatened and endangered species, as follows:

1. Normal and routine maintenance or repair of existing utility structures or rights-of-way;

2. Relocation of electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less, only when required by the City of Shoreline, which approves the new location of the facilities;

3. Replacement, operation, repair, modification or installation or construction in an improved City road right-of-way or City-authorized private roadway of all electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less;

4. Relocation of public sewer local collection, public water local distribution, natural gas, cable

communication or telephone facilities, lines, pipes, mains, equipment or appurtenances, only when required by the City of Shoreline, which approves the new location of the facilities; ~~and~~

5. Replacement, operation, repair, modification, relocation, installation or construction of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances when such facilities are located within an improved public right-of-way or City-authorized private roadway; and

6. Repair and maintenance of existing private connections to public utilities and private stormwater management facilities consistent with best practices. Revegetation of disturbed areas is required to be native vegetation, unless the existing, non-native vegetation is re-established with no change to type or extent.

C. **Roadway Operation, Maintenance, Repair, or Replacement.** Maintenance, operation, repair, modification or replacement of publicly improved roadways or City authorized private roadway, and associated stormwater drainage systems as long as any such alteration does not involve the expansion of roadways or related improvements into previously unimproved rights-of-way or portions of rights-of-way and does not alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater. Retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance;

D. **Recreation Areas Operation, Maintenance, Repair, or Replacement.** Maintenance, operation, ~~or~~ repair, modification, or replacement of existing publicly improved recreation areas as long as any such activity does not involve the expansion of ~~uses and/or~~ facilities and existing improvements into a previously unimproved portion of ~~a preexisting area~~ critical areas or required buffers. Maintenance, operation, ~~and~~ repair, modification, and replacement of publicly improved recreation areas within designated fish and wildlife habitat areas shall be permitted if all activities are performed consistent with the development standards of this chapter, best available science or adaptive management plans as recognized by the City. Retention and replanting of native vegetation shall occur wherever possible in areas of land disturbance;

~~E. Activities affecting isolated Type IV wetlands which are individually smaller than 1,000 square feet;~~

~~F. Activities occurring in areas which may be considered small steep slopes (areas of 40 percent slope or greater with a vertical elevation change of up to, but not greater than 20 feet), such as berms, retaining walls, excavations and small natural slopes, and activities on steep slopes created through prior legal grading activity may be exempted based upon City review of a soils report prepared by a qualified geologist or geotechnical engineer which demonstrates that no adverse impact will result from the exemption;~~

~~G~~E. **Minor Conservation and Enhancement.** Minor conservation and enhancement of critical areas that does not alter the location, dimensions or size of the critical area or buffer, and results in improvement of the critical area functions, including the following invasive species removal activities:

1. ~~Within City-owned property, r~~Removal of noxious weeds or invasive vegetation as identified by the Washington State or King County Noxious Weed Control Boards in a wetland buffer, stream buffer, other~~stream~~ fish and wildlife habitat conservation areas and buffers or geologic hazard area (excluding very high risk landslide hazard areas), or the area within a three-foot radius of a tree ~~on a steep slope~~ in very high risk landslide hazard areas and buffers is allowed when:

   a. Undertaken with hand labor, including handheld mechanical tools;~~.~~

   b. When prescribed by ~~unless~~ the King County Noxious Weed Control Board, ~~otherwise prescribes~~ the use of riding mowers, light mechanical cultivating equipment, herbicides or biological control methods~~; and~~ may be allowed only with permit and approval by the City on private property or when ~~b. and~~

   ~~P~~performed in accordance with SMC 20.80.085, *Pesticides, herbicides and fertilizers on City-owned property*~~; and~~

c. Plants that appear on the Washington State or King county Noxious Weed Board Lists must be handled and disposed of in accordance with the ~~King County~~ best management practices ~~noxious weeds and invasive vegetation~~ appropriate to that species and approved by the City when permit review is applicable; ~~and~~

~~c~~d. Areas cleared by removal of invasive plant species must be revegetated with site appropriate native species at natural densities and the site ~~The cleared area is revegetated with native vegetation and~~ must be ~~s~~stabilized against erosion in accordance with the ~~Department of Ecology 2005~~ adopted ~~S~~stormwater ~~Management M~~manual ~~for Western Washington; and~~

~~d~~e. All work is performed above the ordinary high water mark and above the top of a stream bank; and

~~e~~f. The following limits must not be exceeded:

i. Within City-owned property, n~~N~~o more than 3,000 square feet of soil may be exposed at any one time~~.~~; or

ii. Within private property, not more than 500 square feet of area may be cleared, as calculated cumulatively over one (1) year, without a permit and critical area report prepared by a qualified professional; or

2. Vegetation management consistent with a previously approved critical area mitigation, restoration, remediation, or enhancement plan that requires ongoing maintenance and vegetation management beyond final inspection and the required monitoring period for the permitted project;

~~H~~F. **Active Hazard Trees.** Removal of active or imminent hazardous trees in accordance with SMC 20.50.310(A)(1)(c);

~~I~~G. **Nonimminent Hazard Trees.** Removal of not active or imminent hazardous trees in accordance with the following:

1. For hazardous circumstances that are not active or imminent, such as suspected tree rot or diseased trees or less obvious structural wind damage to limbs or trunks, a permit exemption request form must be submitted by the property owner together with a ~~risk assessment~~ tree evaluation form prepared by a qualified professional arborist as defined in SMC 20.20.042. Both the permit exemption request form and ~~risk assessment~~ tree evaluation form shall be provided by the Director;

2. The permit exemption request form shall include a grant of permission for the Director and/or ~~his~~ qualified professionals under contract with or employed by the City to enter the subject property to evaluate the circumstances. Attached to the permit exemption request form shall be a risk assessment form that documents the hazard and which must be signed by a certified arborist or professional forester;

3. No permit exemption request shall be approved until the Director reviews the submitted forms and conducts a site visit. The Director may ~~direct that a peer review~~ require third party review of the request be performed by a qualified professional under contract with or employed by the City at the applicant's ~~cost~~ expense, and may require that the subject tree(s) and vegetation be cordoned off with yellow warning tape during the review of the request for exemption;

4. Approval to cut or clear trees may only be given upon recommendation of the ~~City approved~~ qualified professional arborist that the condition constitutes an actual threat to life or property in homes, private yards, buildings, public or private streets and driveways, sidewalks, improved utility corridors, or access for emergency vehicles and any trail as proposed by the property owner and approved by the Director for purposes of this section;

5. The Director shall authorize only such alteration to existing trees and vegetation as may be necessary to eliminate the hazard and shall condition authorization on means and methods of removal necessary to minimize environmental impacts, including replacement of any significant trees. The arborist shall

include an assessment of whether a portion of the tree suitable for a snag for wildlife habitat may safely be retained. All work shall be done utilizing hand-held implements only, unless the property owner requests and the Director approves otherwise in writing. The Director may require that all or a portion of cut materials be left on site;

6. The trees shall be replaced within one year consistent with the provisions of SMC 20.50.360. Where nonsignificant trees are approved for removal as hazardous, replacement shall be one tree for each tree removed. Replacement tree may be planted at a different, nearby location on the same property if it can be determined that the planting in the same location would create a new hazard or potentially damage the critical area; and

7. If a tree to be removed provides priority habitat, such as an eagle perch, a qualified professional shall be consulted to determine timing and methods of removal that will minimize and mitigate impacts.

~~J~~H. **Site Investigation.** Site investigative work and studies necessary for preparing land use applications, including soils tests, water quality studies, wildlife studies and similar tests and investigations; provided, that any disturbance of the critical area shall be the minimum necessary to carry out the work or studies;

~~K~~I. **Passive Outdoor Activities.** When it can be demonstrated that there will be no undue adverse effect, the following activities may be allowed within critical areas and their buffers: educational activities, scientific research, and outdoor recreational activities, including but not limited to interpretive field trips, bird watching, public beach access including water recreation-related activities, bicycling and hiking, that will not have an undue adverse effect on the critical area;

~~L~~J. **Normal Maintenance.** Normal and routine maintenance and operation of existing landscaping and gardens~~, provided they comply with all other regulations in this chapter~~ including pruning, beneficial to the tree, of protected trees consistent with SMC 20.50.350(E);

K. **Chemical Applications.** The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, provided that their use shall be restricted in accordance with state Department of Fish and Wildlife Management Recommendations and the regulations of the state Department of Agriculture and the U.S. Environmental Protection Agency;

~~M~~L. **Minor Activities.** Minor activities not mentioned above and determined by the City to have minimal impacts to a critical area;

~~N. Notwithstanding the exemptions provided by this section, any otherwise exempt activities occurring in or near a critical area should meet the purpose and intent of SMC 20.80.010 and should consider on-site alternatives that avoid or minimize impacts;~~ and

~~O~~M. **Utility Mitigation Projects.** Mitigation projects related to utilities construction in critical areas or their buffers. (Ord. 640 § 1 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(G), 2000. Formerly 20.80.070.).

20.80.040 ~~Partial exemptions~~Allowed activities.

A. ~~The following are exempt from the provisions of this chapter except for the notice to title provisions and the flood hazard area provisions, if applicable.~~ **Critical Area Report.** Activities allowed under this section shall have been reviewed and permitted or approved by the City and any other agency with jurisdiction, but do not require submittal of a separate critical area report, unless such submittal was required previously for the underlying permit. The Director may apply conditions to the underlying permit or approval to ensure that the allowed activity is consistent with the provisions of this chapter to protect critical areas.

B. **Best Management Practices.** All allowed activities shall be conducted using the best management practices that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The City shall observe the use of best management

practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.

C. **Allowed Activities.** The following activities are allowed:

1. **Modifications to Existing Structures within Critical Areas.** Structural modification of, addition to, maintenance, repair, or replacement of legally nonconforming structures consistent with SMC 20.30.280~~, except single detached residences, in existence before November 27, 1990~~, which do not meet the building setback or buffer requirements for wetlands, ~~streams~~ fish and wildlife habitat conservation areas, or ~~steep slope~~ geologic hazard areas if the modification, addition, replacement or related activity does not increase the existing building footprint of the structure or area of hardscape lying within the ~~above-described building setback area, sensitive~~ critical area or buffer. Within landslide hazard areas additions that add height to a nonconforming structure may only be allowed with review of a critical area report demonstrating that no increased risk of the hazard will occur. Where nonconforming structures are partially located within critical areas or their buffers additions are allowed with a critical area report delineating the critical area(s) and required buffers showing that the addition is located entirely outside the critical area or buffer;

~~2. Structural modification of, addition to, or replacement of single detached residences in existence before November 27, 1990, which do not meet the building setback or buffer requirements for wetlands, streams or steep slope hazard areas if the modification, addition, replacement or related activity does not increase the existing footprint of the residence lying within the above-described buffer or building setback area by more than 750 square feet over that existing before November 27, 1990, and no portion of the modification, addition or replacement is located closer to the critical area or, if the existing residence is within the critical area, extend farther into the critical area; and~~

~~3. Maintenance or repair of structures which do not meet the development standards of this chapter for landslide or seismic areas if the maintenance or repair does not increase the footprint of the structure and there is no increased risk to life or property as a result of the proposed maintenance or repair.~~

2. **Demolition.** Demolition of structures located within critical areas or their buffers, excluding demolition of structures necessary to support or stabilize landslide hazard areas, subject to approval of a stormwater pollution prevention plan consistent with the adopted stormwater manual and clearing limits that will adequately protect the critical area.

~~B~~3. **Permit Requests Subsequent to Previous Critical Area Review.** A permit or approval sought as part of a development proposal for which multiple permits are required is exempt from the provisions of this chapter, except for the notice to title provisions, as applicable if:

~~1~~a. The City of Shoreline has previously reviewed all critical areas on the site; and

~~2~~b. There is no material change in the development proposal since the prior review; and

~~3~~c. There is no new information available which may alter previous critical area review of the site or a particular critical area; and

~~4~~d. The permit or approval under which the prior review was conducted has not expired or, if no expiration date, no more than five years have lapsed since the issuance of that permit or approval; and

~~5~~e. The prior permit or approval, including any conditions, has been complied with. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(H), 2000. Formerly 20.80.080.).

20.80.045 Critical areas preapplication meeting.

A. A preapplication meeting, pursuant to SMC 20.30.080, is required prior to submitting an application for development or use of land or prior to starting a development activity or use of the land that may be regulated by

the provisions of this chapter unless specifically exempted in SMC 20.80.030.

B. A determination may be provided through the preapplication meeting regarding whether critical area reports are required, and if so what level of detail and what elements may be necessary for the proposed project. This determination does not preclude the Director from requiring additional critical area report information during the review of the project. After a site visit and review of available information for the preapplication meeting the Director may determine:

1. **No Critical Areas Present.** If the Director's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed activity is unlikely to degrade the functions or values of a critical area, then the Director shall determine that the critical area review is complete and note in the preapplication meeting summary letter the reasons that no further review is required.

2. **Critical Areas Present, But No Impact.** If the Director determines that there are critical areas within or adjacent to the project area, but that the best available science shows that the proposed activity is unlikely to degrade the functions or values of the critical area, the Director may waive the requirement for a critical area report. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:

a. There will be no alteration of the critical area or buffer;

b. The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this chapter; and

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

A summary of this analysis and the findings shall be included in the preapplication meeting summary letter and any staff report or decision on the underlying permit.

3. **Critical Areas May Be Affected by Proposal.** If the Director determines that a critical area or areas may be affected by the proposal, then the Director shall notify the applicant that a critical area report(s) must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report. Additionally, the Director may indicate the sections or report types that must be included in the critical report(s) consistent with SMC 20.80.080.

20.80.~~070~~050 Alteration of critical areas.

A. In general, critical areas shall be maintained in their natural state or current legally established condition, including undisturbed, native vegetation to maintain the functions, values, resources, and public health and safety for which they are protected. Alteration of critical areas, including their established buffers, may only be permitted subject to the criteria and standards in this chapter, and compliance with any Federal and/or State permits required. Unless otherwise provided in this chapter, if alteration of the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical areas report, so as to result in no overall net loss of critical area functions and values and no increased risk of hazards. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 2(A), 2000. Formerly 20.80.160.).

20.80.~~080~~053 ~~Alteration or development of critical areas—Standards and criteria.~~Mitigation Requirements. Mitigation shall be sufficient to maintain or compensate for the impacted functions and values of the critical area and to prevent risk from a hazard posed by a critical area. Mitigation shall not be implemented until after the Director has provided approval of a critical areas report that includes a mitigation plan.

A. **Mitigation Sequencing.** This section applies to mitigation required with all critical areas reviews, approvals, and enforcement pursuant to this chapter. This section is supplemented with specific measures under subchapters for particular critical areas. Mitigation for specific development proposals may include a combination of the measures below and shall be designed and constructed in accordance with the provisions of

this section. ~~The proponent proponent for a project involving critical areas shall avoid, minimize and mitigate the impacts to the critical areas through actions that occur in the following sequence.~~ Before impacting any critical areas an applicant shall demonstrate that the following actions have been taken in the follow sequential order of preference:

~~A~~1. Avoiding the impact altogether by not taking a certain action or parts of actions;

~~B~~2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

~~C~~3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment or by restoring or stabilizing the hazard area through natural, engineering, or other methods;

~~D~~4. Reducing or eliminating the impact over time through preservation and maintenance operations during the life of the action;

~~E~~5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or

~~F~~6. Monitoring, measuring and reporting the impact to the ~~Planning~~ Director and taking appropriate corrective measures.

C. Applicants must first demonstrate an inability to avoid or reduce impacts before the use of actions to mitigate potential impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 2(B), 2000. Formerly 20.80.170.).

D. **Type, Location, and Timing of Mitigation.** Unless it is demonstrated that a higher level of ecological functioning or greater reduction of hazard risk would result from an alternative approach or as otherwise allowed in this chapter, mitigation for adverse impacts shall be in-kind, on-site, and prior to the activities that will disturbed the critical area. Mitigation measures that cannot be implemented prior to the critical area impacts shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

1. The ~~Administrator~~ Director may authorize a one-time temporary delay in completing construction or installation of the mitigation when the applicant provides a written explanation from a qualified ~~wetland~~ professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the City.

20.80.056 Voluntary critical area restoration projects.

A. When a critical area restoration project is proposed that is not required as mitigation for a development proposal, the City may grant relief from standard critical area buffer requirements if the restoration project involves:

1. The daylighting of a stream, or

2. Creation or expansion of a wetland that would increase the area of the wetland and/or wetland buffer

B. At the time a restoration project is proposed, a buffer shall be established that will apply to the restoration project boundary. Restoration project buffers shall be established according to the following requirements:

1. A buffer may be applied to the restored portion of the stream or wetland that is not less than seventy-five percent (75%) of the standard buffer associated with the type of stream or category of wetland; or,

2. The project proponent may request a reduced buffer of between fifty percent (50%) and seventy-five percent (75%) of the standard buffer associated with the type of stream or category of wetland. The following criteria will be used by the City in reviewing the request for a reduced buffer:

a. The Director determines that applying a seventy-five percent (75%) buffer would significantly limit the use of the property for existing or permitted uses, thus making the restoration project infeasible;

b. The proposed buffer relief is the minimum necessary to achieve the restoration project;

c. There will be a net environmental benefit from the restoration project with the reduced buffer;

d. Granting the proposed relief is consistent with the objectives of the critical area restoration project and consistent with purposes of the City's critical area regulations.

20.80.060 Best available science.

A. **Protect Functions and Values of Critical Areas With Special Consideration to Anadromous Fish.** Critical area reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and required buffers and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat, where applicable.

B. **Best Available Science to be Consistent With Criteria.** The best available science is that scientific information, obtained through a valid scientific process, that is applicable to the critical area prepared by local, state, or federal natural resource agencies, a qualified scientific professional, or team of qualified scientific professionals that is consistent with criteria established in WAC 365-195-900 through WAC 365-195-925 and RCW 36.70A.172.

C. **Characteristics of a Valid Scientific Process.** In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions, and in developing critical areas policies and development regulations that will be effective in protecting the functions and values of critical areas and buffers. To determine whether information received during the permit review process is reliable scientific information, the Director shall determine whether the source of the information displays the characteristics of a valid scientific process. Such characteristics are as follows:

1. **Peer Review.** The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed;

2. **Methods.** The methods used to obtain the information are clearly stated and reproducible. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to ensure their reliability and validity;

3. **Logical Conclusions and Reasonable Inferences.** The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained;

4. **Quantitative Analysis.** The data have been analyzed using appropriate statistical or quantitative methods;

5. **Context.** The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge; and

6. **References.** The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature, and other pertinent existing information.

D. **Nonscientific Information.** Nonscientific information, such as anecdotal observations, non-expert opinion, and hearsay, may supplement scientific information, but it is not an adequate substitute for valid and available scientific information.

E. **Absence of Valid Scientific Information.** Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the Director shall:

1. Take a "precautionary or a no-risk approach," that strictly limits development and land use activities until the uncertainty is sufficiently resolved; and

2. Require application of an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and nonregulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. An adaptive management program shall:

a. Address funding for the research component of the adaptive management program;

b. Change course based on the results and interpretation of new information that resolves uncertainties; and

c. Commit to the appropriate timeframe and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting protection of critical areas and anadromous fisheries.

20.80.~~1~~070 Classification and rating of critical areas.

To promote consistent application of the standards and requirements of this chapter, critical areas within the City of Shoreline shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance. Classification of critical areas shall be determined by the City using the following tools:

A. Application of the criteria contained in these regulations;

B. Consideration of the ~~technical~~ critical area reports submitted by qualified professionals in connection with applications subject to these regulations; and

C. Review of maps adopted pursuant to this chapter. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 2(E), 2000. Formerly 20.80.200.).

20.80.~~1~~080 Critical areas reports ~~required~~ - Requirements.

A. **Report Required.** If uses, activities, or developments are proposed within, adjacent to, or are likely to impact critical areas or their buffers, an applicant shall provide site-specific information and analysis in the form of critical area report(s) as ~~determined by the City~~ required in this chapter. Critical area reports are required in order to identify the presence, extent, and classification/rating of potential critical areas, as well as to analyze, assess, and mitigate the potential adverse impact to or risk from critical areas for a development project. Critical area reports shall use standards for best available science in SMC 20.80.060.Critical area reports for two or more types of critical areas must meet the report requirements for each type of critical area. The expense of preparing the critical area report(s) shall be borne by the applicant. ~~The site-specific information must be obtained by expert investigation and analysis.~~ This provision is not intended to expand or limit an applicant's other obligations under WAC 197-11-100. ~~Such site-specific reviews shall be performed by qualified professionals, as defined by SMC 20.20.042, who are approved by the City or under contract to the City.~~

B. **Preparation by Qualified Professional.** Critical area report(s) shall be prepared by qualified professional(s) as defined in SMC 20.20.042, with the required training and experience specific to the type(s) of critical area(s) present consistent with the requirements of SMC 20.80.240, 20.80.290, and 20.80.340. Proof of licensing, credentials, and resume of the qualified professional(s) preparing the report must be submitted for review by the City to determine if the minimum qualifications are met.

C. **Third Party Review of Critical Area Reports.** Review of required critical area reports by a qualified professional under contract with or employed by the City will be required by the Director at the applicant's expense in any of the following circumstances:

1. The project requires a Critical Area Reasonable Use Permit (CARUP), Critical Area Special Use Permit (CASUP), or Shoreline Variance application; or

2. Third party review is specifically required by the provisions of this chapter for the critical area(s) or critical area buffer(s) potentially being impacted; or

3. When the Director determines such services are necessary to demonstrate compliance with the standards and guidelines of this chapter.

D. **Critical Area Report Types or Sections.** Critical area reports may be met in stages through multiple reports or combined in one report. A critical area report shall include one or more of the following sections or report types unless exempted by the Director and the extent of the potential critical area impacts. The scope and location of the proposed project will determine which report(s) alone or combined are sufficient to meet the critical area report requirements for the impacted critical area type(s). The typical sequence of required sections or reports that will fulfill the requirements of this section include:

1. **Reconnaissance.** The existence, general location, and type of critical areas in the vicinity (within 300 feet for wetlands and fish and wildlife habitat conservation areas and within 200 feet for geologic hazards, shorelines, flood plains, and aquifer recharge areas) of a project site. Determination of whether the project will adversely impact or be at risk from the potential critical areas based on maximum potential buffers and possible application of SMC 20.80.276(D)(7) or SMC 20.80.324(H)(10) should be addressed;

2. **Delineation.** The extent, boundaries, rating or classification, and applicable standard buffers of critical areas where the project area could potentially impact the critical area or its buffer including an assessment of the characteristics of or functions and values of the critical area and buffers identified;

3. **Analysis.** The proposal and impact assessment report documenting the potential project impacts to the critical area and buffers including a discussion of the efforts taken to avoid, minimize, and reduce potential impacts to those areas;

4. **Mitigation.** The potential impacts and mitigation measures designed to meet the requirements of this chapter, in SMC 20.80. 082 *Mitigation plan requirements*, and the standards for the specific critical areas impacted. Mitigation includes, but is not limited to, adjustments to required buffer sizes, best practices to minimize impacts, and critical area or buffer enhancement, restoration, or preservation plans. Mitigation

plans include habitat management plans, revegetation, or replanting plans, and restoration plans;

5. **Maintenance and Monitoring.** The goals of the mitigation proposed, performance standards for success, monitoring methods and reporting schedule, maintenance methods and schedule, and contingency actions. Maintenance and monitoring plans must be consistent with the mitigation performance standards and requirements of this chapter, including SMC 20.80.250, 20.80.300, and 20.80.350.

E. **Minimum Report Contents.** At a minimum critical area reports shall contain the following:

1. The name and contact information of the applicant;

2. Provide adequate information to determine compliance with the requirements of the critical area regulations, Chapter 20.80 SMC, including critical area report, impact and hazard assessment, and mitigation requirements specific to each critical area type, as indicated in the corresponding sections of this chapter;

3. The dates, names, and qualifications of the qualified professional(s) preparing the report and documentation of any fieldwork performed on the site;

4. A description of the proposal, proposal location including address and parcel number(s), and a vicinity map for the project;

5. Identification of the development permit(s) requested and all other local, State, and/or Federal critical area-related permits required for the project;

6. A copy of the site plan for the development proposal including:

   a. A map to standard engineering scale depicting critical areas, buffers, the development proposal, and any areas to be altered. In addition to plan size site plans, a legible, reduced (8.5”x11”) copy will be required if noticing is required for the project; and

   b. A scaled depiction and description of the proposed storm water pollution prevention plan, consistent with the adopted stormwater manual, for the development and consideration of impacts to critical areas due to drainage alterations;

7. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, and buffers within the vicinity of the proposed project area (within 300 feet for wetlands and fish and wildlife habitat conservation areas and within 200 feet for geologic hazards, shorelines, floodplains, and aquifer recharge areas);

8 A statement specifying the accuracy of the report and all assumptions made and relied upon;

9. A description of the methodologies used to conduct the critical areas investigation, including references;

10. An assessment of the probable impacts to the critical areas resulting from the proposed development of the site based upon identified findings;

11. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC 20.80.053, Alteration of critical areas, to avoid, minimize, and mitigate impacts to critical areas; and

12. Plans for mitigation required to offset any critical areas impacts, in accordance with SMC 20.80.082 Mitigation plan requirements and the corresponding mitigation performance standards sections of this chapter and including a discussion of the applicable development standards and cost estimates for determination of financial guarantee requirements.

F. **Existing reports.** Unless otherwise provided, a critical areas report may incorporate, be supplemented by or

composed, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Director. At the discretion of the Director, reports previously compiled or submitted as part of a proposal for development may be used as a critical areas report to the extent that the requirements of this section and the report requirements for each specific critical area type are met. Critical areas reports shall be considered valid for five years; after such date the City shall determine whether a revision or additional assessment is necessary. Supplemental critical area report(s) may be required to provide information and analysis to address changes to the project scope and potential impacts or applicable regulations that have been made subsequent to existing, valid critical area reports.

G. **Modifications to report requirements.**

1. **Limitations to Study Area.** The Director may limit the required geographic area of the critical areas report as appropriate if:

a. The applicant, with assistance from the City of Shoreline, cannot obtain permission to access properties adjacent to the project area; or

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

2. **Modifications to Required Contents.** The applicant may consult with the Director prior to or during preparation of the critical areas report to obtain approval of modifications to the required contents of the report 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. In some cases, such as when it is determined that no geologic hazard area is present, a full report may not be necessary to determine compliance with the critical area regulations, Chapter 20.80 SMC, and in those cases a letter or reconnaissance only report may be provided.

3. **Additional Information Requirements.** The Director may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with this chapter. Additional information that may be required includes, but is not limited to:

a. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;

b. Grading and drainage plans; and

c. Information specific to the type, location, and nature of the critical area. (Ord. 581 § 1 (Exh. 1), 2010; Ord. 515 § 1, 2008; Ord. 406 § 1, 2006; Ord. 398 § 1, 2006).

20.80.082 Mitigation plan requirements. When mitigation is required, the applicant shall submit for approval by the City a mitigation plan as part of the critical area report. Mitigation plans must meet the minimum requirements of SMC 20.80.080 and the applicable mitigation performance standards and requirements for the impacted type(s) of critical area(s) and buffer(s), including but not limited to SMC 20.80.250, 20.80.300, and 20.80.350. When the mitigation plan is submitted separately from other types or sections of the required critical area report(s) the mitigation plan must meet the minimum content requirements of SMC 20.80.080(E) by inclusion or reference to other existing report(s). The mitigation plan shall include:

A. **Environmental Goals and Objectives.** The mitigation plan shall include a written report identifying environmental goals and objectives of the mitigation proposed and including:

1. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area; and

2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed.

B. **Performance Standards.** The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained at the end of the required monitoring period and whether or not the requirements of this chapter have been met.

C. **Detailed Construction Plans.** The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

1. The proposed construction sequence, timing, and duration;

2. Site plans showing grading and excavation details with minimum 2-foot contour intervals;

3. Erosion and sediment control features;

4. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and

5. Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

~~G~~D. **Monitoring Program and Contingency Plan.**

1. A monitoring program shall be included in the mitigation plan and implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives of the mitigation plan are being met.

2. A contingency plan shall be established for indemnity in the event that the mitigation project is inadequate or fails. Contingency plans include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met. Corrective measures will be required by the City when the qualified professional indicates, in a monitoring report, that the contingency actions are needed to ensure project success by the end of the monitoring period. A performance and maintenance bond or other acceptable financial guarantee is required to ensure the applicant's compliance with the terms of the mitigation agreement consistent with SMC 20.80.120 Financial guarantee requirements. ~~The amount of the performance and maintenance bond(s) shall equal 125 percent of the cost of the mitigation project in addition to the cost for monitoring for a minimum of five years. The bond may be reduced in proportion to work successfully completed over the period of the bond. The bonding period shall coincide with the monitoring period.~~

3. Monitoring programs prepared to comply with this section shall ~~reflect~~ include the following requirements ~~guidelines~~:

a. Scientific procedures shall be used to establish the success or failure of the project. A protocol outlining the schedule for site monitoring (for example, monitoring shall occur in years 0 (as-built), 1, 3, and 5 after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met.

b. For vegetation determinations, permanent sampling points shall be established.

c. Vegetative success shall, at a minimum, equal 80 percent survival of planted trees and shrubs and 80 percent cover of desirable understory or emergent plant species at the end of the required monitoring period. ~~Additional~~ Alternative standards for vegetative success, including (but not limited to) minimum survival standards following the first growing season, may be required after consideration

of a recommendations provided in a critical area report ~~prepared by a qualified consultant~~ or as otherwise required by the provisions of this chapter.

d. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. Monitoring reports on the current status of the mitigation project shall be submitted, consistent with SMC 20.80.082(E), to the City on the schedule identified in the monitoring plan, but not less than every other year. The reports are to be prepared by a qualified ~~consultant~~ professional and reviewed by the City or a ~~consultant~~ qualified professional retained by the City and should include monitoring information on wildlife, vegetation, water quality, water flow, stormwater storage and conveyance, and existing or potential degradation, as applicable.~~, and shall be produced on the following schedule: at the time of construction; 30 days after planting; early in the growing season of the first year; at the end of the growing season of the first year; twice during the second year; and annually thereafter~~.

e. Monitoring programs shall be established for a period necessary to establish that performance standards have been met, but not for less than a minimum of five (5)years without approval from the Director. Monitoring programs for projects located within the shoreline jurisdiction must also comply with the standards in 20.230.020 and may require a longer monitoring period.

f. If necessary, failures in the mitigation project shall be corrected.

g. Dead or undesirable vegetation shall be replaced with appropriate plantings.

h. Damage caused by erosion, settling, or other geomorphological processes shall be repaired.

i. The mitigation project shall be redesigned (if necessary) and the new design shall be implemented and monitored, as in subsection (~~G~~D)(3)(d) of this section.

j. Correction procedures shall be approved by a qualified ~~consultant~~ professional and the City.

k. If the mitigation goals are not obtained within the initial monitoring period, the applicant remains responsible for restoration of the impacted values and functions or hazard risk reduction until the mitigation goals agreed to in the mitigation plan are achieved.

E. **Monitoring Reports.** Monitoring reports shall be submitted to the City consistent with the approved monitoring plan. The as-built report required prior to final inspection shall include documentation of departures from the original approved plans, construction supervision provided by the qualified professional, approved project goals and performance standards, baseline data for monitoring per the approved monitoring methods, photos from established photo points, and a site plan showing final mitigation as constructed or installed, monitoring points, and photo points. Subsequent monitoring reports shall include monitoring visit observations, documentation and analysis of monitoring data collected, photos from photo points, determination whether performance standards are being met, and maintenance and/or contingency action recommendations to ensure success of the project at the end of the monitoring period. The applicant shall be responsible for the cost (at the current hourly rate) of review of monitoring reports and site inspections during the monitoring period completed by the City or a qualified professional under contract with or employed by the City.

F. **Cost Estimates.** The mitigation plan shall include cost estimates that will be used by the City to calculate the amounts of financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with SMC 20.80.120 Financial guarantee requirements.

G. **Approved ~~Wetland~~ Mitigation Projects – Signature.** On completion of construction, an as-built report for any approved mitigation project shall be prepared and signed off by the applicant's qualified ~~consultant~~ professional and approved by the City. Signature of the qualified ~~consultant~~ professional on the required as-built report and approval by the City will indicate that the construction has been completed as planned.

20.80.085 Pesticides, herbicides and fertilizers on City-owned property.

Pesticides, herbicides and fertilizers which have been identified by State or Federal agencies as harmful to humans, wildlife, or fish, shall not be used in a City-owned riparian corridor, shoreline habitat or its buffer, wetland or its buffer, except as allowed by the Director for the following circumstances:

A. When the Director determines that an emergency situation exists where there is a serious threat to public safety, health, or the environment and that an otherwise prohibited application must be used as a last resort.

B. Compost or fertilizer may be used for native plant revegetation projects in any location.

C. Limited pesticide and herbicide use may be applied pursuant to the King County Noxious Weed Control Board best management practices specific to the species needing control when that is determined to be the best method of control for the location. Federal, state, and local regulations of pesticides and water quality must be followed, including requirements for pesticide applicator licensing from the Washington State Department of Agriculture. (Ord. 398 § 1, 2006)

20.80.090 Buffer areas.

The establishment of buffer areas shall be required for all development proposals and activities in or adjacent to critical areas. In all cases the standard buffer ~~(i.e., the maximum buffer required by the City)~~ shall apply unless the Director determines ~~that no net loss of functions and values will occur~~ that additional buffer width is necessary to protect the functions and values consistent with the provisions of this chapter and the recommendations of a qualified professional. The purpose of the buffer shall be to protect the integrity, function, value and resource of the subject critical area, and/or to protect life, property and resources from risks associated with development on unstable or critical lands. Buffers shall consist of an undisturbed area of native vegetation established to achieve the purpose of the buffer. If the buffer area has previously been disturbed, it shall be revegetated pursuant to an approved ~~planting~~ mitigation or restoration plan. Buffers shall be protected during construction by placement of a temporary barricade if determined necessary by the City, on-site notice for construction crews of the presence of the critical area, and implementation of appropriate erosion and sedimentation controls. Restrictive covenants or conservation easements may be required to preserve and protect buffer areas. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 2(C), 2000. Formerly 20.80.180.).

20.80.~~050~~100 Notice to title.~~A.~~ A critical area notice to title is required, when a permit or development application is submitted, as a condition of permit issuance or project approval, for development on any property containing a critical area or buffer. The purpose is t~~T~~o inform subsequent purchasers of real property of the existence of critical areas.~~, when development is permitted in an identified critical area or its associated buffer, a~~ This requirement can be met through recording of a Notice to Title prepared by the City, establishment of a Critical Area Tract, or recording of Native Growth Protection Area easement consistent with the following provisions.

A. **Notice to Title.** A notice to title is required when a permit is required for development on any property containing a critical area or buffer. The notice to title applicable to the property shall be approved by the Director and City Attorney for compliance with this provision and be filed by the property owner with the King County Recorder's Office. The title holder will have the right to challenge this notice and to have it extinguished if the critical area designation no longer applies. However, the titleholder shall be responsible for completing a critical area report, subject to approval by the Director, before the notice on title can be extinguished. The notice shall state that critical areas or buffers have been identified on the property and the fact that limitations on actions in or affecting the critical area or buffer may exist. The notice shall run with the land. A Critical Area Tract or Native Growth Protection Area easement shall be required to meet the notice to title requirement as follows: ~~This notice shall not be required for development by a public agency or public or private utility when:~~

~~1. Within a recorded easement or right-of-way; or~~

~~2. On the site of a permanent public facility.~~

~~B~~1. **Critical Area Tract.** Subdivisions, short subdivisions, ~~development agreements,~~ and binding site plans

shall establish a separate ~~tract (a~~ critical areas tract~~)~~ as a permanent protective measure for wetlands, ~~streams,~~ fish and wildlife habitat conservation areas, and landslide hazard areas and their buffers. The plat or binding site plan for the project shall clearly depict the critical areas tract, and shall include all of the subject critical area and any required buffer, ~~as well as~~ any additional lands~~, as~~ included voluntarily ~~determined~~ by the developer. Restrictions to development within the critical area tract shall be clearly noted on the plat or plan. Restrictions shall be consistent with this chapter for the entire critical area tract~~, including any additional areas included voluntarily by the developer~~. Should the critical area tract include several types of critical areas, the developer may establish separate critical areas tracts; or

2. **Native Growth Protection Area.** NGPA easements shall be required on a property where no subdivision, short subdivision, or binding site plan is proposed or required. Unless otherwise required in this chapter, native growth protection area (NGPA) easements shall be recorded on title for all affected parcels prior to approval of a development agreement, issuance of a Master Development Plan Permit, or issuance of a site development or building permit when two (2) or more dwelling units and/or nonresidential development are proposed on one parcel to delineate and protect those contiguous wetlands, fish and wildlife habitat conservation, and landslide hazard critical areas and their buffers. The easement to be recorded shall clearly depict the critical area and the limits of the NGPA easement and shall include all of the subject critical area(s) and any required buffer(s). Restrictions to development with in the NGPA easement shall be clearly noted in the easement and shall include the following:

a. That native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, limiting chemical applications of hazardous substances (pesticides, herbicides, fertilizers), maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and

b. The right of the City to enforce the terms of the restriction.

D. **Modifications and Waivers.** Where the standards in this chapter allow for development within the identified critical areas, the Director may modify the language or dimensions of the required critical area tract or native growth protection area easement for consistency with the extent of the development to be permitted.

E. **Proof of Notice.** The applicant shall submit proof that the notice has been recorded on title before the City approves any development permit, including master development plan permits, for the property or, in the case of subdivisions, short subdivisions, binding site plans, or development agreements, at or before recording. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(M), 2000. Formerly 20.80.130.).

20.80.~~060~~110 Permanent field marking.

A. All critical areas tracts, easements, ~~or~~ and dedications, or as recommended by a qualified professional, shall be clearly marked on the site using permanent markings, placed at least every ~~300~~ fifty (50) feet, which include the following text:

~~This area has been identified as a <<INSERT TYPE OF CRITICAL AREA>> by the~~ City of Shoreline Designated Critical Area. Activities, including clearing and grading, removal of vegetation, pruning, cutting of trees or shrubs, planting of nonnative species, and other alterations may be prohibited. Help protect and care for this area. Please contact the City of Shoreline ~~Department of Development (206) 546-1811 for further information~~ with questions or concerns.

B. It is the responsibility of the landowner to maintain in perpetuity and replace if necessary all permanent field markings. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(N), 2000. Formerly 20.80.140.).

~~**20.80.100 Classification and rating of critical areas.**~~

~~To promote consistent application of the standards and requirements of this chapter, critical areas within the City of Shoreline shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance. Classification of critical areas shall be determined by the City using the following tools:~~

~~A. Application of the criteria contained in these regulations;~~

~~B. Consideration of the technical reports submitted by qualified professionals in connection with applications subject to these regulations; and~~

~~C. Review of maps adopted pursuant to this chapter. (Ord. 398 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 2(E), 2000. Formerly 20.80.200.).~~

~~20.80.110 Critical areas reports required.~~

~~If uses, activities or developments are proposed within critical areas or their buffers, an applicant shall provide site-specific information and analysis as determined by the City. The site-specific information must be obtained by expert investigation and analysis. This provision is not intended to expand or limit an applicant's other obligations under WAC 197-11-100. Such site-specific reviews shall be performed by qualified professionals, as defined by SMC 20.20.042, who are approved by the City or under contract to the City. (Ord. 581 § 1 (Exh. 1), 2010; Ord. 515 § 1, 2008; Ord. 406 § 1, 2006; Ord. 398 § 1, 2006).~~

20.80.120 Financial guarantee requirements.

Bonds and other financial guarantees and associated Performance Agreements or Maintenance/Defect/Monitoring agreements shall be required for projects with required mitigation or restoration of impacts to critical areas or critical area buffers consistent with the following:

A. A Performance agreement and bond or other acceptable financial guarantee is required from the applicant when mitigation required pursuant to a development proposal is not completed prior to final permit approval, such as final plat approval or final building inspection. The amount of the performance bond(s) shall equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).

B. A Performance agreement and bond or other acceptable financial guarantee is required from the applicant when restoration is required for remediation of a critical area violation. The amount of the performance bond(s) shall equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).

C. A Maintenance/Defect/Monitoring agreement and bond or other acceptable financial guarantee is required to ensure the applicant's compliance with the conditions of the approved mitigation plan pursuant to a development proposal or restoration plan for remediation of a violation. The amount of the maintenance bond(s) shall equal 25 percent of the cost of the mitigation project (after City mobilization is calculated) in addition to the cost for monitoring for a minimum of five years. The monitoring portion of the financial guarantee may be reduced in proportion to work successfully completed over the period of the bond. The bonding period shall coincide with the monitoring period.

20.80.130 Unauthorized critical area alterations.

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

B. **Requirement for Restoration Plan.** All development shall remain stopped until a restoration plan is prepared by the responsible party and an approved permit is issued by the City. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum requirements described in subsection (C). The Director may, at the responsible party's expense, seek expert advice, including but not limited to third party review by a qualified professional under contract with or employed by the City, in determining if the plan meets the minimum performance standards for restoration. Submittal, review, and approval of required restoration plans for remediation of violations of Chapter 20.80 SMC, Critical Areas shall be completed through a site development permit application process.

C. **Minimum Performance Standards for Restoration.**

1. For alterations to aquifer recharge areas, flood hazard areas, wetlands, and habitat conservation areas, the following minimum performance standards shall be met for the restoration, provided that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:

   a. The pre-violation function and values of the affected critical areas and buffers shall be restored, including water quality and habitat functions;

   b. The pre-violation soil types and configuration shall be replicated;

   c. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically, or pre-violation, found on the site in species types, sizes, and densities. The pre-violation functions and values should be replicated at the location of the alteration; and

   d. Information demonstrating compliance with the requirements in Section 20.80.082 Mitigation Plan Requirements and the applicable mitigation sections for the affected type(s) of critical area(s) and their buffer(s) shall be submitted to the Director with a complete site development permit application.

2. For alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

   a. The hazard shall be reduced to a level equal to, or less than, the pre-violation hazard;

   b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

   c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

D. **Site Investigation.** The Director is authorized to take such actions as are necessary to enforce this chapter. The Director shall prevent property credentials and obtain permission before entering onto private property.

E. **Penalties.** Any responsible party violating of any of the provisions of this chapter may be subject any applicable penalties per SMC 20.30.770 plus the following:

1. A square footage cost of three dollars ($3.00) per square foot of impacted critical area buffer; and a square footage cost of fifteen dollars ($15.00) per square foot of impacted critical area; and

2. A per tree penalty in the amount of $3,000 per non-significant tree and $9,000 per significant tree for trees removed from a critical area or critical area buffer in violation of the provisions of this chapter.

Subchapter 2.

Geologic Hazard Areas

20.80.210 GEOLOGIC HAZARDS - Designation and purpose.

A. Geologic hazard areas are those lands that are ~~affected by natural processes that make them susceptible to geologic events, such as landslides, seismic activity and severe erosion, especially bluff and ravine areas and steep slopes. Areas~~ susceptible to erosion, landsliding, seismic, or other geological events as identified by WAC 365-190-120. These areas may not be suited for any development activities, because they may pose a threat to public health and safety, or environmental standards.

Areas susceptible to one or more of the following types of hazards shall be designated as ~~g~~Geologically ~~h~~Hazard~~ous~~ areas:

~~1. Erosion hazard;~~

~~2~~1. Landslide hazard;

~~3~~2. Seismic hazard~~.~~;

3. Erosion hazard.

B. The primary purpose of geologic hazard area regulations is to avoid and minimize potential impacts to life and property from geologic hazards, conserve soil resources, and minimize structural damage relating to seismic hazards. This purpose shall be accomplished through appropriate levels of study and analysis, application of sound engineering principles, and regulation or limitation of land uses, including maintenance of existing ~~native~~ vegetation, regulation of clearing and grading activities, and control of stormwater. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 3(A), 2000).

20.80.220 GEOLOGIC HAZARDS - Classification.

Geologic hazard areas shall be classified according to the criteria in this section as follows:

A. **Landslide Hazard Areas.** Landslide Hazard Areas are those areas potentially subject to landslide activity based on a combination of geologic, topographic and hydrogeologic factors as classified in SMC 20.80.220(B) with ~~Those areas in the City of Shoreline on~~ slopes ~~40~~15 percent or steeper within a vertical elevation change of at least 10 feet or all areas of prior landslide activity regardless of slope. A slope is delineated by establishing its toe and top, and is measured by averaging the inclination over at least 10 feet of vertical relief (see Figure 20.80.220(B)). The edges of the geologic hazard are identified where the characteristics of the slope cross section change from one landslide hazard classification to another or no longer meet any classification. ~~For the purpose of this definition:~~

~~A~~1. The toe of a slope is a distinct topographic break ~~in slope~~ which separates slopes inclined at less than ~~40~~15 percent from slopes above that are ~~40~~15 percent or steeper. ~~Where no distinct break exists, the toe of a steep slope is the lower most limit of the area where the ground surface drops 10 feet or more vertically within a horizontal distance of 25 feet~~ A distinct topographic break is an area that extends at least 15 feet horizontally away from the slope and that slopes less than 15 percent; and

~~B~~2. The top of a slope is a distinct topographic break ~~in slope~~ which separates slopes inclined at less than ~~40~~15 percent from slopes below that are ~~40~~15 percent or steeper. ~~Where no distinct break exists, the top of a steep slope is the upper most limit of the area where the ground surface drops 10 feet or more vertically within a horizontal distance of 25 feet~~ A distinct topographic break is an area that is at least 15 feet horizontally away from the slope and that slopes less than 15 percent.

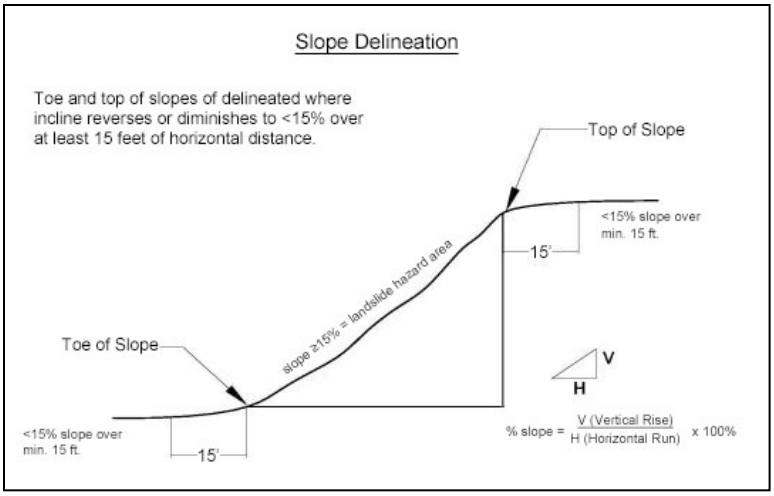

Figure 20.80.220(A): Illustration of slope calcuation for determination of top and toe of landslide hazard area.

3. Landslide hazard area classifications differentiated based on percent slope shall be delineated based on topographic change that extends at least 15 feet horizontally away from the slope and that slopes less than 40 percent, as determined by two (2) foot contour intervals, not averaging over the full landslide hazard area.

B. **Landslide Hazard Area Classification.** Landslide hazard areas are classified as follows:

1. Moderate to High Risk ~~Hazard~~:

   a. Areas with slopes between 15 percent and 40 percent and that are underlain by soils that consist largely of sand, gravel or glacial till that do not meet the criteria for Very High Risk areas in (3) below.

~~2. High Hazard:~~

   b. Areas with slopes between 15 percent and 40 percent that are underlain by soils consisting largely of silt and clay~~.~~ and do not meet the criteria for Very High Risk areas in (3) below; and

   c. All slopes of 10 to 20 feet in height that are 40 percent slope or steeper and do not meet the criteria for Very High Risk in (3)(a) or (3)(b) below.

3. Very High Risk ~~Hazard~~:

   a. Areas with slopes steeper than 15 percent with zones of emergent water (e.g., springs or ground water seepage)~~,~~;

   b. aAreas of landslide ~~deposits~~ activity (scarps, movement, or accumulated debris) regardless of slope~~,~~; and

   c. aAll ~~steep~~ slopes ~~hazard areas sloping~~ that are 40 percent or steeper and more than 20 feet in height. Slope height shall include all areas greater than 40 percent slope that are not separated by breaks greater than 15 feet wide (horizontal run) less than 40 percent slope, as illustrated in Figure 20.80.220(B).

[place holder for cross section and plan view illustrations differentiating Moderate to High, and Very High risk landslide hazard areas]
Figure 20.80.220(B): Illustration of landslide hazard area delineation.

~~B~~C. **Seismic Hazard Areas.** Seismic hazard areas are lands that, due to a combination of soil and ground water conditions, are subject to ~~severe~~ risk of ground shaking, lateral spreading, subsidence or liquefaction of soils during earthquakes. These areas are typically underlain by soft or loose saturated soils (such as alluvium) or peat deposits and have a shallow ground water table. These areas are designated as having "high" and "moderate to high" risk of liquefaction as mapped on the *Liquefaction Susceptibility and Site Class Maps of Western Washington State by County* by the Washington State Department of Natural Areas or areas located within landslide hazards areas.

~~C~~D. **Erosion ~~and Sedimentation~~ Hazard Areas.** Erosion hazard areas are lands or areas underlain by soils identified by the U.S. Department of Agriculture Natural Resources Conservation Service (formerly the Soil Conservation Service) as having "severe" or "very severe" erosion hazards. This includes, but is not limited to, the following group of soils when they occur on slopes of 15 percent or greater: Alderwood-Kitsap (AkF), Alderwood gravelly sandy loam (AgD), Kitsap silt loam (KpD), Everett (EvD) and Indianola (InD). (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 3(B), 2000).

20.80.222 GEOLOGIC HAZARDS – Mapping.

A. The approximate location and extent of geologic hazard areas are shown on City of Shoreline critical areas inventory. In addition, resources providing information on the location and extent of geologic hazard areas include:

1. Washington Department of Ecology coastal zone atlas (for marine bluffs);

2. U.S. Geological Survey geologic maps, landslide hazard maps, and seismic hazard maps;

3. Washington State Department of Natural Resources seismic hazard maps for Western Washington, including, but not limited to the *Liquefaction Susceptibility and Site Class Maps of Western Washington State by County*;

4. Washington State Department of Natural Resources slope stability maps;

5. Soils maps produced by the US Department of Agriculture, National Resources Conservation Service; and

6. Geologic hazard data layers maintained in the City of Shoreline geographic information system (GIS).

B. The critical areas inventory and the resources cited above are to be used as a guide for the City of Shoreline Planning & Community Development department, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

20.80.224 GEOLOGIC HAZARDS – Development standards.

A. Activities and uses shall be allowed in geologic hazard areas and their required buffers only as provided for in this chapter.

B. **Activities allowed in all geologic hazard areas and buffers.** The activities listed below are allowed in the identified geologic hazard areas types pursuant to SMC 20.80.040 *Allowed Activities*. Exemptions are listed in SMC 20.80.030, but do not apply within the shoreline jurisdiction. These activities do not require submission of a critical area report.

1. All allowed activities per SMC 20.80.040;

2. Installation of fences as allowed without a building permit in Chapter 20.50 Development standards;

3. Non-structural interior remodel, ~~M~~maintenance, or repair of structures which do not meet the standards of this chapter ~~for landslide or seismic areas~~, if the maintenance or repair does not increase the footprint or height of the structure and there is no increased risk to life or property as a result of the proposed maintenance or repair; and

4. **Erosion Hazard Areas.** If the site does not contain another type of critical area or critical area buffer and does not exceed any other threshold contained in SMC 20.50.320, then up to 1,500 square feet may be cleared on any lot in an erosion hazard area without a permit ~~unless the site also contains another type of critical area or any other threshold contained in SMC 20.50.320 would be exceeded~~.

~~A~~C. **Alteration.** The City shall approve, condition, or deny proposals in a geologic hazard area ~~as appropriate~~ based upon the effective mitigation of risks posed to property, health and safety. The objective of mitigation measures shall be to render a site containing a geologic hazard as safe as one not containing such hazard. Conditions may include limitations of proposed uses, modification of density, alteration of site layout, and other appropriate changes to the proposal. Practices consistent with the adopted stormwater manual shall be incorporated into any project that alters geologic hazard areas to prevent increased risk of the hazard during and after construction.

Where potential impacts cannot be effectively mitigated to eliminate a significant risk to public health, safety and property, or important natural resources, the proposal shall be denied~~.~~, except as granted by a critical area special use or critical area reasonable use permit per SMC 20.30.333 and 20.30.336, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction.

~~B. **Very High Landslide Hazard Areas.** Development shall be prohibited in very high landslide hazards areas or their buffers except as granted by a critical areas special use permit or a critical areas reasonable use permit.~~

~~C~~D. **Alteration of Moderate ~~and~~ to High Risk Landslide Hazards.**

Development activities and uses that result in unavoidable alterations may be permitted in moderate ~~and~~ to high risk landslide hazard areas or their buffers ~~shall be evaluated by a qualified professional through the preparation of a geotechnical report~~ in accordance with an approved geologic hazard critical area report. ~~However, for proposals that include no development, construction, or impervious surfaces, the City, in its sole discretion, may waive the requirement for a geotechnical report.~~ The recommendations contained within the ~~geotechnical~~ critical area report shall be incorporated into the proposed alteration of the landslide hazard area or their buffers.

The ~~geotechnical engineer and/or geologist preparing the~~ critical area report shall ~~provide assurances~~ certify that the risk of damage from the proposal, both on-site and off-site, are minimal subject to the conditions set forth in the report, that the proposal will not increase the risk of occurrence of the potential landslide hazard, and that measures to eliminate or reduce risks have been incorporated into the report's recommendations and project development plans.

~~B~~E. **Alteration of Very High Risk Landslide Hazard Areas.**

~~Development shall be prohibited in very high landslide hazards or their buffers except as granted by a critical area special use permit or a critical area reasonable use permit.~~ Alterations of a very high risk landslide hazard area and/or buffer may only occur for activities for which a critical area report with a hazards analysis is submitted and certifies that:

1. The development will not increase surface water discharge or sedimentation on site or to adjacent properties beyond pre-development conditions;

2. The development will not decrease slope stability on the site or on adjacent properties;

3. Such alterations will meet other critical areas regulations; and

4. The design criteria in subsection (F) are met.

F. **Design Criteria for Alteration of Very High Risk Landslide Hazard Areas.** Development within a landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative project design provides greater short and long-term slope stability while meeting all other provisions of this Chapter. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design criteria are:

1. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Proposed alteration of natural slopes, that does not include structures, shall not decrease the factor of safety for landslide occurrences below the limits of 1.3 for static conditions and 1.0 for seismic. Where the existing conditions are below these limits the proposed development shall increase the factor of safety to these limits or will not be permitted. Analysis of dynamic conditions shall be based on the seismic event as established by the current version of the International Building Code;

2. New structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;

3. New 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;

4. New structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

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

6. Where the existing natural slope area cannot be retained undisturbed with native vegetation, the use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and

7. Development shall be designed to minimize impervious lot coverage and preserve native vegetation and trees to the maximum extent practicable.

G. **Additional Requirements for Alteration of Very High Hazard Landslide Areas.**

1. Prior to application the applicant shall meet the requirements of and conduct a neighborhood meeting for all property owners whose properties adjoin the subject property and properties that include part of the subject property's Very High Risk Landslide Hazard and its standard 50-foot buffer.

2. Prior to permit issuance the property owner shall sign and record on title a covenant with the City which acknowledges and accepts the risks, waives any rights to claims against the City, indemnifies and holds harmless the City against claims, losses, and damages, informs subsequent successors of the property of the risks and the covenant, advisability of obtaining added insurance, and record the covenant on title.

3. Prior to permit issuance the piling and excavation contractors shall submit insurance bonding documentation that include coverage for subsidence and underground property damage, listing the City as an additional insured. The Director may require adequate bonds and/or insurance to cover potential claims for property damage that may arise from or be related to excavation or fill within a landslide-prone area when the depth of the proposed excavation exceeds four feet (4') and the bottom of the proposed excavation is below the one hundred percent (100%) slope line forty-five (45) degrees from a horizontal line) from the property line. The Director may require such bonds and insurance in other circumstances where the Director determines that there is a potential for significant harm to a critical area or buffer during the construction process.

4. During permitted construction on Very High Risk Landslide Hazard Areas and buffers a qualified

professional Geotechnical Special Inspector shall be a third party contractor and authorized as a deputy of the building official to insure that the development is built as permitted and to insure that slope safety problems are prevented.

5. If the building official has reasonable grounds to believe that an emergency exists because significant changes in conditions at a project site or in the surrounding area may have occurred since a permit was issued, increasing the risk of damage to the proposed development, to neighboring properties, or to the drainage basin, the Director may by letter or other reasonable means of notification suspend the permit until the applicant has submitted a letter of certification.

6. The building official may require a letter of certification based on such factors as the presence of known slides, indications of changed conditions at the site or the surrounding area, or other indications of unstable soils.

a. The letter of certification shall be from the current project qualified professional geotechnical engineer of record stating that a qualified professional geotechnical engineer has inspected the site and area surrounding the proposed development within the sixty (60) days preceding submittal of the letter; and that:

b. In the project geotechnical engineer's professional opinion no significant changes in conditions at the site or surrounding area have occurred that render invalid or out-of-date the analysis and recommendations contained in the technical reports and other application materials previously submitted to the City as part of the application for the permit; or that

c. In the project geotechnical engineer's professional opinion, changes in conditions at the site or surrounding area have occurred that require revision to project criteria and that all technical reports and any necessary revised drawings that account for the changed conditions have been prepared and submitted.

~~D~~H. **Alteration of Seismic Hazard Areas.** Development activities and uses in seismic hazard areas may be permitted, not subject to 20.80.050(1), based on review of a critical area report demonstrating that the project is consistent with SMC 20.80.050(2-6). The report must certify that the risk of damage from the proposal, both on-site and off-site, are minimal subject to the conditions set forth in the report, that the proposal will not increase the risk of occurrence of the potential hazard, and that measures to eliminate or reduce risks have been incorporated into the report's recommendations. The report must include the following:

1. For one-story and two-story detached residential structures a qualified professional shall conduct an evaluation of site response and liquefaction potential based on ~~the performance of similar structures with similar foundation conditions~~ current mapping, site reconnaissance, research of nearby studies; or

2. For all other proposals, the applicant shall conduct an evaluation of site response and liquefaction potential including sufficient subsurface exploration to determine the site coefficient for use in the static lateral force procedure described in the International Building Code.

~~E~~I. **Alteration of Erosion Hazard Areas.** Development activities and uses in erosion hazard areas may be permitted, not subject to 20.80.050(1), based on review of a critical area report demonstrating that the project is consistent with SMC 20.80.050(2-6) and the following provisions:

1. ~~Up to 1,500 square feet may be cleared on any lot in an erosion hazard area without a permit, unless the site also contains another type of critical area or any other threshold contained in SMC 20.50.320 would be exceeded.~~

2. ~~—~~All development proposals on sites containing erosion hazard areas shall include a ~~temporary erosion and sediment control~~ stormwater pollution prevention plan consistent with the requirements of the adopted ~~S~~stormwater ~~M~~manual and a ~~revegetation~~ mitigation plan to ensure revegetation and permanent stabilization of the site. Specific requirements for revegetation in mitigation plans shall be ~~determined on~~

~~a case-by-case basis during permit review and administrative guidelines shall be developed by the Department~~ consistent with the mitigation plan requirements in SMC 20.80.082 and the mitigation performance standards for geologic hazard areas in SMC 20.80.250. ~~Critical area r~~Revegetation ~~plans~~ for site stabilization may be combined with required landscape, tree retention, and/or other critical area mitigation plans as appropriate.

2. All subdivisions, short subdivisions or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:

a. Except as provided in this section, existing vegetation shall be retained on all lots until building permits are approved for development on individual lots;

b. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to implement the revegetation plan in those areas that have been impacted prior to final inspection of the site development permit or the issuance of any building permit for the subject property;

c. Clearing of vegetation on individual lots may be allowed prior to building permit approval if the City ~~of Shoreline~~ determines that:

i. Such clearing is a necessary part of a large scale grading plan,

ii. It is not feasible to perform such grading on an individual lot basis, and

iii. Drainage from the graded area will meet established water quality standards ~~to be established by administrative rules.~~

3. Where the City ~~of Shoreline~~ determines that erosion from a development site poses a significant risk of damage to downstream receiving water, the applicant shall be required to provide regular monitoring of surface water discharge from the site. If the project does not meet water quality standards, the City may suspend further development work on the site until such standards are met.

4. The City may require additional mitigation measures in erosion hazard areas, including, but not limited to, the restriction of major soil-disturbing activities associated with site development between October 1st ~~15th~~ and April 30th ~~15th~~ to meet the stated purpose contained in SMC 20.80.010 and 20.80.210.

5. The use of hazardous substances, pesticides and fertilizers in erosion hazard areas may be prohibited by the City ~~of Shoreline~~.

20.80.230 GEOLOGIC HAZARDS – Required buffer areas.

A. Buffers for geologic hazard area shall be maintained as undisturbed native vegetation consistent with SMC 20.80.090. Building and other improvement setbacks will be required in addition to buffers as recommended by the qualified professional to allow for landscaping, access around structures for maintenance, and location of stormwater facilities at safe distances from geologic hazard areas where native vegetation is not necessary to reduce the risk of the hazard.

B. Required buffer widths for geologic hazard areas shall reflect the sensitivity of the hazard area and the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the area.

~~B~~C. In determining the appropriate buffer width, the City shall consider the recommendations contained in a geotechnical critical area report required by these regulations ~~and prepared by a qualified consultant~~.

D. For moderate to high landslide hazard areas, the critical area report shall recommend whether buffers should be required and the width of those buffers as well as recommending any additional setbacks for buildings and

stormwater facilities adequate to certify no increase in the risk of the hazard.

~~C~~E. For very high risk landslide hazard areas, the standard buffer shall be 50 feet from all edges of the landslide hazard area. Larger buffers may be required as needed to eliminate or minimize the risk to people and property based on a geotechnical critical area report ~~prepared by a qualified professional~~. The standard buffer may be reduced ~~to a minimum of 15 feet~~ when geotechnical studies demonstrate and the qualified professional certifies that the reduction will not increase the risk of hazard to people or property, on- or off-site, however the minimum shall be 15 feet.

~~D. Landslide hazard area buffers may be reduced to a minimum of 15 feet when technical studies demonstrate that the reduction will not increase the risk of the hazard to people or property on- or off-site.~~

~~E~~F. Landslide hazard areas and their associated buffers shall be placed either in a separate tract on which development is prohibited, protected by execution of an easement, dedicated to a conservation organization or land trust, or similarly preserved through a permanent protective mechanism acceptable to the City. The location and limitations associated with the critical landslide hazard and its buffer shall be shown on the face of the deed or plat applicable to the property and shall be recorded with the King County ~~Department of~~ Recorder's Office ~~and Elections~~. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 3(C), 2000).

~~**20.80.240 Alteration.**~~

~~A. The City shall approve, condition or deny proposals in a geologic hazard area as appropriate based upon the effective mitigation of risks posed to property, health and safety. The objective of mitigation measures shall be to render a site containing a geologic hazard as safe as one not containing such hazard. Conditions may include limitations of proposed uses, modification of density, alteration of site layout and other appropriate changes to the proposal. Where potential impacts cannot be effectively mitigated to eliminate a significant risk to public health, safety and property, or important natural resources, the proposal shall be denied.~~

~~B. **Very High Landslide Hazard Areas.** Development shall be prohibited in very high landslide hazards areas or their buffers except as granted by a critical areas special use permit or a critical areas reasonable use permit.~~

~~C. **Moderate and High Landslide Hazards.** Alterations proposed to moderate and high landslide hazards or their buffers shall be evaluated by a qualified professional through the preparation of the geotechnical report. However, for proposals that include no development, construction, or impervious surfaces, the City, in its sole discretion, may waive the requirement for a geotechnical report. The recommendations contained within the geotechnical report shall be incorporated into the alteration of the landslide hazard area or their buffers.~~

~~The geotechnical engineer and/or geologist preparing the report shall provide assurances that the risk of damage from the proposal, both on-site and off-site, are minimal subject to the conditions set forth in the report, that the proposal will not increase the risk of occurrence of the potential landslide hazard, and that measures to eliminate or reduce risks have been incorporated into the report's recommendations.~~

~~D. **Seismic Hazard Areas.**~~

~~1. For one-story and two-story residential structures, a qualified professional shall conduct an evaluation of site response and liquefaction potential based on the performance of similar structures with similar foundation conditions; or~~

~~2. For all other proposals, the applicant shall conduct an evaluation of site response and liquefaction potential including sufficient subsurface exploration to determine the site coefficient for use in the static lateral force procedure described in the International Building Code.~~

~~E. **Erosion Hazard Areas.**~~

~~1. Up to 1,500 square feet may be cleared on any lot in an erosion hazard area without a permit, unless the site also contains another type of critical area or any other threshold contained in SMC 20.50.320 would be exceeded.~~

~~2. All development proposals on sites containing erosion hazard areas shall include a temporary erosion and sediment control plan consistent with the requirements of the adopted surface water design manual and a revegetation plan to ensure permanent stabilization of the site. Specific requirements for revegetation plans shall be determined on a case-by-case basis during permit review and administrative guidelines shall be developed by the Department. Critical area revegetation plans may be combined with required landscape, tree retention, and/or other critical area mitigation plans as appropriate.~~

~~3. All subdivisions, short subdivisions or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:~~

~~a. Except as provided in this section, existing vegetation shall be retained on all lots until building permits are approved for development on individual lots;~~

~~b. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to implement the revegetation plan in those areas that have been impacted prior to final inspection of the site development permit or the issuance of any building permit for the subject property;~~

~~c. Clearing of vegetation on individual lots may be allowed prior to building permit approval if the City of Shoreline determines that:~~

~~i. Such clearing is a necessary part of a large scale grading plan,~~

~~ii. It is not feasible to perform such grading on an individual lot basis, and~~

~~iii. Drainage from the graded area will meet water quality standards to be established by administrative rules.~~

~~4. Where the City of Shoreline determines that erosion from a development site poses a significant risk of damage to downstream receiving water, the applicant shall be required to provide regular monitoring of surface water discharge from the site. If the project does not meet water quality standards established by law or administrative rules, the City may suspend further development work on the site until such standards are met.~~

~~5. The City may require additional mitigation measures in erosion hazard areas, including, but not limited to, the restriction of major soil disturbing activities associated with site development between October 15th and April 15th to meet the stated purpose contained in SMC 20.80.010 and 20.80.210.~~

~~6. The use of hazardous substances, pesticides and fertilizers in erosion hazard areas may be prohibited by the City of Shoreline.~~

20.80.240 GEOLOGIC HAZARDS – Critical area report requirements.

A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a geologic hazard area, a critical area report shall be required. Critical area report requirements for geologic hazard areas are met through submission to the Director of one or more geologic hazard critical area reports (also referred to as geotech or geotechnical engineering reports). In addition to the general critical areas report requirements of SMC 20.80.080, critical areas reports for geologic hazard areas must meet the requirements of this section. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

B. **Preparation by a Qualified Professional.** Critical areas reports for potential geologic hazard areas shall be prepared, stamped, and signed by a qualified geotechnical engineer or engineering geologist licensed in the state of Washington, with minimum required experience, per SMC 20.20.042, analyzing geologic, hydrologic, and ground water flow systems, and who has experience preparing reports for the relevant type of hazard. If mitigation measures are necessary, the report detailing the mitigation measures and design of the mitigation shall be prepared by a qualified professional with experience stabilizing geologic hazard areas with similar

geotechnical properties and by a qualified vegetation ecologist, landscape architect or arborist with experience designing and monitoring vegetative stabilization of geologic hazard areas.

C. **Third Party Review Required.** Critical areas studies and reports on geologically hazardous areas shall be subject to third party review consistent with SMC 20.80.080(C) and in any of the additional following circumstances:

1. A buffer reduction or alteration of the critical area or buffer is proposed for a very high risk landslide hazard areas; or

2. Mitigation is required within a very high risk landslide hazard area following any alterations allowed in response to emergencies per SMC 20.80.030(A).

D. **Minimum Report Contents for Geologic Hazard Areas.** A critical area report for geologic hazard areas shall include a field investigation and contain an assessment of whether or not each type of geologic hazard identified in SMC 20.80.210 is present or not present and if the proposed development of the site will increase the risk of the hazard on or off site. The written critical area report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC 20.80.080(E);

2. Documentation of any fieldwork performed on the site, including field data sheets for soils, test pit locations, baseline hydrologic data, site photos, etc.;

3. A description of the methodologies used to conduct the geologic hazard areas delineations, classifications, hazards assessments and/or analyses of the proposal impacts including references;

4. **Site and Construction Plans.** The report shall include a copy of the site plans for the proposal, drawn at an engineering scale, showing:

   a. The type and extent of geologic hazard areas, any other critical areas, and buffers on, adjacent to, within 200 feet of, or that are likely to impact or be affected by the proposal;

   b. Proposed development, including the location of existing and proposed structures, fill, significant trees to be removed, vegetation to be removed, storage of materials, and drainage facilities;

   c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report;

   d. Height of slope, slope gradient, and cross-section of the project area;

   e. The location of springs, seeps, or other surface expressions of ground water on or within 200 feet of the project area or that have the potential to affect or be affected by the proposal;

   f. The location and description of surface water on or within 200 feet of the project area or that have the potential to be affected by the proposal; and

   g. Clearing limits, including required tree protection consistent with SMC 20.50.370.

5. **Stormwater Pollution Prevention Plan (SWPPP)**. For any development proposed with land disturbing activities on a site containing a geologic hazard area, a stormwater pollution prevention plan (also known as an erosion and sediment control plan) shall be required. The SWPPP, in compliance with the requirements of SMC Chapter 13.10, shall be included in the critical area report or be referenced if it is prepared separately.

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

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

   b. A summary of the existing site conditions, including:

      i. the surface topography, existing features, and vegetation found in the project area and in all hazard areas addressed in the report;

      ii. surface and subsurface geology and soils to sufficient depth based on data from site-specific explorations;

      iii. geologic cross-section(s) displaying the critical design slope conditions;

      iv. surface and ground water conditions; and

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

7. **Analysis of Proposal.** The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the identified hazard area(s), the subject property, and affected adjacent properties. The hazards analysis component of the critical areas report shall include the following based on the type(s) of geologic hazard areas identified:

   a. An estimate of the present stability of the subject property, the stability of the subject property during construction, the stability of the subject property after all development activities are completed and a discussion of the relative risks and slide potential relating to adjacent properties during each stage of development including the effect construction and placement of structures, clearing, grading, and removal of vegetation will have on the slope over the estimated life of the structure;

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

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

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

   e. Recommendations for the minimum buffer consistent with 20.80.230, or as recommended, and recommended minimum drainage and building setbacks from any geologic hazard based upon the geotechnical analysis. Buffers must be maintained consistent with SMC 20.80.090, however the qualified professional may recommend additional setbacks for drainage facilities or structures which do not have to be maintained as undisturbed native vegetation;

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

E. **Additional Technical Information Requirements for Landslide Hazard Areas**. The technical information required in a critical area report for a project within a landslide hazard area shall also include the following:

a. Compliance with the requirements of SMC 20.80.224(D) for alterations proposed in moderate to high risk landslide hazard areas;

b. Compliance with the requirements of SMC 20.80.22(E-G) for alterations proposed in very high risk landslide hazard areas;

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

d. Recommendations for drainage and subdrainage improvements;

e. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and

f. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate.

F. **Additional Technical Information Requirements for Seismic Hazard Areas.** The technical information required in a critical area report for a project within a seismic hazard area shall also include the following:

a. A complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement);

b. Additionally, a geotechnical engineering report for a seismic hazard area shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented; and

c. Any additional information or analysis necessary to demonstrate compliance with the standards for alteration in seismic hazard areas in SMC 20.80.224(H).

G. **Limited Report Requirements for Stable Erosion Hazard Areas.** When recommended by the qualified professional for sites only overlain by erosion hazard areas with suitable slope stability, and no other type of critical area or buffer, detailed critical areas report requirements may be waived. Report requirements for stable erosion hazard areas may be met through construction documents that shall include at a minimum a stormwater pollution plan prepared in compliance with requirements set forth in SMC Chapter 13.10.

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

I. **Additional Information.** When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.80.082 and the geologic hazards mitigation performance standards and requirements of SMC 20.80.250.

2. A request for consultation with the Washington Department of Fish and Wildlife (DFW) , Washington Department of Ecology (Ecology), local Native American Indian Tribes, or other appropriate agency; and

3. Detailed surface and subsurface hydrologic features both on and adjacent to the site. (Ord. 695 § 1 (Exh. A), 2014; Ord. 398 § 1, 2006; Ord. 352 § 1, 2004; Ord. 324 § 1, 2003; Ord. 299 § 1, 2002; Ord. 238 Ch. VIII § 3(D), 2000).

20.80.250 GEOLOGIC HAZARDS - Mitigation performance standards and requirements.

A. **Requirements for Mitigation.** Mitigation is required for proposed adverse impacts and increased risks of alteration of geologic hazard areas must be sufficient to result in no increased risk of the hazard consistent with the development standards in SMC 20.80.224. Mitigation plans shall be submitted as part of the required critical area report consistent with the requirements of SMC 20.80.080, 20.80.082, and 20.80.240 and this section. When revegetation is required as part of the mitigation, then the standards of SMC 20.80.350(H) shall be applied, excluding those standards that are wetland specific.

B. **Preference of Mitigation Actions.** Methods to achieve mitigation for alterations of geologic hazard areas shall be approached in the following order of preference:

1. **Protection.** Mitigation measure that increase the protection of the identified geologic hazard areas include but are not limited to:

a. Increased or enhanced buffers;

b. Setbacks for permanent and temporary structures;

c. Reduced project scope; and

f. Retention of existing vegetation;

2. **Restoration.** Restoration of native vegetation.

3. **Engineered Stabilization.** Engineered design of geologic hazard stabilization to ensure no increased risk of the hazard due to the proposal with preference for bioengineering over structural engineered solutions.

C. **Performance Standards.** The following performance standards shall apply to any mitigations for development proposed within geologic ~~hazard areas located within the City~~:

~~A. Relevant performance standards from SMC 20.80.080, 20.80.300, 20.80.350 and 20.80.500 as determined by the City, shall be incorporated into mitigation plans.~~

~~B. The following additional performance standards shall be reflected in proposals within geologic hazard areas:~~

1. Geotechnical studies shall be prepared by a qualified ~~consultant~~ professional to identify and evaluate potential hazards and to formulate mitigation measures~~.~~;

2. Construction methods will reduce or not adversely affect geologic hazards~~.~~;

3. Site planning ~~should~~ to minimize disruption of existing topography and natural vegetation~~.~~;

4. Significant trees shall be preserved, unless removal is unavoidable or otherwise allowed under the provisions of this chapter;

~~4~~5. Minimize ~~I~~impervious surface coverage ~~should be minimized~~.

~~5~~6. Replant D~~d~~isturbed areas ~~should be replanted~~ as soon as feasible pursuant to an approved landscape plan. When planting is required, the following standards shall apply:

a. Native species, indigenous to the region, shall be used in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers;

b. Plant selection shall be consistent with the existing or projected site conditions, including slope aspect, moisture, and shading;

c. Plants should be commercially available or available from local sources;

d. Plant species high in food and cover value for fish and wildlife shall be used;

e. Mostly perennial species should be planted;

f. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided;

g. Plant selection, densities, and placement of plants must be determined by a qualified professional and shown on the design plans;

h. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City;

i. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;

j. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process;

k. An irrigation system shall be installed, if necessary, for the initial establishment period; and

l. The heterogeneity and structural diversity of vegetation shall be emphasized in landscaping;

~~6~~7. Clearing and grading regulations as set forth by the City, in SMC 20.50.290 through 20.50.370, shall be followed~~.~~;

~~7~~8. The use of retaining walls that allow maintenance of existing natural slope areas are preferred over graded slopes~~.~~;

~~8~~9. All construction specifications and methods shall be approved by a qualified professional and the City;

10. Construction management shall be provided by a qualified professional. Ongoing work on-site shall be inspected by the City;

11. Site drainage design and t~~T~~emporary erosion and sedimentation controls, pursuant to an approved stormwater pollution prevention plan consistent with the adopted stormwater manual, shall be implemented during and after construction~~.~~;

~~9~~12. Undevelopable geologic hazard areas larger than one-half acre shall be placed in a separate tract, provided this requirement does not make the lot nonconforming~~.~~;

~~10~~13. A monitoring program shall be prepared for construction activities permitted in geologic hazard areas~~.~~; and

~~11. A bond, guarantee or other assurance device approved by the City shall be posted to cover the cost of monitoring, maintenance and any necessary corrective actions.~~

~~12~~14. Development shall not increase instability or create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion and adequate mitigation must be incorporated in to the project design to comply with the requirements of SMC 20.80.224 and 20.80.230. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 3(E), 2000).

Subchapter 3.

Fish and Wildlife Habitat Conservation Areas

20.80.260 FISH AND WILDLIFE HABITAT - ~~Designation~~ Description and purpose.

A. Fish and wildlife habitat conservation areas (or habitat conservation areas) are lands managed for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. Fish and wildlife habitat conservation areas include ~~nesting and breeding grounds for~~ areas with which State and Federal designated threatened, endangered, and sensitive species have a primary association as well as ~~critical or~~ priority species and habitats listed by the Washington State Department of Fish and Wildlife, including corridors which connect priority habitat, and those areas which provide habitat for species of local significance which have been or may be identified in the City of Shoreline Comprehensive Plan. Fish and wildlife habitat conservation areas also include stream areas and ~~their associated~~ buffers which provide important ~~fish and wildlife~~ habitat corridors; help maintain water quality; store and convey stormwater and floodwater; recharge groundwater; and serve as areas for recreation, education, ~~and~~ scientific study, and aesthetic appreciation.

B. The purpose of fish and wildlife habitat conservation areas shall be to ~~provide opportunities for food, cover, nesting, breeding and movement for fish and wildlife within the City; maintain and promote diversity of species and habitat within the City; coordinate habitat protection with elements of the City's established open space corridors wherever possible; help to maintain air and water quality; control erosion; provide areas for recreation, education and scientific study and aesthetic appreciation; and contribute to the established character of the City~~ protect and conserve the habitat of fish and wildlife species and thereby maintain or increase their populations. The primary purpose of this section is to minimize development impacts to habitat conservation areas and to:

1. Protect federal and state listed habitats and species and give special attention to protection and enhancement of anadromous fish populations; and

2. Maintain a diversity of species and habitat within the City; and

3. Coordinate habitat protection to maintain and provide habitat connections; and

4. Help maintain air and water quality and control erosion.

~~C. The City of Shoreline has given special consideration to the identification and regulation of fish and wildlife habitat conservation areas that support anadromous fisheries in order to preserve and enhance species which are or may be listed as endangered, threatened or priority species by State and Federal agencies.~~ (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(A), 2000).

20.80.270 FISH AND WILDLIFE HABITAT – Classification and designation.

~~A.~~ Fish and wildlife habitat conservation areas are those areas designated by the City based on review of the best available science; input from Washington Department of Fish and Wildlife, Washington Department of Ecology, U.S. Army Corps of Engineers, and other agencies; and any of the following criteria:

~~1~~A. **Areas where State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.** ~~The presence of species proposed or listed by the Federal government or the State of Washington as endangered, threatened, critical, or priority; or~~

1. Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current listing status. Federally designated endangered

and threatened species known to be identified and mapped by DFW in Shoreline include but may not be limited to the following:

a. Chinook *(Oncrhynchus tshawytscha)*;

b. Coho *(Oncrhynchus kisutch)*; and

c. Southern Resident Orca or Killer Whales *(Orcinus orca).*

2. State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the state of Washington identified by the Washington Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species) and WAC 232-12-011 (state threatened and sensitive species). The state Department of Fish and Wildlife maintains the most current listing and should be consulted for current listing status. State designated endangered, threatened, and sensitive species known to be identified and mapped by DFW in Shoreline include but may not be limited to the following:

a. Northern goshawk *(Accipiter gentilis)*;

b. Osprey *(Pandion haliaetus)*; and

c. Purple martin *(Progne subis*).

~~2~~B. **State Priority Habitats and Areas Associated With State Priority Species.** ~~The presence of heron rookeries or raptor nesting trees; or~~ Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the State Department of Fish and Wildlife (DFW). Priority habitats and species known to be identified and mapped by DFW in Shoreline include but may not be limited to the following:

1. Biodiversity areas and corridors identified and mapped along Boeing Creek and in and around Innis Arden Reserve Park;

2. Chinook/Fall Chinook *(Oncrhynchus tshawytscha)*;

3. Coho *(Oncrhynchus kisutch)*;

4. Dungeness crab;

5. Estuarine intertidal aquatic habitat;

6. Geoduck;

7. Northern goshawk *(Accipiter gentilis)*;

8. Pacific sand lance *(Ammodytes hexapterus)*;

9. Purple martin *(Progne subis*);

10. Resident coastal cutthroat *(Oncrhynchus clarki)*;

11. Surf smelt *(Hypomesus pretiosus)*;

12. Waterfowl concentrations at Ronald Bog (Ronald Bog is not a shoreline of the state subject to the SMP); and

13. Winter steelhead *(Oncrhynchus mykiss)*.

C. **Commercial and Recreational Shellfish Areas.** These areas include all public and private tidelands or bedlands suitable for shellfish harvest, including shellfish protection districts established pursuant to Chapter 90.72 RCW.

D. **Kelp and Eelgrass Beds and Herring and Smelt Spawning Areas.**

E. **Waters of the State.** Waters of the state include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-031.

~~3.~~ Streams ~~and wetlands and their associated buffers that provide significant habitat for fish and wildlife.~~ are those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses, unless they are used by fish or are used to convey streams naturally occurring prior to construction. A channel or bed need not contain water year-round; provided that there is evidence of at least intermittent flow during years of normal rainfall. Streams shall be classified in accordance with the Washington Department of Natural Resources water typing system (WAC 222-16-030) hereby adopted in its entirety by reference and summarized as follows:

1. **Type S:** streams inventoried as "shorelines of the state" under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW;

2. **Type F:** streams which contain fish habitat;

3. **Type Np:** perennial nonfish habitat streams;

4. **Type Ns:** seasonal nonfish habitat streams; and

5. **Piped stream segments:** those segments of streams, regardless of their type, that are fully enclosed in an underground pipe or culvert.

6. Not all streams that are known to exist with fish habitat support anadromous fish populations, or have the potential for anadromous fish occurrence because of obstructions, blockages or access restrictions resulting from existing conditions. Therefore, in order to provide special consideration of and increased protection for anadromous fish in the application of development standards, Shoreline streams shall be further classified as follows:

   a. **Anadromous fishbearing streams.** These streams include:

      i. Streams where naturally recurring use by anadromous fish populations has been documented by a government agency;

      ii. Streams that are fish passable or have the potential to be fish passable by anadromous populations, including those from Lake Washington or Puget Sound, as determined by a qualified professional based on review of stream flow, gradient and natural barriers (i.e. natural features that exceed jumping height for salmonids), and criteria for fish passability established by the Washington Department of Fish and Wildlife; and

      iii. Streams that are planned for restoration in a six-year capital improvement plan adopted by a

government agency or planned for removal of the private dams that will result in a fish passable connection to Lake Washington or Puget Sound; and

b. **Nonanadromous fishbearing streams.** These include streams which contain existing or potential fish habitat, but do not have the potential for anadromous fish use due to natural barriers to fish passage, including streams that contain resident or isolated fish populations.

The general areas and stream reaches with access for anadromous fish are indicated in the City of Shoreline Stream and Wetland Inventory and Assessment (2004) and basin plans. The potential for anadromous fish access shall be confirmed in the field by a qualified professional as part of a critical area report.

~~B~~F. The City designates ~~the following fish and wildlife habitat conservation~~ all areas that meet one or more of the above criteria, regardless of any formal identification, as critical areas and as such they are subject to the provisions of this chapter. They shall be managed consistent with best available science; including the Washington State Department of Fish and Wildlife's Management Recommendations for Priority Habitat and Species. The following fish and wildlife habitat conservation areas are specifically designated and this designation does not preclude designation of additional areas as provided in subsection (A) of this section:

1. All regulated streams ~~and wetlands~~ and their associated buffers as determined by a qualified specialist.

2. The waters, bed and shoreline of Puget Sound up to the ordinary high water mark. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(B), 2000).

20.80.272 FISH AND WILDLIFE HABITAT - Mapping.

A. **Mapping.** The approximate location and extent of fish and wildlife habitat areas are shown in the following maps and inventories herby adopted:

1. Washington Department of Fish and Wildlife Priority Habitat and Species maps;

2. Washington State Department of Natural Resources, Official Water Type Reference maps, as amended;

3. Washington State Department of Natural Resources Puget Sound Intertidal Habitat Inventory maps;

4. Washington State Department of Natural Resources Shorezone Inventory;

5. Washington State Department of Natural Resources Natural Heritage Program mapping data;

6. Washington State Department of Health Annual Inventory of Shellfish Harvest Areas;

7. Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors reports published by the Washington Conservation Commission;

8. Washington State Department of Natural Resources State Natural Area Preserves and Natural Resource Conservation Area maps; and

9. Fish and Wildlife habitat data layers, such as stream and wetland data, maintained in the City of Shoreline geographic information system (GIS).

B. The inventories and cited resources are to be used as a guide for the City of Shoreline, project applicants, and/or property owners, and may be continuously updated as new fish and wildlife habitat conservation areas are identified or critical area reports are submitted for known habitat conservation areas. They are a reference and do not provide a final critical area designation.

20.80.274 FISH AND WILDLIFE HABITAT - General development standards.

A. Activities and uses shall be prohibited in fish and wildlife habitat conservation areas and associated buffers, except as provided for in this subchapter. Unless specifically exempted under SMC 20.80.030 and or allowed under 20.80.040 or subsection C below or SMC 20.80.276, development activities and uses that result in alteration of fish and wildlife habitat conservation areas shall be subject to the critical area reasonable use and special use provisions of SMC 20.30.333 and 20.30.336 or subject to the provisions of the Shoreline Master Program where located within the shoreline jurisdiction.

B. Any proposed alterations permitted, consistent with special use or reasonable use review, to fish and wildlife habitat conservation area shall require the preparation of a habitat conservation area mitigation plan (commonly referred to as a habitat management plan to mitigate for the adverse impacts of the proposal, consistent with the requirements of the Washington State Department of Fish and Wildlife Priority Habitat Program. The habitat management plan shall be prepared by a qualified professional and reviewed and approved by the City, consistent with the standards for mitigation plans in SMC 20.80.082 and 20.80.300.

C. **Activities Allowed in Fish and Wildlife Habitat Conservation Areas.** These activities listed below are allowed in fish and wildlife habitat conservation areas subject to applicable permit approvals. Additional exemptions are listed in the provisions of SMC 20.80.030 and 20.80.040. These activities do not require the submission of a critical area report and are exempt from monitoring and financial guarantee requirements, except where such activities result in a loss of the functions and values of a fish and wildlife habitat conservation area or related buffer. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing habitat conservation area.

2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the habitat conservation area by changing existing topography, water conditions, or water sources.

3. Permitted alteration to a legally constructed structure existing within a fish and wildlife habitat conservation area buffer that does not increase the footprint of the development or hardscape or increase the impact to a fish and wildlife habitat conservation area.

4. Buildings and structures (excluding fences and arbors) are prohibited within the required 10 foot stream buffers for a piped stream segment. Other development activities, such as paving, stormwater facilities, clearing (including tree removal) and grading are allowed if no other critical area or buffer is present.

D. **Non-indigenous Species.** No plant, wildlife, or fish species not indigenous to the region shall be introduced into a fish and wildlife habitat conservation area unless authorized by a state or federal permit or approval.

E. **Mitigation and Contiguous Corridors.** Mitigation sites shall be located to preserve or achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

F. **Approvals of Activities.** The Director shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on the best available science and may include, but are not limited to, the following:

1. Establishment of buffers;

2. Preservation of important vegetation and/or habitat features such as snags and downed wood specific to

the priority wildlife species in the habitat conservation area;

3. Limitation of access to the habitat area, including fencing to deter unauthorized access;

4. Seasonal restriction of construction activities;

5. Establishment of a duration and timetable for periodic review of mitigation activities; and

6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

G. **Mitigation and Equivalent or Greater Biological Functions.** Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic and hydrologic functions and shall include mitigation for adverse impacts upstream from, downstream from, or within the same shoreline reach as the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis. Mitigation shall be located on-site except when demonstrated that a higher level of ecological functioning would result from an off-site location. Mitigation shall be detailed in a fish and wildlife habitat conservation area mitigation plan consistent with the requirements of SMC 20.80.300.

H. **Approvals and the Best Available Science.** Any approval of alterations or impacts to a habitat conservation area shall be supported by the best available science.

I. **Buffers.**

1. **Establishment of Buffers.** The Director shall require the establishment of buffer areas for activities adjacent to habitat conservation areas in order to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the management recommendations issued by the Washington Department of Fish and Wildlife.

2. **Seasonal Restrictions.** When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.

3. **Habitat Buffer Averaging.** The Director may allow the recommended habitat area buffer width to be reduced in accordance with a critical area report, the best available science, and the management recommendations issued by the Washington Department of Fish and Wildlife, only if:

a. It will not reduce stream or habitat functions;

b. It will not adversely affect fish and wildlife habitat;

c. It will provide additional natural resource protection, such as buffer enhancement;

d. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

e. The buffer area width is not reduced by more than twenty-five percent (25%) in any location.

J. **Signs and Fencing of Habitat Conservation Areas.**

1. **Temporary Markers.** The outer perimeter of the fish and wildlife habitat conservation area or buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary “clearing limits” fencing in such a way as to ensure that no unauthorized intrusion will occur.

The marking is subject to inspection by the Director prior to the commencement of permitted activities during the preconstruction meeting required under SMC 20.50.330(E). This temporary marking and fencing shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent Signs.** As a condition of any permit or authorization issued pursuant to this chapter, the Director may require that applicant to install permanent signs along the boundary of a habitat conservation area or buffer, when recommended in a critical area report or otherwise required by the provisions of this chapter.

a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another material of equal durability and nonhazardous material. Signs must be posted at an interval of one per lot or every fifty (50) feet, whichever is less and must be maintained by the property owner in perpetuity. The signs shall be worded consistent with the text specified in SMC 20.80.110 or with alternative language approved by the Director.

b. The provisions of subsection (a) of this section may be modified as necessary to assure protection of sensitive features or wildlife.

3. **Fencing.** Fencing installed as part of a proposed activity or as required in this subsection shall be design so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts. Permanent fencing shall be required at the outer edge of the critical area buffer under the following circumstances, provided that the Director may waived this requirement:

a. As part of any development proposal for subdivisions, short plats, multifamily, mixed use, and commercial development where the Director determines that such fencing is necessary to protect the functions of the critical area, provided that breaks in permanent fencing may be allowed for access to allowed uses (SMC 20.80.274(C) and 20.80.280(D));

b. As part of development proposals for parks where the adjacent proposed use is active recreation and the Director determines that such fencing is necessary to protect the functions of the critical area;

c. When buffer averaging is part of a development proposal;

d. When buffer reductions are part of a development proposal; or

e. At the Director's discretion to protect the values and functions of a critical area as demonstrated in a critical area report. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area.

f. The applicant shall be required to install a permanent fence around the habitat conservation area or buffer when domestic grazing animals, only as allowed under SMC 20.40.240, are present or may be introduced on site.

K. **Subdivisions.** The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:

1. Land that is located wholly within a habitat conservation area or its buffer may not be subdivided;

2. Land that is located partially within a habitat conservation area or its buffer may be divided provided that the developable portion of each new lot and its access is located outside of the habitat conservation area or

its buffer and meets the minimum lot size requirements of SMC 20.50.020.

3. Access roads and utilities serving the proposed subdivision may be permitted within the habitat conservation area and associated buffers only if the applicant's qualified professionals demonstrate and the City determines that no other feasible alternative exists, all unavoidable impacts are fully mitigated, and when consistent with this chapter.

20.80.276 FISH AND WILDLIFE HABITAT – Specific habitat development standards.

In addition to the provision in SMC 20.80.274, the following development standards apply to the specific habitat types identified below.

A. Endangered, Threatened, and Sensitive Species.

1. No development shall be allowed within a fish and wildlife habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by the Washington Department of Fish and Wildlife or applicable state or federal agency.

2. Whenever activities are proposed adjacent to a fish and wildlife habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and approved by the City. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Washington Department of Fish and Wildlife for animal species, the Washington State Department of Natural Resources for plant species, and other appropriate federal or state agencies.

B. **Anadromous Fish.**

1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:

   a. Subsection A above applies to anadromous fish where those populations are identified as endangered, threatened or sensitive species;

   b. Activities shall be timed to occur only during the allowable work window as designated by the Washington Department of Fish and Wildlife for the applicable species;

   c. An alternative alignment or location for the activity is not feasible;

   d. The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;

   e. Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to an approved critical area report; and

   f. Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved critical area report.

2. Structures that prevent migration shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided, consistent with RCW 77.57.030, that allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.

3. Fills, when authorized by the City and all applicable Joint Aquatic Resource Permit Application approvals, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable

impacts and shall only be allowed for a water-dependent use.

C. **Wetland Habitats.** All proposed activities within or adjacent to habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in SMC Chapter 20.80, Subchapter 4. Wetlands. If non-wetlands habitat and wetlands are present at the same location, the provisions of this subchapter or the Wetlands subchapter, whichever provides greater protection to the habitat, apply.

D. **Streams.** Activities, uses and alterations of streams shall be prohibited subject to the reasonable use provisions (SMC 20.30.336) or special use provisions (SMC 20.30.333), unless otherwise allowed by the exemptions or allowed activities provisions of this chapter, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II. No alteration to a stream buffer shall be permitted unless consistent with the provisions of this chapter and the specific standards for development outlined below.

1. **Type S and Type F-anadromous streams.** Development activities and uses that result in alteration of Type S and Type F-anadromous streams and their associated buffers shall be prohibited subject to the critical area reasonable use and critical area special use provisions of SMC 20.30.333 and 20.30.336, unless otherwise allowed by the exemptions or allowed activities provisions of this chapter, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction.

2. **Type F-nonanadromous and Type Np streams.** Development activities and uses that result in alteration of Type F-nonanadromous and Type Np streams are prohibited subject to the critical area reasonable use and critical area special use provisions of SMC 20.30.333 and 20.30.336, unless otherwise allowed by the exemptions or allowed activities provisions of this chapter, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction.

3. **Type Ns streams.** Development activities and uses that result in unavoidable impacts may be permitted in Type Ns streams and associated buffers in accordance with an approved critical area(s) report and compensatory mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the loss of acreage and functions of wetland and buffers shall be provided in compliance with the mitigation performance standards and requirements of these regulations.

4. **Stream Crossing.** Crossing of streams may be permitted based on the findings in a critical area report, subject to the limitation in subsections 1, 2, and 3 above, and consistent with the following:

~~A~~a. **Bridges.** Bridges shall be used to cross Type ~~I~~S and Type F-anadromous streams. Culverted crossings and other obstructive means of crossing Type ~~I~~S and Type F-anadromous streams shall be prohibited; and

~~B~~b. **Culverts.** Culverts are allowable ~~only under the following circumstances~~ for crossing of Type F-nonanadromous, Np, and Ns streams when fish passage will not be impaired and when the following design criteria and conditions are met:

~~a~~i. Oversized culverts, that allow for fish passage and floodplain or wetland connectivity, will be installed;

~~b~~ii. Culverts ~~will include gradient controls and creation of pools within the culvert~~ for Type ~~II~~F streams must be designed for fish passage that will allow natural stream functions and processes to occur (i.e. sediment, wood, and debris transport) where appropriate; ~~and~~

~~c~~iii. Gravel substrate will be placed in the bottom of the culvert to a minimum depth of one foot for Type F streams;

~~4~~iv. A maintenance covenant shall be recorded on title with King County that requires the

property owner to at all times, keep any culvert free of debris and sediment to allow free passage of water and, if applicable, fish.; and

Cv. The City may require that a culvert be removed from a stream as a condition of approval, unless it is demonstrated conclusively that the culvert is not detrimental to fish habitat or water quality, or removal would be detrimental to fish or wildlife habitat or water quality.

G5. **Relocation.** Relocation of a Type I, II, or III S, F, or Np stream shall may be allowed, subject to the limitation in subsections 1 and 2 above, and only when the proposed relocation is part of an approved mitigation or rehabilitation plan, will result in equal or better habitat and water quality, and will not diminish the flow capacity of the stream. Relocation of a Type IV Ns stream may be allowed, subject to the limitation in subsections 3 above, and only when the proposed relocation will result in equal or better habitat and water quality and will not diminish the flow capacity of the stream.

H6. **Restoring Piped Watercourses.** The City allows the voluntary opening of previously channelized/culverted streams and the rehabilitation and restoration of streams, especially on public property or when a property owner is a proponent in conjunction with new development. Restoring piped watercourses may be approved consistent with the following:

2a. When piped watercourse sections are restored, a protective buffer shall be required of the stream section. The buffer distance shall be based on an approved restoration plan, regardless of stream classification, and shall be a minimum of 10 to 25 feet, based on a restoration plan at the discretion of the Director, to allow for restoration and maintenance consistent with the buffer relief that may be granted consistent with SMC 20.80.055 *Voluntary critical area restoration projects*. The stream and buffer area shall include habitat improvements and measures to prevent erosion, landslide, and water quality impacts. Opened channels shall be designed to support fish and wildlife habitat and all uninhibited fish access, unless determined to be unfeasible as demonstrated in a restoration plan reviewed and approved by the City;

3b. Removal of pipes conveying streams shall only occur when the City determines that the proposal will result in a new improvement of water quality and ecological functions and will not significantly increase the threat of erosion, flooding, slope stability, or other hazards; and

c. Where the buffer of the restored stream would extend beyond a required setback on onto an adjacent property, the applicant shall obtain a written agreement from the affected neighboring property owner prior to the City approving the restoration of the piped watercourse.

20.80.280 FISH AND WILDLIFE HABITAT - Required buffer areas.

A. Buffer widths for fish and wildlife habitat areas shall be based on consideration of the following factors: species-specific recommendations of the Washington State Department of Fish and Wildlife; recommendations contained in a habitat management plan submitted by a qualified consultant professional; and the nature and intensity of land uses and activities occurring on the land adjacent to the site.

B. Low impact uses and activities which are consistent with the purpose and function of the habitat buffer and do not detract from its integrity may be permitted within the buffer depending on the sensitivity of the habitat area. Examples of uses and activities which may be permitted in appropriate cases include trails that are pervious, viewing platforms, low impact stormwater management facilities such as bio-swales, utility easements and other similar uses and activities; provided, that any impacts to the buffer resulting from such permitted facilities shall be fully mitigated.

AC. **Standard Required Stream Buffer Widths.** Buffer widths shall reflect the sensitivity of the stream type, the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the stream area. Stream buffers shall be measured from the ordinary high water mark (OHWM) or the top of the bank, if the OHWM cannot be determined. Buffers shall be measured with rounded ends where streams enter or exit piped segments.

~~B~~1. The following buffers are established for streams based upon the Washington State Department of Natural Resources water typing system and further classification based on anadromous or nonanadromous fish presence for the Type F streams:

Table 20.80.280(1)

Stream Type	Standard Buffer Width (ft)
Type S	150
Type F - anadromous	115
Type F - nonanadromous	75
Type Np	65
Type Ns	45
Piped Stream Segments	10

2. **Increased Stream Buffer Widths.** The recommended stream buffer widths shall be increased, as follows:

a. When the qualified professional determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;

b. When the flood hazard area exceeds the recommended stream buffer width, the stream buffer area shall extend to the outer edge of the flood hazard area;

c. When a channel migration zone is present, the stream buffer width shall be measured from the outer edge of the channel migration zone;

d. When the habitat area is in an area of high blowdown potential, the stream buffer width shall be expanded an additional fifty (50) feet on the windward side; or

e. When the habitat area is within an erosion or landslide hazard area, or buffer, the stream buffer width shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.

3. **Stream Buffer Width Averaging with Enhancement.** The Director may allow the recommended stream buffer width to be reduced in accordance with an approved critical area report and the best available science on a case-by-case basis by averaging buffer widths. Any allowance for averaging buffer widths shall only be granted based on the development and implementation of a buffer enhancement plan for areas of buffer degradation consistent with the provisions in subsection 4 below. Only those portions of the stream buffer existing within the project area or subject parcel shall be considered in the total buffer area for buffer averaging. Averaging of buffer widths may only be allowed where a qualified professional demonstrates that:

a. The width reduction and buffer enhancement plan provides evidence that the stream or habitat functions, including those of nonfish habitat and riparian wildlife, will be;

i. Increased or maintained through plan implementation for those streams where existing buffer vegetation is generally intact native vegetation; or

ii. Increased through plan implementation for those streams where existing buffer vegetation is inadequate to protect the functions and values of the stream;

b. The total area contained in the buffer area of each stream on the development proposal site is not decreased after averaging;

c. The recommended riparian habitat area width is not reduced by more than twenty-five percent (25%) in any one location; and

d. The width reduction will not be located within another critical area or associated buffer.

~~C~~4. **Stream Buffer Enhancement Measures**. The measures determined most applicable and/or appropriate will be considered in ~~reducing~~ buffer averaging requirements. These include but are not limited to:

~~1~~a. Removal of fish barriers to restore accessibility to ~~anadromous~~ fish.

~~2~~b. Enhancement of fish habitat using log structures incorporated as part of a fish habitat enhancement plan.

~~3~~c. Enhancement of fish and wildlife habitat structures that are likely to be used by wildlife, including wood duck houses, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.

~~4~~d. Additional enhancement measures may include:

~~a~~i. Planting native vegetation within the buffer area, especially vegetation that would increase value for fish and wildlife, increase stream bank or slope stability, improve water quality, or provide aesthetic/recreational value; or

~~b~~ii. Creation of a surface channel where a stream was previously underground, in a culvert or pipe. Surface channels which are "daylighted" shall be located within a buffer area and shall be designed with energy dissipating functions or channel roughness features such as meanders and rootwads to reduce future ~~erosion~~ bank failures or nearby flooding;

~~c~~iii. Removal or modification of existing stream culverts (such as at road crossings) to improve fish passage, stream habitat, and flow capabilities; or

~~d~~iv. Upgrading of retention/detention facilities or other drainage facilities beyond required levels.

D. **Stream Buffer Allowed Uses and Alteration.** Activities and uses shall be prohibited in stream buffers, except as provided for in this chapter. Stream buffers shall be maintained as undisturbed or restored natural vegetation. No clearing or grading activities are allowed within required stream buffers except as allowed under SMC 20.80.030, 20.80.040, 20.80.274, or consistent with an approved buffer enhancement plan consistent with the provisions of this subchapter. No structures or improvements shall be permitted within the stream buffer area, including buildings, decks, docks, except as otherwise permitted or required under the Shoreline Master Program, SMC Title 20, Division II, or under one of the following circumstances:

1. When the improvements are part of an approved rehabilitation or mitigation plan; or

2. For the construction of new roads and utilities, and accessory structures, when no feasible alternative location exists; or

3. **Trails.** The construction of trails over and in the buffer of piped stream segments, and the construction of trails near other stream segments consistent with the following criteria:

a. Trails should be constructed of ~~permeable materials~~ pervious surface, with preference for natural materials. Raised boardwalks utilizing nontreated pilings may be acceptable;

b. Trails shall be designed in a manner that minimizes impact on the stream system;

c. Trails shall have a maximum trail corridor width of ~~10~~5 feet; and

d. Trails should be located within the outer ~~half~~ 25 percent of the buffer, i.e., that portion of the buffer that is farther away from the stream and located to avoid removal of significant trees; or

4. The construction of footbridges that minimize the impact to the stream system; or

5. **Informational Signs.** The construction and placement of informational signs or educational demonstration facilities limited to no more than one square yard surface area and four feet high, provided there is no permanent infringement on stream flow; or

6. **Stormwater Management Facilities.** The establishment of low impact stormwater management facilities, such as stormwater dispersion outfalls and bioswales, ~~over and in the buffer of piped stream segments and when located outside of the minimum buffer area of other stream segments as set forth in the Table 20.80.480(B).~~may be allowed within stream buffers consistent with the adopted stormwater manual; provided that:

a. No other location is feasible;

b. Pipes and conveyance facilities will be in in the outer twenty-five percent (25%) of the standard buffer area as set forth in Table 20.80.280(1);

c. Stormwater dispersion outfalls, bioswales, bioretention facilities, and other low impact facilities consistent with the adopted stormwater manual may be allowed anywhere within stream buffers when determined by a qualified professional that the location of the facility will enhance the buffer area and protect the stream; and

d. Such facilities are designed consistent with the requirements of SMC 20.70.330.

7. **Development Proposals within Physically Separated and Functionally Isolated Stream Buffers.** Consistent with the definition of "buffers" (SMC 20.20.012), areas that are functionally isolated and physically separated from stream due to existing, legally established roadways and railroads or other legally established structures or paved areas eight (8) feet or more in width that occurs between the area in question and the stream shall be considered physically isolated and functionally separated stream buffer. Once determined by the Director based on a submitted critical area report to be a physically separated and functionally isolated stream buffer, development proposals shall be allowed in these areas.

~~C. Fish and wildlife habitat conservation areas and their associated buffers shall be placed either in a separate tract on which development is prohibited, protected by execution of an easement, dedicated to a conservation organization or land trust, or similarly preserved through a permanent protective mechanism acceptable to the City. The location and limitations associated with the critical habitat and its buffer shall be shown on the face of the deed or plat applicable to the property and shall be recorded with the King County Department of Records and Elections.~~ (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(C), 2000).

~~**20.80.290 Alteration.**~~

~~A. Alterations of fish and wildlife habitat conservation areas shall be avoided, subject to the reasonable use provision section (SMC 20.30.336) or special use permit section (SMC 20.30.333).~~

~~B. Any proposed alterations permitted, consistent with special use or reasonable use review, to fish and wildlife habitat conservation area shall require the preparation of a habitat management plan, consistent with the requirements of the Washington State Department of Fish and Wildlife Priority Habitat Program. The habitat management plan shall be prepared by a qualified consultant and reviewed and approved by the City.~~ (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(D), 2000).

20.80.290 FISH AND WILDLIFE HABITAT - Critical area report requirements.

A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a fish and wildlife habitat conservation area, a critical area report shall be required. Critical area report requirements for fish and wildlife habitat conservation areas are generally met through submission to the Director of one or more fish and wildlife habitat critical area reports. In addition to the general critical area report requirements of SMC 20.80.080, critical area reports for fish and wildlife habitat conservation areas must meet the requirements of this section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

B. **Preparation by a Qualified Professional.** Critical areas reports for a habitat conservation area shall be prepared and signed by a qualified professional who is a biologist, ecologist, or other scientist with the minimum required experience, per SMC 20.20.042, related to the specific type(s) of fish and wildlife habitats identified.

C. **Third Party Review Required.** Critical areas studies and reports on fish and wildlife habitat conservation areas shall be subject to third party review consistent with SMC 20.80.080(C) and in any of the additional following circumstances:

1. Mitigation is required for impacts to Type S, Type F, or Type Np streams and/or buffers; or

2. Mitigation is required for impacts to Type Ns streams.

D. **Minimum Report Contents for Fish and Wildlife Habitat Conservation Areas.** The written critical area report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC 20.80.080(E);

2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, water typing and other habitat conservation area classification, baseline hydrologic data, site photos, etc.;

3. A description of the methodologies used to conduct the delineations, classifications, or impact analyses including reference;

4. **Site Plans.** A copy of the site plan sheet(s) for the project must be included with the written report and must include, at a minimum:

   a. Maps (to scale) depicting delineated and surveyed fish and wildlife habitat conservation areas and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to fish and wildlife habitat conservation areas and/or buffers (include square footage estimates); and

   b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the fish and wildlife habitat conservation areas associated with anticipated hydroperiod alterations from the project.

5. **Habitat Assessmen**t. A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:

   a. Detailed description of vegetation on and adjacent to the project area and its associated buffer;

b. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;

c. A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;

d. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;

e. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with SMC 20.80.055 ;

f. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs; and

6. **Additional Technical Information Requirements for Streams.** Critical area reports for streams must be consistent with the specific development standards for streams in SMC 20.80.276 and 20.80.280 and may be met through submission of one or more specific report types. If stream buffer enhancement is proposed to average stream buffer width, a stream buffer enhancement plan must be submitted in addition to other critical area report requirements of this section. If no project impacts are anticipated and standard stream buffer width are retained, a stream delineation report, general critical areas report or other reports alone or in combination may be submitted as consistent with the specific requirements of this section. In addition to the basic critical area report requirements for fish and wildlife habitat conservation areas provided in subsections (A) through (C) of this section, technical information on streams shall include the following information at a minimum:

a. A written assessment and accompanying maps of the stream and associated hydrologic features within 200 feet of the project area, including the following information at a minimum:

i. Stream survey showing the field delineated ordinary high water mark(s);

ii. Standard stream buffer boundary;

iii. Boundary for proposed stream buffers averaging, if applicable;

iv. Vegetative, faunal, and hydrologic characteristics;

v. Soil and substrate conditions; and

vi. Topographic elevations, at two-foot contours;

b. A detailed description and functional assessment of the stream buffer under existing conditions pertaining to the protection of stream functions, fish habitat and, in particular, potential anadromous fisheries;

c. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and stream functions;

d. Proposed buffer enhancement, if needed, including a written assessment and accompanying maps and planting plans for buffer areas to be enhanced, including the following information at a minimum:

i. A description of existing buffer conditions;

ii. A description of proposed buffer conditions and how proposed conditions will increase buffer functions in terms of stream and fish habitat protection;

iii. Performance standards for measuring enhancement success through a monitoring period of at least five years; and

iv. Provisions for monitoring and submission of monitoring reports documenting buffer conditions as compared to performance standards for enhancement success;

e. A discussion of ongoing management practices that will protect stream functions and habitat value through maintenance of vegetation density within the stream buffer.

E. **Additional Information.** When appropriate due to the type of habitat or species present or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.80.082 and the fish and wildlife habitat mitigation performance standards and requirements of SMC 20.80.300.

2. Third party review to include any recommendations as appropriate by a qualified professional under contract with or employed by the City may be required at the applicant's expense of the critical area report analysis and the effectiveness of any proposed mitigating measures or programs;

3. A request for consultation with the Washington Department of Fish and Wildlife (DFW), Washington Department of Ecology (Ecology), local Native American Indian Tribes or other appropriate agency;

4. Copies of the Joint Aquatic Resource Permit Application (JARPA) and related approvals, such as a Hydraulic Project Approval (HPA) from the DFW, when applicable to the project; and

5. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

20.80.300 FISH AND WILDLIFE HABITAT - Mitigation performance standards and requirements.

A. **Requirements for Mitigation.** Where impacts cannot be avoided, and the applicant has exhausted feasible design alternatives, the applicant or property owner shall seek to implement other appropriate mitigation actions in compliance with the intent, standards and criteria of this section. Mitigation provisions shall be applied through the critical area reasonable use or critical area special use provisions in SMC 20.30.333 and 20.30.336, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction, unless mitigated alterations are specifically allowed by the provisions of this subchapter. In an individual case, these actions may include consideration of alternative site plans and layouts, reductions in the density or scope of the proposal, and/or implementation of the performance standards listed in this section.

B. **Additional Requirements for Stream Mitigation.** Significant adverse impacts to stream area functions and values shall be mitigated. Mitigation actions shall be implemented in the preferred sequence: Avoidance, minimization, restoration and replacement. Proposals which include less preferred and/or compensatory mitigation shall demonstrate that:

1. All feasible and reasonable measures will be taken to reduce impacts and losses to the stream, or to avoid impacts where avoidance is required by these regulations; ~~and~~

2. The restored, created or enhanced stream area or buffer will be available and persistent as the stream or buffer area it replaces; and

3. No overall net loss will occur in stream functions and values.

C. **Compensating for Lost or Impacted Functions.** Mitigation of alterations to fish and wildlife habitat shall achieve equivalent or greater biologic and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site on a per function basis. Mitigation shall be located on-site except when demonstrated that a higher level of ecological functioning would result from an off-site location. A mitigation plan may include the following:

1. Native vegetation planting plan;

2. Retention, enhancement or restoration plan of specific habitat features;

3. Plans for control of nonnative invasive plant or wildlife species; and

4. Stipulations for use of innovative, sustainable building practices.

D. **Preference of Mitigation Actions.** Methods to achieve compensation for fish and wildlife habitat functions shall be approached in the following order of preference:

1. **Protection.** Mitigation measure that increase the protection of the identified habitat conservation areas may include but are not limited to:

   a. Increased or enhanced buffers;

   b. Setbacks for permanent and temporary structures;

   c. Reduced project scope;

   d. Limitations on construction hours;

   e. Limitations on hours of operation; and/or

   f. Relocation of access;

2. **Restoration.** Restoration of degraded habitat.

3. **Creation.** Creation (establishment) of wildlife habitat on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when the site conditions are conducive to the habitat type that is anticipated in the design.

4. **Enhancement.** Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

5. **Preservation.** Preservation of high quality, at-risk fish and wildlife habitat as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high quality, at-risk fish and wildlife habitat may be considered as the sole means of compensation for habitat impacts when the following criteria are met:

a. Habitat impacts will not have a significant adverse impact on habitat for listed fish, or other ESA listed species;

b. There is no net loss of habitat functions within the watershed or basin;

c. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low functioning systems; and

d. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

~~C~~E. **Location and Timing of Stream Mitigation.**

1. Mitigation shall be provided on-site, unless on-site mitigation is not scientifically feasible due to the physical features of the property. The burden of proof shall be on the applicant to demonstrate that mitigation cannot be provided on-site.

2. When mitigation cannot be provided on-site, mitigation shall be provided in the immediate vicinity of the permitted activity on property owned or controlled by the applicant such as an easement, provided such mitigation is beneficial to the critical area and associated resources. It is the responsibility of the applicant to obtain title to off-site mitigation areas. Mitigation on City-owned property, or similar publically owned property for which title is not available, through a City mitigation program may be considered if programmatic mitigation areas have been identified.

3. In-kind mitigation shall be provided except when the applicant demonstrates and the City concurs that greater functional and habitat value can be achieved through out-of-kind mitigation.

4. Only when it is determined by the City that subsections (B)(1), (2), and (3) of this section are inappropriate and impractical shall off-site, out-of-kind mitigation be considered.

5. When stream mitigation is permitted by these regulations on-site or off-site, the mitigation project shall occur near an adequate water supply (~~river,~~ stream, groundwater) with a hydrologic connection to the mitigation area to ensure successful development or restoration.

6. Any agreed upon mitigation proposal shall be completed prior to project construction, unless a phased schedule, that assures completion concurrent with project construction, has been approved by the City.

7. Restored or created streams, where permitted by these regulations, shall be an equivalent or higher stream value or function than the altered stream.

~~A. Relevant performance standards for other critical areas (such as wetlands and streams) that may be located within the fish and wildlife habitat conservation area, as determined by the City, shall be incorporated into mitigation plans.~~

~~B~~F. **Performance Standards.** The following ~~additional~~ mitigation measures shall be reflected in fish and wildlife habitat conservation area mitigation planning:

1. The maintenance and protection of habitat values shall be considered a priority in site planning and design~~.~~;

2. Buildings and structures shall be located in a manner that preserves and minimizes adverse impacts to important habitat areas. This may include clustering buildings and locating fences outside of habitat areas~~.~~;

3. Retained habitat shall be integrated into open space and landscaping~~.~~;

4. Where possible, habitat and vegetated open space shall be consolidated in contiguous blocks~~.~~;

5. Habitat shall be located contiguous to other habitat areas, open space or landscaped areas both on- and off-site to contribute to a continuous system or corridor that provides connections to adjacent habitat areas~~.~~;

6. When planting is required, the following standards shall apply:

   a. Native species, indigenous to the region, shall be used in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers~~.~~;

   b. Plant selection shall be consistent with the existing or projected site conditions, including slope aspect, moisture, and shading;

   c. Plants should be commercially available or available from local sources;

   d. Plant species high in food and cover value for fish and wildlife shall be used;

   e. Mostly perennial species should be planted;

   f. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided;

   g. Plant selection, densities, and placement of plants must be determined by a qualified professional and shown on the design plans;

   h. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City;

   i. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;

   j. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process; and

   k. An irrigation system shall be installed, if necessary, for the initial establishment period;

7. The heterogeneity and structural diversity of vegetation shall be emphasized in landscaping~~.~~; and

8. Significant trees~~, preferably in groups,~~ shall be preserved~~, consistent with the requirements of Chapter 20.50 SMC, Subchapter 5, Tree Conservation, Land Clearing and Site Grading, and with the objectives found in these standards~~.

9. All construction specifications and methods shall be approved by a qualified professional and the City.

10. Construction management shall be provided by a qualified professional. Ongoing work on-site shall be inspected by the City. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(E), 2000).

H. **Mitigation Plan.** Mitigation plans shall be submitted as part of the required critical area report consistent with the requirements of SMC 20.80.080, 20.80.082, and 20.80.290 and this section. When revegetation is required as part of the mitigation, then the standards of SMC 20.80.350(H) shall be applied, excluding those standards that are wetland specific.

I. **Monitoring Program and Contingency Plan.** A monitoring program shall be implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives are being met. The monitoring program will be established consistent with the guidelines contained in SMC 20.80.082(D).

Subchapter 4.

Wetlands

20.80.310 WETLANDS – Purpose.

A. Wetlands are those areas that are inundated or saturated by surface or ground 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 swamps, marshes, bogs, and similar areas.

Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, bio-swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands.

B. Wetlands help to maintain water quality; store and convey stormwater and floodwater; recharge ground water; provide important fish and wildlife habitat; and serve as areas for recreation, education, scientific study and aesthetic appreciation.

C. The City's overall goal shall be to achieve no net loss of wetlands. This goal shall be implemented through retention of the function, value and acreage of wetlands within the City. Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment, chemical nutrient and toxic pollutants; provide shading to maintain desirable water temperatures; provide habitat for wildlife; protect wetland resources from harmful intrusion; and generally preserve the ecological integrity of the wetland area.

D. The primary purpose of the wetland regulations is to avoid detrimental wetland impacts and achieve a goal of no net loss of wetland function, value and acreage; and where possible enhance and restore wetlands. (Ord. 695 § 1 (Exh. A), 2014; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 5(A), 2000).

20.80.320 WETLANDS - Designation~~, delineation~~ and ~~classification~~ rating.

A. ~~The identification of wetlands and the delineation of their boundaries shall be done in accordance with the Federal Wetland Delineation Manual and applicable regional supplements approved by the Washington State Department of Ecology per WAC 173-22-035.~~

B. **Designation.** All areas meeting the definition of a wetland and identifi~~ed~~cation criteria as wetlands pursuant to ~~subsection A~~ SMC 20.80.322 of this section, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.

~~C. Wetlands, as defined by this subchapter, shall be classified according to the following criteria:~~

~~1. "Type I wetlands" are those wetlands which meet any of the following criteria:~~

~~a. The presence of species proposed or listed by the Federal government or State of Washington as endangered, threatened, critical or priority, or the presence of critical or outstanding actual or potential habitat for those species; or~~

~~b. Wetlands having 40 percent to 60 percent open water in dispersed patches with two or more wetland subclasses of vegetation; or~~

~~c. High quality examples of a native wetland listed in the terrestrial and/or aquatic ecosystem elements of the Washington Natural Heritage Plan that are presently identified as such or are determined to be of heritage quality by the Department of Natural Resources; or~~

~~d. The presence of plant associations of infrequent occurrence. These include, but are not limited to, plant associations found in bogs and in wetlands with a coniferous forested wetland class or subclass~~

~~occurring on organic soils.~~

~~2. "Type II wetlands" are those wetlands which are not Type I wetlands and meet any of the following criteria:~~

~~a. Wetlands greater than one acre (43,560 sq. ft.) in size;~~

~~b. Wetlands equal to or less than one acre (43,560 sq. ft.) but greater than one-half acre (21,780 sq.ft.) in size and have three or more wetland classes; or~~

~~c. Wetlands equal to or less than one acre (43,560 sq. ft.) but greater than one-half acre (21,780 sq.ft.) in size, and have a forested wetland class or subclasses.~~

~~3. "Type III wetlands" are those wetlands that are equal to or less than one acre in size and that have one or two wetland classes and are not rated as Type IV wetlands, or wetlands less than one-half acre in size having either three wetlands classes or a forested wetland class or subclass.~~

~~4. "Type IV wetlands" are those wetlands that are equal to or less than 2,500 square feet, hydrologically isolated and have only one, unforested, wetland class. (Ord. 695 § 1 (Exh. A), 2014; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 5(B), 2000).~~

B. **Rating.** All ~~W~~wetlands shall be rated by a qualified professional according to the current Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington 2014 (Ecology Publication No. ~~0~~14-06-029, or as revised~~, and Wetlands Guidance for Small Cities Western approved by Ecology), which contain the definitions and methods for determining whether the criteria below are met~~. Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the City, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities.

1. **Category I.** Category I wetlands are those that represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a high level of functions. The following types of wetlands are Category I:

   a. Relatively undisturbed estuarine wetlands larger than one acre;

   b. Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR~~as high quality wetlands~~;

   c. Bogs;

   d. Mature and old-growth forested wetlands larger than one acre;

   e. Wetlands in coastal lagoons; and

   f. Wetlands that perform many functions well (scoring ~~70~~ 23 points or more based on functions).

2. **Category II.** Category II wetlands are those that are difficult, though not impossible to replace and provide high levels of some functions. The following types of wetlands are Category II:

   a. Estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre;

   b. Interdunal wetlands larger than one acre or those found in a mosaic of wetlands; and

   c. ~~Disturbed coastal lagoons; and~~

d. Wetlands with a moderately high level of functions (scoring between 51 20 and 69 22 points).

3. **Category III.** Category III wetlands are those with a moderate level of functions, generally have been disturbed in some ways, can often be adequately replaced with a well-planned mitigation project, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. The following types of wetlands are Category III:

a. Wetlands with a moderate level of functions (scoring between 30 16 and 50 19 points); or

b. Interdunal wetlands between 0.1 and one acre.

4. **Category IV.** Category IV wetlands are those with the lowest levels of functions (scoring fewer than 30 below 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should also need to be protected to some degree.

C. **Illegal Modifications.** Wetland rating categories shall not change due to illegal modifications or alterations made by the applicant or with the applicant's knowledge.

D. At the time of adoption of the updated critical areas regulations, Chapter 20.80, Critical Areas, in November 2015, there were no identified Category I wetlands identified within the City of Shoreline. If this category of wetland is subsequently identified any applicable standards may be added or modified by the Director based on Washington State guidance on protection of the identified type of resource where the adopted regulations do not address the specified type of wetland.

20.80.322 WETLANDS – Mapping and delineation.

A. **Mapping.** The approximate location and extent of wetlands are shown in the following maps and inventories:

1. *City of Shoreline, Basin Characterization Reports and Stream and Wetland Inventory and Assessment, Tetra Tech (May 2004);*
2. City of Shoreline stormwater basin plans as completed and updated;
3. Wetland data layer maintained in the City of Shoreline geographic information system (GIS);
4. Soils maps produced by the US Department of Agriculture, National Resources Conservation Service; and
5. the *National Wetlands Inventory*, produced by the US Fish & Wildlife Service.

B. **Reference Only.** The inventories and cited resources are to be used as a guide for the City of Shoreline, project applicants, and/or property owners, and may be continuously updated as new wetlands are identified or critical area reports are submitted for known wetlands. They are a reference and do not provide a final critical area designation.

C. Identification and Delineation. Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved Federal wetland delineation manual and applicable regional supplements per WAC 173-22-035. The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional. Wetland delineations are valid for five years; after such date the City Director shall determine whether a revision or additional assessment is necessary.

20.80.324 WETLANDS – Development standards.

A. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this chapter.

B. **Activities Allowed in Wetlands.** The activities listed below are allowed in wetlands. Exemptions are listed in, the provisions established in SMC 20.80.030 and additional allowed activities in 20.80.040, but do not apply within the shoreline jurisdiction. These activities do not require submission of a critical area report, except where such activities result in a loss of the functions and values of a wetland or wetland buffer. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.

2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

3. Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column will be disturbed.

4. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and hand-held equipment ~~removal~~ unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than 500 square feet of area may be cleared, as calculated cumulatively over one (1) year, on private property without a permit. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds or the King County Noxious Weed List must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

5. Permitted alteration to a legally constructed structure existing within a wetland or wetland buffer that does not increase the footprint of the development or hardscape or increase the impact to a wetland or wetland buffer.

C. **Category I wetlands.** Development activities and uses that result in alteration of Category I wetlands and their associated buffers shall be prohibited subject to the reasonable use provisions and special use provision of SMC 20.30.333 and 20.30.336, unless otherwise allowed by the exemptions or allowed activities provisions of this chapter, or subject to the provisions of the Shoreline Master Program, SMC Title 20, Division II, where the proposed development activity is located within the shoreline jurisdiction.

D. **Category II and III wetlands.** Development activities and uses that result in alteration of Category II and III wetlands is prohibited, unless the applicant can demonstrate that:

1. The basic project proposed cannot reasonably be accomplished on another site or sites in the general region while still successfully avoiding or resulting in less adverse impact on a wetland;

2. All on-site alternative designs that would avoid or result in less adverse impact on a wetland or its buffer, such as a reduction to the size, scope, configuration, or density of the project are not feasible; and

3. Full compensation for the loss of acreage and functions of wetland and buffers due to unavoidable

impacts shall be provided in compliance with the mitigation performance standards and requirements of this chapter.

E. **Category IV wetlands.** Development activities and uses that result in unavoidable impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical area(s) report and compensatory mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the loss of acreage and functions of wetland and buffers shall be provided in compliance with the mitigation performance standards and requirements of these regulations.

F. **Small, hydrologically isolated Category IV wetlands.** The Director may allow small, hydrologically isolated Category IV wetlands to be exempt from the avoidance sequencing provisions of SMC 20.80.055 and SMC 20.80.324(D) and allow alteration of such wetlands provided that a submitted critical area report and mitigation plan provides evidence that all of the following conditions are met:

1. The wetland is less than one thousand (1,000) square feet in area;

2. The wetland is a low quality Category IV wetland with a habitat score of less than 3 points in the adopted rating system;

3. The wetland does not contain habitat identified as essential for local populations of priority species identified by the Washington Department of Fish and Wildlife or species of local importance which are regulated as fish and wildlife habitat conservation areas in Chapter 20.80, Subchapter 3;

4. The wetland is not associated with riparian areas or buffers;

5. The wetland is not part of a wetland mosaic; and

5. A mitigation plan to replace lost wetland functions and values is developed, approved, and implemented consistent with SMC 20.80.350.

G. **Subdivisions.** The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:

1. Land that is located wholly within a wetland or its buffer may not be subdivided; and

2. Land that is located partially within a wetland or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is:

a. Located outside of the wetland and its buffer; and

b. Meets the minimum lot size requirements of SMC 20.50.020~~(1)~~.

20.80.330 WETLANDS - Required buffer areas.

A. ~~Required wetland buffer widths shall reflect the sensitivity of the area and resource or the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the critical area. Wetland buffers shall be measured from the wetland's edge as delineated in accordance with the Federal Wetland Delineation Manual and applicable regional supplements approved by the Washington State Department of Ecology per WAC 173-22-035.~~ **Buffer Requirements.** The standard buffer widths in Table ~~20.230.031~~ 20.30.330(A)(1) have been established in accordance with the best available science. They are based on the category of

wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington.

1. The use of the standard buffer widths requires the implementation of the measures in Table ~~20.230.032~~ 20.80.330(A)(2), where applicable, to minimize the impacts of the adjacent land uses.

2. If an applicant chooses not to apply the mitigation measures in Table ~~20.230.032~~ 20.80.330(A)(2), then a 33 percent increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.

3. The standard buffer widths assume that the buffer is ~~vegetated with a~~ relatively intact native plant community ~~appropriate for the ecoregion~~ in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the existing buffer is ~~unvegetated~~ bare ground, sparsely vegetated, or vegetated with nonnative or invasive species that do not perform needed functions, then the applicant must either develop and implement a wetland buffer restoration or enhancement plan to maintain the standard width to create the appropriate plant community or the buffer ~~should~~ must be widened to ensure that adequate functions of the buffer are provided.

~~4. Additional buffer widths are added to the standard buffer widths. For example, a Category I wetland scoring 9 points for habitat function would require a buffer of 225 feet (75 + 150).~~

~~B. Wetland buffers shall be established as follows:~~

Table 20.80.330(A)(1) Wetland Buffer Requirements

Wetland Category	Buffer Width According to Habitat Score			
	Habitat Score of 3-4	Habitat Score of 5	Habitat Score of 6-7	Habitat Score of 8-9
Category I: Based on total score or Forested	75 ft	105 ft	165 ft	225 ft
Category I: Estuarine	150 ft (no change based on habitat scores)			
Category II: Based on total score	75 ft	105 ft	165 ft	225 ft
Category III (all)	60 ft	105 ft	165 ft	225 ft
Category IV (all)	40 ft (no change based on habitat scores)			

Table ~~20.230.032~~ 20.80.330(A)(2) Required measures to minimize impacts to wetlands (Measures are required, where applicable to a specific proposal)

Disturbance	Activities and Uses that Cause Disturbances	Required Measures to Minimize Impacts
Lights	• Parking lots • Warehouses • Manufacturing • Residential	• Direct lights away from wetland.

Disturbance	**Activities and Uses that Cause Disturbances**	**Required Measures to Minimize Impacts**
Noise	• Manufacturing • Residential	• 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 ft heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.
Toxic runoff*	• Parking lots • Roads • Manufacturing • Residential areas • Application of agricultural pesticides • Landscaping	• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered. • Establish covenants limiting use of pesticides and fertilizers within 150 ft of wetland. • Apply integrated pest management.
Stormwater runoff	• Parking lots • Roads • Manufacturing • Residential areas • Commercial • Landscaping	• 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 techniques (per PSAT publication on LID techniques).
Change in water regime	• Impermeable surfaces • Lawns • Tilling	• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns.
Pets and human disturbance	• Residential areas	• 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	• Tilled fields	• Use best management practices to control dust.
Disruption of corridors or connections		• Maintain connections to off-site areas that are undisturbed. • Restore corridors.
* These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site.		

~~C. The standard buffer width shall be established; provided, that the buffer may be reduced to the minimum buffer listed above if the applicant can demonstrate that a smaller area is adequate to protect the wetland functions and one or both of the following:~~

~~1. The proposed use and activities are considered low impact, and may include the following:~~

~~a. A site layout with no parking, outdoor storage, or use of machinery;~~

~~b. The proposed use does not involve usage or storage of chemicals; and~~

~~c. Passive areas are located adjacent to the subject buffer; and~~

~~d. Both the wetland and its buffer are incorporated into the site design in a manner which eliminates the risk of adverse impact on the subject critical area.~~

~~2. Wetland and buffer enhancement is implemented that will result in equal or greater wetland functions. This includes but is not limited to the following:~~

~~a. Enhancement of fish and wildlife habitat by incorporating structures that are likely to be used by wildlife, including wood duck houses, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.~~

~~b. Planting native vegetation that would increase value for fish and wildlife habitat, improve water quality, or provide aesthetic/recreational value.~~

~~D. When a wetland has salmonid fish use consistent with SMC 20.80.470, the corresponding wetland or stream buffer, whichever is greater, shall be established.~~

~~E. The City may extend the width of the buffer on the basis of site-specific analysis when necessary to achieve the goals of this subchapter.~~

5. **Increased Wetland Buffer Area Width.** Buffer widths shall be increased on a case-by-case basis as determined by the ~~Administrator~~ Director when a larger buffer is necessary to protect wetland functions and values. This determination shall be supported by ~~appropriate documentation~~ a critical area report showing that it is reasonably related to protection of the functions and values of the wetland. The ~~documentation~~ critical area report must include, but not be limited to, the following criteria:

a. The wetland is used by a plant or animal species listed by the Federal government or the State as endangered, threatened, candidate, sensitive, monitored or documented priority species or habitats, or essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or

b. The adjacent land has slopes greater than 15 percent or is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or

c. The adjacent land has minimal vegetative cover ~~or slopes greater than 30 percent~~. In lieu of increasing the buffer width where exiting buffer vegetation is inadequate to protect the wetland functions and values, development and implementation of a wetland buffer restoration/enhancement plan in accordance with SMC 20.80.350 may be substituted.

~~F. Wetland buffer widths may be modified by averaging buffer widths as set forth herein. Buffer width averaging shall be allowed only where the applicant demonstrates to the City:~~

~~1. The ecological structure and function of the buffer after averaging is equivalent to or greater than the structure and function before averaging;~~

~~2. That the total area contained within the buffer after averaging is no less than that contained within the standard buffer prior to averaging;~~

~~3. Buffer averaging will not result in a buffer width being reduced by more than 25 percent of the required buffer as set forth in Table 20.80.330B and in no case may the buffer be less than the stated minimum width.~~

~~4. A habitat survey shall be conducted within the area of concern in order to identify and prioritize highly functional fish and wildlife habitat within the study area.~~

~~The City may require buffer averaging to be designed to protect areas of greater sensitivity and function based on the recommendations of a wetland report prepared by a qualified professional.~~

6. Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:

a. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a “dual-rated” wetland with a Category I area adjacent to a lower rated area;

b. 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 from a qualified wetland professional;

c. The total area of the buffer after averaging is equal to the area required without averaging; and

d. The buffer at its narrowest point is never less than either three-fourths 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.

7. Averaging through a Critical Area Reasonable Use Permit consistent with SMC 20.30.333 or Critical Area Special Use Permit consistent with SMC 20.30.336 or a ~~s~~Shoreline ~~v~~Variance consistent with 20.220.040 may be permitted when all of the following are met:

a. There are no feasible alternatives to the site design that could be accomplished without buffer averaging;

b. The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report from a qualified wetland professional;

c. The total buffer area after averaging is equal to the area required without averaging; and

d. The buffer at its narrowest point is never less than either three-fourths 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.

B. To facilitate long-range planning using a landscape approach, the ~~Administrator~~ Director may identify and preassess wetlands using the rating system and establish appropriate wetland buffer widths for such wetlands. The ~~Administrator~~ Director will prepare maps of wetlands that have been preassessed in this manner.

C. **Measurement of Wetland Buffers.** All buffers shall be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland. ~~Only fully vegetated buffers will be considered. Lawns, walkways, driveways, and other mowed or paved areas will not be considered buffers or included in buffer area calculations.~~

D. **Buffers on Mitigation Sites.** All mitigation sites shall have buffers consistent with the buffer requirements of this chapter. Buffers shall be based on the expected or target category of the proposed wetland mitigation site.

E. **Buffer Maintenance.** Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive nonnative weeds is required for the duration of the mitigation bond (~~subsection (C)(6)(h)(ii)(A)(8) of this section~~ SMC 20.80.350(H)(2)(a)(viii)).

F. **Impacts to Buffers.** Requirements for the compensation for impacts to buffers are outlined in ~~subsection (C)(6)~~ SMC 20.80.350 of this section.

G. **Overlapping Critical Area Buffers.** If buffers for two contiguous critical areas overlap (such as buffers for a stream and a wetland), the wider buffer applies.

~~G. Low impact uses and activities which are consistent with the purpose and function of the wetland buffer and do not detract from its integrity may be permitted within the buffer depending on the sensitivity of the wetland. Examples of uses and activities which may be permitted in appropriate cases include trails constructed in a manner to reduce impervious surfaces, viewing platforms, and utility easements; provided, that any impacts to the buffer resulting from such permitted activities are fully mitigated. Uses permitted within the buffer shall be located as far from the wetland as possible.~~

H. **Allowed Wetland Buffer Uses.** The following uses may be allowed within a wetland buffer in accordance with the review procedures of this chapter, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

1. **Conservation and Restoration Activities.** Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

2. **Passive Recreation.** Passive recreation facilities designed and in accordance with an approved critical area report, including:

   a. Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent (25%) ~~25 percent~~ of the wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five (5) feet in width for pedestrian use only. Raised boardwalks utilizing nontreated pilings may be acceptable; and/or

   b. Wildlife viewing structures.

3. Educational and scientific research activities.

4. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.

5. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops, and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

6. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.

7. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and hand-held equipment ~~removal~~ unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than1,500 square feet of area may be cleared, as calculated cumulatively over one (1) year, on private property without a permit. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds or the King County Noxious Weed List must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native

species at natural densities is allowed in conjunction with removal of invasive plant species.

~~H. Stormwater management facilities, such as bio-swales, may not be located within the minimum buffer area as set forth in Table 20.80.330B unless it is determined that the location of the facility will enhance the buffer area, and protect the wetland.~~

8. **Stormwater Management Facilities.** Stormwater management facilities are limited to stormwater dispersion outfalls, ~~and~~ bioswales, and other low impact facilities consistent with the adopted stormwater manual. They may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only; provided, that:

a. No other location is feasible;

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

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

9. **Nonconforming Uses.** Repair and maintenance of nonconforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.

10. **Development Proposals within Physically Separated and Functionally Isolated Wetland Buffers.** Consistent with the definition of "buffers" (SMC 20.20.012), areas that are functionally isolated and physically separated from wetland due to existing, legally established roadways, paved trails eight (8) feet or more in width, or other legally established structures or paved areas eight (8) feet or more in width that occurs between the area in question and the wetland shall be considered physically isolated and functionally separated wetland buffer. Once determined by the Director based on a submitted critical area report to be a physically separated and functionally isolated wetland buffer, development proposals shall be allowed in these areas.

~~I. A regulated wetland and its associated buffer shall either be placed in a separate tract on which development is prohibited, protected by execution of an easement, dedicated to a conservation organization or land trust, or similarly preserved through a permanent protective mechanism acceptable to the City. The location and limitations associated with the wetland and its buffer shall be shown on the face of the deed or plat applicable to the property and shall be recorded with the King County Department of Records. (Ord. 695 § 1 (Exh. A), 2014; Ord. 469 § 1, 2007; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 5(C), 2000).~~

I. **Signs and Fencing of Wetlands and Buffers.**

1. **Temporary Markers.** The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary "clearing limits" fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the ~~Administrator~~ Director prior to the commencement of permitted activities during the preconstruction meeting required under SMC 20.50.330(E). This temporary marking and fencing shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent Signs.** As a condition of any permit or authorization issued pursuant to this chapter, the ~~Administrator~~ Director may require the applicant to install permanent signs along the boundary of a wetland or buffer, when recommended in a critical area report or otherwise required by the provisions of this chapter.

a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another nontreated material of equal durability. Signs must be posted at an interval of one per lot or every fifty (50) feet, whichever is less, and must be maintained by the property owner in perpetuity. The signs shall be worded ~~as follows~~ consistent with the text specified in SMC 20.80.110 or with alternative language approved by the ~~Administrator:~~ Director.

~~Protected Wetland Area Do Not Disturb~~

~~Contact the City of Shoreline Regarding Uses, Restrictions, and Opportunities for Stewardship~~

b. The provisions of subsection ~~(C)(4)(i)(ii)(A)~~ (a) of this section may be modified as necessary to assure protection of sensitive features.

3. **Fencing.** Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat. Permanent fencing shall be required at the outer edge of the critical area buffer under the following circumstances, provided that the Director may waive this requirement:

a. As part of any development proposal for subdivisions, short plats, multifamily, mixed use, and commercial development where the Director determines that such fencing is necessary to protect the functions of the critical area, provided that breaks in permanent fencing may be allowed for access to permitted buffer uses (SMC 20.80.330(H));

b. As part of development proposals for parks where the adjacent proposed use is active recreation and the Director determines that such fencing is necessary to protect the functions of the critical area;

c. When buffer averaging is part of a development proposal;

d. When buffer reductions are part of a development proposal; or

f. At the Director's discretion to protect the values and functions of a critical area as demonstrated in a critical area report. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area.

f. The applicant shall be required to install a permanent fence around the wetland buffer when domestic grazing animals, only as allowed under SMC 20.40.240, are present or may be introduced on site.

~~**20.80.340 Alteration.**~~

~~A. **Type I Wetlands.** Alterations of Type I wetlands shall be prohibited subject to the reasonable use provisions and special use permit provision of this title.~~

~~B. **Type II, III and IV Wetlands.**~~

~~1. Any proposed alteration and mitigation shall comply with the mitigation performance standards and requirements of these regulations; and~~

~~2. No net loss of wetland function and value may occur; and~~

~~3. Where enhancement or replacement is proposed, ratios shall comply with the requirements of this subchapter. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 5(D), 2000).~~

20.80.340 WETLANDS - Critical area report requirements.

A. **Report Required.** If the ~~Administrator~~ Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a wetland, a wetland critical area report~~, prepared by a qualified professional,~~ shall be required. ~~The expense of preparing the wetland report shall be borne by the applicant.~~ Critical area report requirements for wetland areas are generally met through submission to the Director of one or more wetland critical area reports. In addition to the general critical area report requirements of SMC 20.80.080, critical area reports for wetlands must meet the requirements of this section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

B. **Preparation by a Qualified Professional.** Critical area reports for wetlands shall be prepared and signed by a qualified professional who is a certified wetland scientist or a non-certified wetland scientist with the minimum required experience, per SMC 20.20.042, in the field of wetland science and with experience preparing wetland delineation, impact assessments, and mitigation plans.

C. **Third Party Review Required.** Critical areas studies and reports on wetland areas shall be subject to third party review consistent with SMC 20.80.080(C) and in any of the additional following circumstances:

1. Compensatory mitigation is required for impacts to Category I, II, or III wetlands and or buffers; or

2. Compensatory mitigation is required for impacts to Category IV wetlands.

D. **Minimum ~~Standards~~ Report Contents for Wetland ~~Reports~~.** The written critical area report(s) and ~~the~~ accompanying plan sheet(s) shall contain the following information~~,~~ at a minimum:

1. The minimum report contents required per SMC 20.80.080(E);

~~1. The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the wetland critical area report; a description of the proposal; identification of all the local, State, and/or Federal wetland related permit(s) required for the project; and a vicinity map for the project.~~

~~2. A statement specifying the accuracy of the report and all assumptions made and relied upon.~~

~~3~~2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, site photos, etc.~~,~~;

~~4~~3. A description of the methodologies used to conduct the wetland delineations, rating ~~system forms~~, or impact analyses including references~~.~~;

~~D~~4. **Site Plans.** A copy of the site plan sheet(s) for the project must be included with the written report and must include, at a minimum:

~~1~~a. Maps (to scale) depicting delineated and surveyed wetland(s) and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading ~~and clearing~~ limits; areas of proposed impacts to wetlands and/or buffers (include square footage estimates); and

~~2~~b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project.

~~5. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, floodplains, and buffers on or adjacent to the proposed project area. For areas off site of the project site, estimate conditions within 300 feet of the project boundaries using the best available information.~~

~~6~~5. For each wetland identified on site and within 300 feet of the project site provide: the wetland rating, including a description of and score for each function, per wetland ratings (~~subsection (C)(2)(b) of this section~~ SMC 20.80.320(B)); required buffers (SMC 20.80.330); hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site~~.~~;

~~7~~6. A description of the proposed actions, including an estimation of acreages of impacts to wetlands and buffers based on the field delineation and survey and an analysis of site development alternatives, including a no-development alternative~~.~~;

~~8~~7. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development~~.~~;

~~9~~8. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC 20.80.053(A) Mitigation Sequencing ~~(subsection (C)(6)(a) of this section)~~ to avoid, minimize, and mitigate impacts to critical areas~~.10. A~~ and a discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land-use activity~~.~~;

~~11~~9. A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions~~.~~; and

~~C~~10. An evaluation of the functions of the wetland and adjacent buffer. Include reference for the method used and data sheets.

E. **Additional Information.** When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC 20.80.082 and the wetland mitigation performance standards and requirements of SMC 20.80.350.

2. A request for consultation with the Washington Department of Fish and Wildlife (DFW) , Washington Department of Ecology (Ecology), local Native American Indian Tribes, or other appropriate agency;

3. Copies of the Joint Aquatic Resource Permit Application (JARPA) and related approvals, such as a

Hydraulic Project Approval (HPA) from the DFW, when applicable to the project; and

4. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

20.80.350 WETLANDS – Compensatory ~~M~~mitigation performance standards and requirements.

~~A. **Appropriate Wetland Mitigation Sequence and Actions.** Where impacts cannot be avoided, and the applicant has exhausted feasible design alternatives, the applicant or property owner shall seek to implement other appropriate mitigation actions in compliance with the intent, standards and criteria of this section. In an individual case, these actions may include consideration of alternative site plans and layouts, reductions in the density or scope of the proposal, and/or implementation of the performance standards listed in this subchapter.~~

~~B. Impacts to wetland functions and values shall be mitigated. Mitigation actions shall be implemented in the preferred sequence: Avoidance, minimization, restoration and replacement. Proposals which include less preferred and/or compensatory mitigation shall demonstrate that:~~

~~1. All feasible and reasonable measures will be taken to reduce impacts and losses to the critical area, or to avoid impacts where avoidance is required by these regulations; and~~

~~2. The restored, created or enhanced critical area or buffer will be as available and persistent as the critical area or buffer area it replaces; and~~

~~3. In the case of wetlands and streams, no overall net loss will occur in wetland or stream functions and values.~~

A. **Requirements for Compensatory Mitigation.**

1. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1), Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised.

2. Mitigation ratios shall be consistent with ~~subsection (C)(6)(g) of this section~~ SMC 20.80.350(G).

3. Mitigation requirements may also be determined using the credit/debit tool described in "Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Operational Draft" (Ecology Publication No. 10-06-011, February 2011, or as revised) consistent with ~~subsection (C)(6)(h) of this section~~ SMC 20.80.350(G).

B. **Compensating for Lost or ~~Affected~~ Impacted Functions.** Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:

1. The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or

2. Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.

C. **Preference of Mitigation Actions.** Methods to achieve compensation for wetland functions shall be approached in the following order of preference:

1. **Restoration.** Restoration ~~(reestablishment and rehabilitation)~~ of wetlands.

2. **Creation.** Creation (establishment) of wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to the wetland community that is anticipated in the design.

3. **Enhancement.** Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

4. **Preservation.** Preservation of high quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high quality, at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

   a. Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA listed species;

   b. There is no net loss of habitat functions within the watershed or basin;

   c. Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost; and

   d. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low functioning system (Category III or IV wetland).

   e. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

~~C. **Location and Timing of Wetland Mitigation.**~~

~~1. Wetland mitigation shall be provided on-site, unless on-site mitigation is not scientifically feasible due to the physical features of the property. The burden of proof shall be on the applicant to demonstrate that mitigation cannot be provided on-site.~~

~~2. When mitigation cannot be provided on-site, mitigation shall be provided in the immediate vicinity of the permitted activity on property owned or controlled by the applicant such as an easement, provided such mitigation is beneficial to the critical area and associated resources. It is the responsibility of the applicant to obtain title to off-site mitigation areas.~~

~~3. In-kind mitigation shall be provided except when the applicant demonstrates and the City concurs that greater functional and habitat value can be achieved through out-of-kind mitigation.~~

~~4. Only when it is determined by the City that subsections (C)(1), (2), and (3) of this section are inappropriate and impractical shall off-site, out-of-kind mitigation be considered.~~

~~5. When wetland mitigation is permitted by these regulations on-site or off-site, the mitigation project shall occur near an adequate water supply (river, stream, ground water) with a hydrologic connection to the proposed wetland mitigation area to ensure successful development or restoration.~~

~~6. Any agreed upon mitigation proposal shall be completed prior to project construction, unless a phased schedule that assures completion concurrent with project construction, has been approved by the City.~~

~~7. Wetland acreage replacement ratios shall be as specified in this section.~~

~~8. When wetland mitigation is permitted by these regulations, native plant materials salvaged from the original wetland area shall be utilized to the maximum extent possible.~~

D. **Type and Location of Compensatory Mitigation.** Unless it is demonstrated that a higher level of ecological functioning would result from an alternative approach, compensatory mitigation for ecological functions shall be either in kind and on site, or in kind and within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration except when all of the following apply:

1. There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);

2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and

3. Off-site locations shall be in the same sub-drainage basin unless~~:~~

   ~~a. W~~watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site.~~; or~~

4. The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.

~~D. **Wetland Replacement Ratios.**~~

~~1. Where wetland alterations are permitted by the City, the applicant shall restore or create areas of wetlands in order to compensate for wetland losses. Equivalent areas shall be determined according to acreage, function, type, location, timing factors and projected success of restoration or creation.~~

~~2. When creating or enhancing wetlands, the following acreage replacement ratios shall be used:~~

~~Table 20.80.350D~~

~~Wetland Type~~	~~Wetland Creation Replacement Ratio (Area)~~	~~Wetland Enhancement Ratio (Area)~~
~~Type I~~	~~6:1~~	~~16:1~~
~~Type II~~	~~3:1~~	~~12:1~~
~~Type III~~	~~2:1~~	~~8:1~~
~~Type IV~~	~~1.5:1~~	~~6:1~~

~~The Department shall have discretion to increase these standards where mitigation is to occur off-site or in other appropriate circumstances based on the recommendations of a wetlands report that includes best available science and is prepared by a qualified professional.~~

~~3. Enhanced wetlands shall have higher wetland values and functions than the altered wetland. The values and functions transferred shall be of equal or greater quality to assure no net loss of wetland values and functions.~~

~~4. Enhanced and created wetlands shall be appropriately classified and buffered.~~

~~5. An enhanced or created wetland and its associated buffer shall be placed either in a separate tract on which development is prohibited, protected by execution of an easement, dedicated to a conservation organization or land trust, or similarly preserved through a permanent protective mechanism acceptable to the City and shall be recorded with the King County Department of Records.~~

E. **Wetland Mitigation Ratios[1].**

Table 20.80.350(G). Wetland mitigation ratios apply when impacts to wetlands cannot be avoided or are otherwise allowed consistent with the provisions of this chapter.

Category and Type of Wetland[2]	**Creation or Reestablishment**	**Rehabilitation**	**Enhancement**	**Preservation**
Category I: Based on total score for functions	4:1	8:1	16:1	20:1
Category I: Mature forested	6:1	12:1	24:1	24:1
Category I: Estuarine	Case-by-case	6:1	Case-by-case	Case-by-case
Category II: Based on total score for functions	3:1	6:1	12:1	20:1
Category III (all)	2:1	4:1	8:1	15:1
Category IV (all)	1.5:1	3:1	6:1	10:1

[1] Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or reestablishment. See Table 1a or 1b, Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance – Version 1 (Ecology Publication No. 06-06-011a, Olympia, WA, March 2006 or as revised).

[2] Category and rating of wetland as determined consistent with SMC 20.80.320(B).

F. **Buffer Mitigation Ratios.** Impacts to buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

~~E~~G. ~~**Wetlands**~~ **Mitigation Performance Standards.** The performance standards in this section shall be incorporated into mitigation plans submitted to the City for impacts to critical areas. ~~In addition, the City may prepare a technical manual which includes guidelines and requirements for report preparation.~~ The following performance standards shall apply to any mitigations proposed within ~~Type~~ Category I, ~~Type~~ II, ~~Type~~ III and ~~Type~~ IV wetlands and their buffers. Modifications to these performance standards consistent with the guidance in *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised) may be considered for approval by the Director as alternatives to the following standards.*

1. Plants indigenous to the region (not introduced or foreign species) shall be used.

2. Plant selection shall be consistent with the existing or projected hydrologic regime, including base water levels and stormwater event fluctuations.

3. Plants should be commercially available or available from local sources.

4. Plant species high in food and cover value for fish and wildlife shall be used.

5. Mostly perennial species should be planted.

6. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided.

7. Plant selection must be approved by a qualified ~~consultant~~ professional.

8. The following standards shall apply to wetland design and construction:

   a. Water depth shall not exceed six and one-half feet (two meters).

   b. The grade or slope that water flows through the wetland shall not exceed six percent.

   c. Slopes within the wetland basin and the buffer zone shall not be steeper than 3:1 (horizontal to vertical).

   d. The wetland (excluding the buffer area) should not contain more than 60 percent open water as measured at the seasonal high water mark.

9. Substrate should consist of a minimum of one foot, in depth, of clean (uncontaminated with chemicals or solid/hazardous wastes) inorganic/organic materials.

10. Planting densities and placement of plants should be determined by a qualified ~~consultant~~ professional and shown on the design plans.

11. The planting plan shall be approved by the City.

12. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City.

13. Planting instructions shall be submitted which describe ~~proper~~ placement, diversity, and spacing of seeds,

tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock.

14. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as ~~(~~determined during the monitoring process~~)~~.

15. An irrigation system shall be installed, if necessary, for the initial establishment period.

16. All construction specifications and methods shall be approved by a qualified ~~consultant~~ professional and the City.

17. Construction management shall be provided by a qualified ~~consultant~~ professional. Ongoing work on-site shall be inspected by the City.

H. **Compensatory Mitigation Plan.** When a project involves wetland and/or buffer impacts, a compensatory mitigation plan as part of the required critical area report. ~~prepared by a qualified professional shall be required.~~ Compensatory wetland mitigation plans must meet the minimum requirements SMC 20.80.082 and demonstrate compliance with SMC 20.80.053. Full guidance can be found in *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised).* The mitigation plan must meet the following additional ~~meeting the following minimum~~ standards:

1. Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding land uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on wetland ratings (~~subsection (C)(2)(b) of this section~~ SMC 20.80.320(B));

2. Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are not undertaken (i.e., how would this site progress through natural succession?);

3. A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands;

4. A description of the proposed mitigation construction activities, construction/installation notes, and timing of activities;

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

6. Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas.

7. The scaled plan sheets for the compensatory mitigation must contain, at a minimum:

   a. Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions;

b. Existing topography, ground-proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be impacted, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation;

c. Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions;

d. Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes;

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

f. A plant schedule for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, typical plant installation details and notes, total number of each species by community type, timing of installation; and

g. Performance standards (measurable standards reflective of years post-installation) for upland and wetland communities, monitoring ~~schedule~~ plan, contingency plan, and maintenance schedule, and actions. Standards for success shall be established based on the performance standards identified and the functions and values being mitigated based on the guidance in *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised)*.

~~F. **Approved Wetland Mitigation Projects – Signature.** On completion of construction, any approved mitigation project shall be signed off by the applicant's qualified consultant and approved by the City. Signature of the qualified consultant and approval by the City will indicate that the construction has been completed as planned.~~

~~G. **Monitoring Program and Contingency Plan.**~~

~~1. A monitoring program shall be implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives are being met.~~

~~2. A contingency plan shall be established for indemnity in the event that the mitigation project is inadequate or fails. A performance and maintenance bond or other acceptable financial guarantee is required to ensure the applicant's compliance with the terms of the mitigation agreement. The amount of the performance and maintenance bond shall equal 125 percent of the cost of the mitigation project in addition to the cost for monitoring for a minimum of five years. The bond may be reduced in proportion to work successfully completed over the period of the bond. The bonding period shall coincide with the monitoring period.~~

~~3. Monitoring programs prepared to comply with this section shall reflect the following guidelines:~~

~~a. Scientific procedures shall be used to establish the success or failure of the project.~~

~~b. For vegetation determinations, permanent sampling points shall be established.~~

~~c. Vegetative success shall, at a minimum, equal 80 percent survival of planted trees and shrubs and 80 percent cover of desirable understory or emergent plant species at the end of the required monitoring period. Additional standards for vegetative success, including (but not limited to) minimum survival standards following the first growing season, may be required after consideration of a report prepared by a qualified consultant.~~

~~d. Monitoring reports on the current status of the mitigation project shall be submitted to the City. The reports are to be prepared by a qualified consultant and reviewed by the City or a consultant retained by the City and should include monitoring information on wildlife, vegetation, water quality, water flow, stormwater storage and conveyance, and existing or potential degradation, as applicable, and shall be produced on the following schedule: at the time of construction; 30 days after planting; early in the growing season of the first year; at the end of the growing season of the first year; twice during the second year; and annually thereafter.~~

~~e. Monitoring programs shall be established for a minimum of five years.~~

~~f. If necessary, failures in the mitigation project shall be corrected.~~

~~g. Dead or undesirable vegetation shall be replaced with appropriate plantings.~~

~~h. Damage caused by erosion, settling, or other geomorphological processes shall be repaired.~~

~~i. The mitigation project shall be redesigned (if necessary) and the new design shall be implemented and monitored, as in subsection (G)(3)(d) of this section.~~

~~j. Correction procedures shall be approved by a qualified consultant and the City.~~ (Ord. 581 § 1 (Exh. 1), 2010; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 5(E), 2000).

Subchapter 5.

Flood Hazard Areas

20.80.360 FLOOD HAZARD - Description and purpose.

A. A flood hazard area consists of the special flood hazard areas and protected areas as defined in Chapter 13.12 SMC, which comprise the regulatory floodplain.

B. It is the purpose of these regulations to ensure that the City of Shoreline meets the requirements of the National Flood Insurance Program and maintains the City as an eligible community for Federal flood insurance benefits. (Ord. 641 § 5 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(A), 2000).

20.80.370 FLOOD HAZARD - Classification.

Flood hazard areas shall be determined pursuant to the requirements of the floodplain management regulations, Chapter 13.12 SMC, which include, at a minimum, all lands identified on the 100-year floodplain designations of the current Federal Emergency Management Agency (FEMA) flood insurance rate map for King County as identified in SMC 13.12.300. (Ord. 641 § 5 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(B), 2000).

20.80.380 FLOOD HAZARD - Development limitations.

All development within designated flood hazard areas shall comply with Chapter 13.12 SMC, Floodplain Management, as now or hereafter amended, and is not subject to the regulations of this chapter. (Ord. 641 § 5 (Exh. A), 2012; Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(C), 2000).

20.80.390 Zero-rise floodway – Development standards and permitted alterations.

Repealed by Ord. 641. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(D), 2000).

20.80.400 FEMA floodway – Development standards and permitted alterations.

Repealed by Ord. 641. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(E), 2000).

20.80.410 Flood hazard areas – Certification by engineer or surveyor.

Repealed by Ord. 641. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 6(F), 2000).

Subchapter 6.

Aquifer Recharge Areas

20.80.420 AQUIFER RECHARGE - Description and purpose.

A. Aquifer recharge areas provide a source of potable water and contribute to stream discharge during periods of low flow. Urban-type pollutants may enter watercourse supplies through potential infiltration of pollutants through the soil to ground water aquifers.

B. The primary purpose of aquifer recharge area regulations is to protect aquifer recharge areas by providing for regulation of land use activities that pose a risk of potential aquifer contamination and to minimize impacts through the application of strict performance standards. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 7(A), 2000).

C. At the time of adoption of the updated critical areas regulations, Chapter 20.80 SMC, Critical Areas, in November 2015, there were no identified critical aquifer recharge areas identified within the City of Shoreline.

20.80.430 AQUIFER RECHARGE - Classification.

Aquifer recharge areas shall be classified based on the soil and ground water conditions and risks to surface water during periods of low hydrology. Classification depends on the combined effects of hydrogeological susceptibility to contamination and contaminant loading potential, and includes upland areas underlain by soils consisting largely of silt, clay or glacial till, upland areas underlain by soils consisting largely of sand and gravel, and wellhead protection areas and areas underlain by soils consisting largely of sand and gravel in which there is a predominantly downward or lateral component to ground water flow. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 7(B), 2000).

20.80.440 AQUIFER RECHARGE - Alteration.

The following land uses and activities shall require implementation of Best Management Practices (BMPs) as established by the Department of Ecology:

A. Land uses and activities that involve the use, storage, transport or disposal of significant quantities of chemicals, substances or materials that are toxic, dangerous or hazardous, as those terms are defined by State and Federal regulations.

B. On-site community sewage disposal systems.

C. Underground storage of chemicals.

D. Petroleum pipelines.

E. Solid waste landfills.

F. Stormwater management, including infiltration, and groundwater recharge. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 7(C), 2000).

20.80.450 AQUIFER RECHARGE - Performance standards and requirements.

Any uses or activities located in an aquifer recharge area, as defined within this subchapter, that involve the use, storage, transport or disposal of significant quantities of chemicals, substances, or materials that are toxic, dangerous or hazardous, as those terms are defined by State and Federal regulations, shall comply with the following additional standards:

A. Underground storage of chemicals, substances or materials that are toxic, hazardous or dangerous is discouraged.

B. Any chemicals, substances or materials that are toxic, hazardous or dangerous shall be segregated and stored in receptacles or containers that meet State and Federal standards.

C. Storage containers shall be located in a designated, secured area that is paved and able to contain leaks and spills, and shall be surrounded by a containment dike.

D. Secondary containment devices shall be constructed around storage areas to retard the spread of any spills and a monitoring system should be implemented.

E. A written operations plan shall be developed, including procedures for loading/unloading liquids and for training of employees in proper materials handling.

F. An emergency response/spill clean-up plan shall be prepared and employees properly trained to react to accidental spills.

G. Any aboveground storage tanks shall be located within a diked containment area on an impervious surface. The tanks shall include overfill protection systems and positive controls on outlets to prevent uncontrolled discharges.

H. Development should be clustered and impervious surfaces limited where possible.

I. No waste liquids or chemicals of any kind shall be discharged to storm sewers.

J. All development shall implement Best Management Practices (BMPs) for water quality, as approved by the City, including the standards contained within the ~~City of Shoreline~~ adopted s~~S~~tormwater ~~Design~~ m~~M~~anual, such as biofiltration swales and use of oil-water separators, and BMPs appropriate to the particular use proposed. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 7(D), 2000).

Subchapter 7.

Stream Areas

20.80.460 Designation and purpose.

A. Streams are those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses, unless they are used by salmonids or are used to convey streams naturally occurring prior to construction. A channel or bed need not contain water year-round; provided, that there is evidence of at least intermittent flow during years of normal rainfall.

B. Stream areas and their associated buffers provide important fish and wildlife habitat and corridors; help to maintain water quality; store and convey stormwater and floodwater; recharge groundwater; and serve as areas for recreation, education and scientific study and aesthetic appreciation.

C. The primary purpose of the stream area regulations is to avoid impacts to streams and associated riparian corridors and where possible, provide for stream enhancement and rehabilitation. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 8(A), 2000).

20.80.470 Streams.

A. "Type I streams" are those streams identified as "Shorelines of the State" under the City Shoreline Master Program.

B. "Type II streams" are those streams that are not Type I streams and are either perennial or intermittent and have one of the following characteristics:

1. Salmonid fish use; or

2. Demonstrated salmonid habitat value as determined by a qualified professional.

C. "Type III streams" are those streams which are not Type I or Type II streams with perennial (year-round) or intermittent flow with channel width of two feet or more taken at the ordinary high water mark and are not used by salmonid fish.

D. "Type IV streams," which are not Type I, Type II, or Type III, are those streams with perennial or intermittent flow with channel width less than two feet taken at the ordinary high water mark that are not used by salmonid fish.

E. "Piped stream segments" are those segments of streams, regardless of their type, that are fully enclosed in an underground pipe or culvert.

F. For the purposes of this section, "salmonid fish use" and "used by salmonid fish" is presumed for:

1. Streams where naturally recurring use by salmonid populations has been documented by a government agency;

2. Streams that are fish passable or have the potential to be fish passable by salmonid populations, including those from Lake Washington or Puget Sound, as determined by a qualified professional based on review of stream flow, gradient and barriers and criteria for fish passability established by the Washington Department of Fish and Wildlife; and

3. Streams that are:

a. Planned for restoration in a six-year capital improvement plan adopted by a government agency that will result in a fish passable connection to Lake Washington or Puget Sound.

b. Planned removal of the private dams that will result in a fish passable connection to Lake Washington and Puget Sound. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 8(B), 2000).

20.80.480 Required buffer areas.

A. Required buffer widths shall reflect the sensitivity of the stream type, the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the stream area. Stream buffers shall be measured from the ordinary high water mark (OHWM) or the top of the bank, if the OHWM can not be determined.

B. The following buffers are established for streams:

Table 20.80.480B

Stream Type	Standard Buffer Width (ft)	Minimum Buffer Width (ft)
Type I	150	115
Type II	115	75
Type III	65	35
Type IV	35	25
Piped Stream Segments	10	10

C. The standard buffer width shall be established; provided, that the buffer may be reduced to the minimum buffer listed above if the applicant can demonstrate that a smaller buffer is adequate to protect the stream functions and implements one or more enhancement measures to result in a net improvement to the stream and buffer. The measures determined most applicable and/or appropriate will be considered in reducing buffer requirements. These include but are not limited to:

1. Removal of fish barriers to restore accessibility to anadromous fish.

2. Enhancement of fish habitat using log structures incorporated as part of a fish habitat enhancement plan.

3. Enhancement of fish and wildlife habitat structures that are likely to be used by wildlife, including wood duck houses, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.

4. Additional enhancement measures may include:

a. Planting native vegetation within the buffer area, especially vegetation that would increase value for fish and wildlife, increase stream bank or slope stability, improve water quality, or provide aesthetic/recreational value; or

b. Creation of a surface channel where a stream was previously underground, in a culvert or pipe. Surface channels which are "daylighted" shall be located within a buffer area and shall be designed with energy dissipating functions such as meanders to reduce future erosion;

c. Removal or modification of existing stream culverts (such as at road crossings) to improve fish passage and flow capabilities; or

d. Upgrading of retention/detention facilities or other drainage facilities beyond required levels.

D. No structures or improvements shall be permitted within the stream buffer area, including buildings, decks,

docks, except as otherwise permitted or required under the City's adopted Shoreline Master Program, or under one of the following circumstances:

1. When the improvements are part of an approved rehabilitation or mitigation plan; or

2. For the construction of new roads and utilities, and accessory structures, when no feasible alternative location exists; or

3. The construction of trails over and in the buffer of piped stream segments, and the construction of trails near other stream segments consistent with the following criteria:

   a. Trails should be constructed of permeable materials;

   b. Trails shall be designed in a manner that minimizes impact on the stream system;

   c. Trails shall have a maximum trail corridor width of 10 feet; and

   d. Trails should be located within the outer half of the buffer, i.e., that portion of the buffer that is farther away from the stream; or

4. The construction of footbridges; or

5. The construction and placement of informational signs or educational demonstration facilities limited to no more than one square yard surface area and four feet high, provided there is no permanent infringement on stream flow; or

6. The establishment of stormwater management facilities, such as bio-swales, over and in the buffer of piped stream segments and when located outside of the minimum buffer area for other stream segments as set forth in the Table 20.80.480B.

E. The City may extend the width of the buffer on the basis of site-specific analysis when necessary to comply with an adopted basin plan in accordance with City, County, State or Federal plans to preserve endangered or threatened species.

F. Stream buffer widths may be modified by averaging buffer widths as set forth herein. Buffer width averaging shall be allowed only where the applicant demonstrates to the City:

   1. The ecological structure and function of the buffer after averaging is equivalent to or greater than the structure and function before averaging;

   2. That the total area contained within the buffer after averaging is no less than that contained within the standard buffer prior to averaging;

   3. Buffer averaging shall not result in the buffer width being reduced by more than 25 percent of the required buffer as set forth in the table in subsection (B) of this section and in no case may the buffer be less than the stated minimum width.

   4. A habitat survey shall be conducted within the area of concern in order to identify and prioritize highly functional fish and wildlife habitat within the study area.

   The City may require buffer averaging to be designed to protect areas of greater sensitivity and function based on the recommendations of a stream report prepared by a qualified professional.

G. Relocation of a Type I, II, or III shall be allowed only when the proposed relocation is part of an approved mitigation or rehabilitation plan, will result in equal or better habitat and water quality, and will not diminish the flow capacity of the stream. Relocation of a Type IV stream shall be allowed only when the proposed relocation will result in equal or better habitat and water quality and will not diminish the flow capacity of the stream.

H. Restoring Piped Watercourses.

1. The City allows the voluntary opening of previously channelized/culverted streams and the rehabilitation and restoration of streams, especially on public property or when a property owner is a proponent in conjunction with new development.

2. When piped watercourse sections are restored, a protective buffer shall be required of the stream section. The buffer distance shall be based on an approved restoration plan, regardless of stream classification, and shall be a minimum of 10 to 25 feet, at the discretion of the Director, to allow for restoration and maintenance. The stream and buffer area shall include habitat improvements and measures to prevent erosion, landslide and water quality impacts. Opened channels shall be designed to support fish access, unless determine to be unfeasible by the City.

3. Removal of pipes conveying streams shall only occur when the City determines that the proposal will result in a new improvement of water quality and ecological functions and will not significantly increase the threat of erosion, flooding, slope stability or other hazards.

4. Where the buffer of the restored stream would extend beyond a required setback on an adjacent property, the applicant shall obtain a written agreement from the affected neighboring property owner. (Ord. 398 § 1, 2006; Ord. 299 § 1, 2002; Ord. 238 Ch. VIII § 8(C), 2000).

20.80.490 Alteration.

A. Bridges shall be used to cross Type I streams. Culverted crossings and other obstructive means of crossing Type I streams shall be prohibited.

B. Culverts are allowable only under the following circumstances:

1. Crossing of Type II, III, and IV streams;

2. When fish passage will not be impaired;

3. When the following design criteria are met:

a. Oversized culverts will be installed;

b. Culverts will include gradient controls and creation of pools within the culvert for Type II streams where appropriate; and

c. Gravel substrate will be placed in the bottom of the culvert to a minimum depth of one foot for Type II streams;

4. The applicant or successors shall, at all times, keep any culvert free of debris and sediment to allow free passage of water and, if applicable, fish.

C. The City may require that a culvert be removed from a stream as a condition of approval, unless it is demonstrated conclusively that the culvert is not detrimental to fish habitat or water quality, or removal would be detrimental to fish or wildlife habitat or water quality. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 8(D), 2000).

20.80.500 Mitigation performance standards and requirements.

A. **Appropriate Stream Mitigation Sequence and Actions.** Where impacts cannot be avoided, and the applicant has exhausted feasible design alternatives, the applicant or property owner shall seek to implement other appropriate mitigation actions in compliance with the intent, standards and criteria of this section. In an individual case, these actions may include consideration of alternative site plans and layouts, reductions in the density or scope of the proposal, and/or implementation of the performance standards listed in this section.

B. Significant adverse impacts to stream area functions and values shall be mitigated. Mitigation actions shall be

implemented in the preferred sequence: Avoidance, minimization, restoration and replacement. Proposals which include less preferred and/or compensatory mitigation shall demonstrate that:

1. All feasible and reasonable measures will be taken to reduce impacts and losses to the stream, or to avoid impacts where avoidance is required by these regulations; and

2. The restored, created or enhanced stream area or buffer will be available and persistent as the stream or buffer area it replaces; and

3. No overall net loss will occur in stream functions and values.

C. **Location and Timing of Stream Mitigation.**

1. Mitigation shall be provided on-site, unless on-site mitigation is not scientifically feasible due to the physical features of the property. The burden of proof shall be on the applicant to demonstrate that mitigation cannot be provided on-site.

2. When mitigation cannot be provided on-site, mitigation shall be provided in the immediate vicinity of the permitted activity on property owned or controlled by the applicant such as an easement, provided such mitigation is beneficial to the critical area and associated resources. It is the responsibility of the applicant to obtain title to off-site mitigation areas.

3. In-kind mitigation shall be provided except when the applicant demonstrates and the City concurs that greater functional and habitat value can be achieved through out-of-kind mitigation.

4. Only when it is determined by the City that subsections (B)(1), (2), and (3) of this section are inappropriate and impractical shall off-site, out-of-kind mitigation be considered.

5. When stream mitigation is permitted by these regulations on-site or off-site, the mitigation project shall occur near an adequate water supply (river, stream, groundwater) with a hydrologic connection to the mitigation area to ensure successful development or restoration.

6. Any agreed upon mitigation proposal shall be completed prior to project construction, unless a phased schedule, that assures completion concurrent with project construction, has been approved by the City.

7. Restored or created streams, where permitted by these regulations, shall be an equivalent or higher stream value or function than the altered stream.

D. The performance standards in this section and the relevant performance standards located within the wetland standards of SMC 20.80.350(E)(1) through (17) shall be incorporated into mitigation plans submitted to the City for impacts to critical areas. In addition, the City may prepare a technical manual which includes guidelines and requirements for report preparation. The performance standards shall apply to any mitigations proposed within Type I, Type II or Type III streams within the City.

E. On completion of construction, any approved mitigation project must be signed off by the applicant's qualified consultant and approved by the City. Signature of the qualified consultant and approval by the City will indicate that the construction has been completed as planned.

F. **Monitoring Program and Contingency Plan.** A monitoring program shall be implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives are being met. The monitoring program will be established consistent with the guidelines contained in SMC 20.80.350(G). (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 8(E), 2000).

Title 20

DEVELOPMENT CODE

Division I. Unified Development Code

20.20 Definitions
20.30 Procedures and Administration
20.40 Zoning and Use Provisions
20.50 General Development Standards

Chapter 20.20

Definitions*

Sections:

20.20.010 A definitions.
20.20.012 B definitions.
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20.20.046 S definitions.
20.20.054 W definitions.

*Code reviser's note: Ordinance 238 provided all of the definitions initially set out in this chapter. History notes following definitions indicate amending ordinances only.

20.20.010 A definitions.

Alteration	Any human induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to grading, filling, channelizing, dredging, clearing (vegetation), construction, compaction, excavation, or any other activity that changes the character of the critical area.
Anadromous Fish	Fish that spawn and rear in freshwater and mature in the marine environment. While Pacific salmon die after their first spawning, adult char (bull trout) can live for many years, moving in and out of saltwater and spawning each year. The life history of Pacific salmon and char contains critical periods of time when these fish are more susceptible to environmental and physical damage than at other times. The life history of salmon, for example, contains the following stages: upstream migration of adults, spawning, inter-gravel incubation, rearing, smoltification (the time period needed for juveniles to adjust their body functions to live in the marine environment), downstream migration, and ocean rearing to adults.
Aquifer	A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.
Aquifer Recharge Areas	A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

20.20.012 B definitions.

Best Available Science	Current scientific information used in the

	process to designate, protect, mitigate impacts to, or restore critical areas, that is derived from a valid scientific process as defined by WAC 365-196-900 through 925.
Bond	A financial guarantee in the form of a surety bond, cash deposit, escrow account assignment of savings, irrevocable letter of credit or other means acceptable to, or required by, the Director to guarantee work is in compliance with all applicable requirements.
Buffer	A designated area contiguous to and protects a critical area which is required for the continued maintenance, functioning and/or structural stability of a critical area.

20.20.014 C definitions.

Certified Arborist	A person or firm with specialized knowledge of the horticultural requirements of trees, certified by the International Society of Arboriculture or by the American Society of Consulting Arborists as a registered consulting arborist.
Compensatory Mitigation	Replacing project-induced losses or impacts to a critical area, and includes but is not limited to creation, restoration, re-establishment, enhancement, and preservation. The term mitigation is often used to refer to compensation, which is just one part of the overall mitigation sequence. See *mitigation.*
Conservation Easement	A legal agreement that the property owner enters into to restrict uses of the land. Such restrictions can include, but are not limited to, passive recreation uses such as trails or scientific uses and fences or other barriers to protect habitat. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property, therefore, providing permanent or long-term protection.
Critical Areas	An area or ecosystem with one or more of the following environmental characteristics: A. Geologic hazard areas, included but not limited to: 1. Landslide hazard areas, 2. Seismic hazard areas, and 3. Erosion hazard areas; B. Fish and wildlife habitat conservation areas; C. Wetlands; D. Flood hazard areas; and E. Aquifer recharge areas. (Ord. 398 § 1, 2006; Ord. 352 § 1, 2004).

20.20.018 E definitions.

Engineering Geologist	A person licensed by the State of Washington as a professional geologist with an engineering geologist endorsement who specializes in evaluating geologic site characteristics to determine the response of geologic processes and materials to development activities, such as removal of vegetation, site grading, buildings, and civil works.
Enhancement	An action which increases the functions and values of a stream, wetland or other critical area or buffer so the functions and values they provide are of a higher quality.
Excessive Pruning	Pruning more than 25 percent of the tree canopy in one growing season or over a five year period, unless necessary to restore the vigor of the tree or to protect life and property.

20.20.020 F definitions.

Fish and Wildlife Habitat Conservation Areas	Areas, as designated by SMC 20.80.270, necessary to maintain populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created.
Fish Habitat	Habitat that is used by fish at any life stage at any time of the year, including potential habitat likely to be used by fish that could be recovered by restoration or management and includes off-channel habitat.
Functions and Values	The beneficial roles served by critical areas and their buffers including, but not limited to, water quality protection and enhancement; fish and wildlife habitat; food chain support; flood storage, conveyance, and attenuation; ground water recharge and discharge; erosion control; wave attenuation; protection from hazards; historical, archaeological, and aesthetic value protection; educational opportunities; and recreation. These beneficial roles are not listed in order of priority. Critical area functions and values can be used to help set targets (species composition, structure, etc.) for mitigation sites.

20.20.022 G definitions.

Geologic Hazard Areas	Critical areas which are susceptible to erosion, land sliding, seismic, or other geological events as designated by SMC 20.80.210. These areas may not be suited for any development activities, because they may pose a threat to public health and safety, or environmental standards.
Geologist	A person trained in geological sciences and licensed by the State of Washington as a professional geologist.

20.20.024 H definitions.

Habitat Conservation Areas	Areas designated as fish and wildlife habitat conservation areas.

Habitats of Local Importance	Areas identified as important by the City and designated as fish and wildlife habitat conservation areas that include a seasonal range or habitat element with which a given species has a primary association, and which, if altered may reduce the likelihood that the species will maintain and reproduce over the long-term..
Hand-held Equipment	Equipment, such as shovels or chainsaws that are compact enough to be used or operated while being held in the hand or hands. Does not include equipment operated on the ground by pushing or self-propulsion such as lawn mowers or rototillers.
Hazardous Substance	Any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090 or 173-303-100.

20.20.026 I definitions.

Invasive Species	Any nonnative organisms that cause economic or environmental harm and are capable of spreading to new areas of the state. Invasive species do not include domestic livestock, intentionally planted agronomic crops, or nonharmful exotic organisms. Invasive species include but are not limited to noxious weeds.

20.20.032 L definitions.

Lands Covered by Water	All lands underlying the water areas of the state below the ordinary high water mark, including salt waters, tidal waters, estuarine waters, natural water courses, lakes, ponds, artificially impounded waters, and wetlands consistent with WAC 197-11-756.

20.20.034 M definitions.

Marine Environment/Marine Waters	Aquatic lands and waters under tidal influence, including saltwaters and estuaries to the ordinary high water mark.
Mitigation	Avoiding, minimizing, or compensating for adverse impacts, including use of any or all of the following actions listed in descending order of preference: A. Avoiding the impact by not taking a certain action or parts of an action; B. Minimizing the impact 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 the impact; C. Rectifying the impact by repairing, rehabilitating or restoring the affected critical area or buffer to the conditions existing at the time of initiation of the project; D. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through biological, engineered, or other methods; E. Reducing or eliminating the impact or

hazard over time by preservation or maintenance operations during the life of the development proposal;

F. Compensating for the impact by replacing, enhancing or providing substitute critical areas and environments; and

G. Monitoring the hazard or required mitigation and taking appropriate corrective measures when necessary.

Mitigation for individual actions may include a combination of the above measures.

20.20.036 N definitions.

Native Growth Protection Area (NGPA)	A tract or easement recorded with an approved subdivision or easement, established for the purposes of protecting vegetation, providing open space, maintaining wildlife corridors, maintaining slope stability, controlling runoff and erosion, and/or any other purpose designated in the development approval.
Native Vegetation, Native Plant(s)	Vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest, which reasonably could have been expected to naturally occur on the site.

20.20.040 P definitions.

Practical Alternative	An alternative that is available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes, and has less adverse impacts to critical areas.
Priority Habitat	Habitat type or elements with unique or significant value to one or more species as classified by the state Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element.
Protected Tree/Protected Vegetation	A tree or area of understory vegetation identified on an approved tree protection and replacement plan (or other plan determined to be acceptable by the Director) to be retained and protected during construction and/or permanently protected by easement, tract, or covenant restriction. A protected tree may be located outside or within a NGPA, critical area or critical area buffer.

20.20.042 Q definitions.

Qualified Professional	A person with experience, training and competence in the pertinent discipline. A qualified professional must be licensed to practice in the State of Washington in the related professional field, if such field is licensed. If not licensed, a qualified professional must have a national certification in the pertinent field. If national certification in the field does not exist, the minimum qualification should be a bachelor's degree with 10 years of related professional work, or master's degree in the

field and three years of related professional work. Minimum qualifications for specific fields of practice shall include but not be limited to the following:

A. Arborists must be certified arborists as defined in SMC 20.20.014 and have a valid ISA Tree Risk Assessment Qualification (TRAQ).

B. Professionals for geologic hazard areas must be licensed and endorsed in the State of Washington as a geotechnical engineer or engineering geologist as defined in SMC 20.20.018 and 20.20.022.

C. Professionals for streams and other fish and wildlife habitat must have a degree in biology, environmental planning, natural science, stream ecology or related field and the minimum years of experience, listed above, related to the subject habitat or species.

D. Professionals for vegetation restoration planning where specific expertise for wetlands, streams or other fish and wildlife habitat is not required, must have a degree in botany, environmental planning, natural science, ecology, landscape architecture or a related field and the minimum years of experience, listed above, with an emphasis on restoration ecology and vegetation management associated with critical areas and buffers. Professionals must demonstrate a minimum of three years of experience with the type of critical area or buffer for which the critical area report is being submitted.

E. Professionals for wetlands must be currently certified as a Professional Wetland Scientist (PWS) with the Society of Wetland Scientists or meet the minimum education and years of experience, listed above, as a wetlands professional.

F. Minimum qualifications of professionals for other disciplines shall be determined by the Director consistent with the minimum qualifications defined above and specific to the discipline identified. (Ord. 324 § 1, 2003).

20.20.044 R definitions.

Remediation — To restore a site to a condition that complies with critical area or other regulatory requirements as they existed when the violation occurred; or, for sites that have been degraded under prior ownerships, restore to a condition which does not pose a probable threat to the environment or to the public health, safety, or welfare. Remediation does not mandate a return to pre-development conditions in critical areas.

Restoration — Measures taken to restore an altered or damaged critical area or any associated buffer to a state in which its stability and functions

approach its unaltered state as closely as possible, including:

A. Active steps taken to restore damaged critical areas or their buffers to the functioning condition that existed prior to an unauthorized alteration; and

B. Actions performed to reestablished structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.

Riparian Habitat — Areas adjacent to aquatic systems with flowing water that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife. Widths shall be measured from the ordinary high water mark or from the top of bank if the ordinary high water mark cannot be identified. It includes the entire extent of the floodplain and the extent of vegetation adapted to wet conditions as well as adjacent upland plant communities that directly influence the stream system. Riparian habitat areas include those riparian areas severely altered or damaged due to human development activities.

20.20.046 S definitions.

Salmonid — A member of the fish family salmonidae, including:

A. Chinook, coho, chum, sockeye and pink salmon;

B. Rainbow, steelhead and cutthroat trout or salmon;

C. Brown trout;

D. Brook and dolly varden trout or char;

E. Kokanee; and

F. Whitefish.

Site Development Permit — A permit, issued by the City, to develop, redevelop or partially develop a site exclusive of any required building or land use permit. A site development permit may include one or more of the following activities: paving, grading, clearing, tree removal, on-site utility installation, stormwater facilities, walkways, striping, wheelstops or curbing for parking and circulation, landscaping, critical area and buffer mitigation, enhancement, remediation, or restoration. (Ord. 439 § 1, 2006; Ord. 352 § 1, 2004).

Site Plan — The development plan for one or more lots on which is shown the existing and proposed conditions of the lot, including topography, vegetation, drainage, flood plains, wetlands,

	waterways, critical areas and critical area buffers; landscaping and open spaces; walkways; means of ingress and egress; circulation; utility services; structures and buildings; signs and lighting; berms, buffers, and screening devices; surrounding development; and any other information that reasonably may be required in order that an informed decision can be made by the approving authority.
Streams	Those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses, unless they are used by fish or are used to convey streams naturally occurring prior to construction. A channel or bed need not contain water year-round; provided, that there is evidence of at least intermittent flow during years of normal rainfall. (Ord. 398 § 1, 2006).

20.20.054 W definitions.

Wetland Creation	The manipulation of the physical, chemical, or biological characteristics to develop a wetland on an upland or deepwater site, where a wetland did no previously exist. Creation results in a gain in wetland acreage and function. A typical action is the excavation of upland soils to elevations that will produce a wetland hydroperiod and hydric soils, and support the growth of hydrophytic plant species.
Wetland Delineation	A technical procedure performed by a qualified professional with expertise in wetlands to determine the area of a wetland, ascertaining the wetland's classification, function, and value, and to define the boundary between a wetland and adjacent uplands.
Wetland Edge	The line delineating the outer edge of a wetland established based on the definitions and methods contained in Title 20.80.
Wetland Enhancement	The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in a change in wetland function(s) and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Examples are planting vegetation, controlling non-native or invasive species, and modifying site elevations to alter hydroperiods.
Wetland Re-establishment	The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Re-establishment results in rebuilding a former wetland and results in a gain in wetland acres and functions. Activities could include removing fill, plugging ditches, or breaking drain tiles.

Wetland Rehabilitation	The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain or returning tidal influence to a wetland.
Wetlands	Those areas that are inundated or saturated by ground 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 swamps, marshes, bogs 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, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.
Wetland Scientist	A scientist, including but not limited to ecologists, hydrologists, and soil scientists, who study the physical and biological characteristics of wetlands and their functions.

Chapter 20.30

Procedures and Administration

Sections:

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Subchapter 3.

Permit Review Procedures

20.30.080 Preapplication meeting.

A preapplication meeting is required prior to submitting an application for any Type B or Type C action and/or for an application for a project that may impact a critical area or its buffer consistent with SMC 20.80.045.

Applicants for development permits under Type A actions are encouraged to participate in preapplication meetings with the City. Preapplication meetings with staff provide an opportunity to discuss the proposal in general terms, identify the applicable City requirements and the project review process including the permits required by the action, timing of the permits and the approval process.

Preapplication meetings are required prior to the neighborhood meeting.

The Director shall specify submittal requirements for preapplication meetings, which shall include a critical areas worksheet and, if available, preliminary critical area reports. Plans presented at the preapplication meeting are nonbinding and do not “vest” an application. (Ord. 439 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. III § 4(a), 2000).

Subchapter 5.

Nonconforming Uses, Lots, and Structures

20.30.280 Nonconformance.

A. Any use, structure, lot or other site improvement (e.g., landscaping or signage), which was legally established prior to the effective date of a land use regulation that rendered it nonconforming, shall be considered nonconforming if:

1. The use is now prohibited or cannot meet use limitations applicable to the zone in which it is located; or

2. The use or structure does not comply with the development standards or other requirements of this code;

3. A change in the required permit review process shall not create a nonconformance.

B. **Abatement of Illegal Use, Structure or Development.** Any use, structure, lot or other site improvement not established in compliance with use, lot size, building, and development standards in effect at the time of establishment shall be deemed illegal and shall be discontinued or terminated and subject to removal.

C. **Continuation and Maintenance of Nonconformance.** A nonconformance may be continued or physically maintained as provided by this code.

1. Any nonconformance that is brought into conformance for any period of time shall forfeit status as a nonconformance.

2. **Discontinuation of Nonconforming Use.** A nonconforming use shall not be resumed when abandonment or discontinuance extends for 12 consecutive months.

3. **Repair or Reconstruction of Nonconforming Structure.** Any structure nonconforming as to height or setback standards may be repaired or reconstructed; provided, that:

a. The extent of the previously existing nonconformance is not increased;

b. The building permit application for repair or reconstruction is submitted within 12 months of the occurrence of damage or destruction; and

c. The provisions of Chapter 13.12 SMC, Floodplain Management, are met when applicable.

4. **Modifications to Nonconforming Structures.** Modifications to a nonconforming structure may be permitted; provided, the modification does not increase the area, height or degree of an existing nonconformity. Single-family additions shall be limited to 50 percent of the use area or 1,000 square feet, whichever is lesser, and shall not require a conditional use permit in the MUR-45' and MUR-70' zones. Modification of structures that are nonconforming with regards to critical areas may only be permitted consistent with SMC 20.80.040.

D. **Expansion of Nonconforming Use.** A nonconforming use may be expanded subject to approval of a conditional use permit unless the indexed supplemental criteria (SMC 20.40.200) require a special use permit for expansion of the use under the code. A nonconformance with the development standards shall not be created or increased and the total expansion shall not exceed 10 percent of the use area.

E. **Nonconforming Lots.** Any permitted use may be established on an undersized lot, which cannot satisfy the lot size or width requirements of this code; provided, that:

1. All other applicable standards of the code are met; or a variance has been granted;

2. The lot was legally created and satisfied the lot size and width requirements applicable at the time of

creation;

3. The lot cannot be combined with contiguous undeveloped lots to create a lot of required size;

4. No unsafe condition is created by permitting development on the nonconforming lot; and

5. The lot was not created as a “special tract” to protect critical area, provide open space, or as a public or private access tract.

Subchapter 6.

Review and/or Decision Criteria

20.30.290 Deviation from the engineering standards (Type A action).

B. Decision Criteria. The Director shall grant an engineering standards deviation only if the applicant demonstrates all of the following:

1. The granting of such deviation will not be materially detrimental to the public welfare or injurious or create adverse impacts to the property or other property(s) and improvements in the vicinity and in the zone in which the subject property is situated;

2. The authorization of such deviation will not adversely affect the implementation of the Comprehensive Plan adopted in accordance with State law;

3. The deviation is not in conflict with the standards of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II;

4. A deviation from engineering standards shall only be granted if the proposal meets the following criteria:

   a. Conform to the intent and purpose of the Code;

   b. Produce a compensating or comparable result which is in the public interest; and

   c. Meet the objectives of safety, function and maintainability based upon sound engineering judgement;

5. Deviations from road standards must meet the objectives for fire protection. Any deviation from road standards, which does not meet the International Fire Code, shall also require concurrence by the Fire Marshal;

6. Deviations from drainage standards contained in the Stormwater Manual and Chapter 13.10 SMC must meet the objectives for appearance and environmental protection;

7. Deviations from drainage standards contained in the Stormwater Manual and Chapter 13.10 SMC must be shown to be justified and required for the use and situation intended;

8. Deviations from drainage standards for facilities that request use of emerging technologies, an experimental water quality facility or flow control facilities must meet these additional criteria:

   a. The new design is likely to meet the identified target pollutant removal goal or flow control performance based on limited data and theoretical consideration;

   b. Construction of the facility can, in practice, be successfully carried out; and

   c. Maintenance considerations are included in the design, and costs are not excessive or are borne and reliably performed by the applicant or property owner;

9. Deviations from utility standards shall only be granted if following facts and conditions exist:

   a. The deviation shall not constitute a grant of special privilege inconsistent with the limitation upon uses of other properties in the vicinity and in the zone in which the property on behalf of which the application was filed is located;

   b. The deviation is necessary because of special circumstances relating to the size, shape, topography, location or surrounding of the subject property in order to provide it with use rights and privileges

permitted to other properties in the vicinity and in the zone in which the subject property is located; and

c. The granting of such deviation is necessary for the preservation and enjoyment of a substantial property right of the applicant possessed by the owners of other properties in the same zone or vicinity. (Ord. 531 § 1 (Exh. 1), 2009; Ord. 406 § 1, 2006; Ord. 238 Ch. III § 7(a), 2000).

20.30.295 Temporary use.

B. The Director may approve or modify and approve an application for a temporary use permit if:

1. The temporary use will not be materially detrimental to public health, safety, or welfare, nor injurious to property and improvements in the immediate vicinity of the subject temporary use;

2. The temporary use is not incompatible in intensity and appearance with existing land uses in the immediate vicinity of the temporary use;

3. Adequate parking is provided for the temporary use and, if applicable, the temporary use does not create a parking shortage for the existing uses on the site;

4. Hours of operation of the temporary use are specified;

5. The temporary use will not create noise, light, or glare which would adversely impact surrounding uses and properties: and

6. The temporary use is not in conflict with the standards of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, and is located outside the shoreline jurisdiction regulated by the Shoreline Master Program, SMC Title 20, Division II.

20.30.310 Zoning variance (Type B action).

B. Decision Criteria. A variance shall be granted by the City, only if the applicant demonstrates all of the following:

1. The variance is necessary because of the unique size, shape, topography, or location of the subject property;

2. The strict enforcement of the provisions of this title creates an unnecessary hardship to the property owner;

3. The subject property is deprived, by provisions of this title, of rights and privileges enjoyed by other properties in the vicinity and under an identical zone;

4. The need for the variance is not the result of deliberate actions of the applicant or property owner, including any past owner of the same property;

5. The variance is compatible with the Comprehensive Plan;

6. The variance does not create a health or safety hazard;

7. The granting of the variance will not be materially detrimental to the public welfare or injurious to:

   a. The property or improvements in the vicinity, or

   b. The zone in which the subject property is located;

8. The variance does not relieve an applicant from:

a. Any of the procedural or administrative provisions of this title, or

b. Any standard or provision that specifically states that no variance from such standard or provision is permitted, or

c. Use or building restrictions, or

d. Any provisions of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II;

9. The variance from setback or height requirements does not infringe upon or interfere with easement or covenant rights or responsibilities;

10. The variance does not allow the establishment of a use that is not otherwise permitted in the zone in which the proposal is located; or

11. The variance is the minimum necessary to grant relief to the applicant. (Ord. 324 § 1, 2003; Ord. 238 Ch. III § 7(c), 2000).

20.30.330 Special use permit-SUP (Type C action).

B. Decision Criteria. A special use permit shall be granted by the City, only if the applicant demonstrates that:

1. The use will provide a public benefit or satisfy a public need of the neighborhood, district or City;

2. The characteristics of the special use will be compatible with the types of uses permitted in surrounding areas;

3. The special use will not materially endanger the health, safety and welfare of the community;

4. The proposed location shall not result in either the detrimental over-concentration of a particular use within the City or within the immediate area of the proposed use, unless the proposed use is deemed a public necessity;

5. The special use is such that pedestrian and vehicular traffic associated with the use will not be hazardous or conflict with existing and anticipated traffic in the neighborhood;

6. The special use will be supported by adequate public facilities or services and will not adversely affect public services to the surrounding area or conditions can be established to mitigate adverse impacts;

7. The location, size and height of buildings, structures, walls and fences, and screening vegetation for the special use shall not hinder or discourage the appropriate development or use of neighboring properties;

8. The special use is not in conflict with the policies of the Comprehensive Plan or the basic purposes of this title; and

9. The special use is not in conflict with the standards of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II. (Ord. 238 Ch. III § 7(e), 2000).

20.30.333 Critical area special use permit (Type C action).

A. **Purpose.** The purpose of the critical areas special use permit is to allow development by a public agency or public utility when the strict application of the critical areas standards would otherwise unreasonably prohibit the provision of public services. This type of permit does not apply to flood hazard areas or within the shoreline jurisdiction.

B. **Decision Criteria.** A critical areas special use permit shall be granted by the City only if the utility or public

agency applicant demonstrates that:

1. The application of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, would unreasonably restrict the ability of the public agency or utility to provide services to the public;

2. There is no other practical alternative to the proposal by the public agency or utility which would cause less impact on the critical area;

3. The proposed development does not create a health or safety hazard on or off the development site, will not be materially detrimental to the property or improvements in the vicinity;

4. This special use permit process shall not allow the use of the following critical areas for regional retention/detention facilities except where the Hearing Examiner makes a finding that the facility is necessary to protect public health and safety or repair damaged natural resources:

   a. Type S or Type F-anadromous streams or buffers;

   b. Category I wetlands or buffers with plant associations of infrequent occurrence; or

   c. Category I or II wetlands or buffers which provide critical or outstanding habitat for herons, raptors or State or Federal designated endangered or threatened species unless clearly demonstrated by the applicant, using best available science, that there will be no impact on such habitat;

5. Any alterations permitted to the critical area are mitigated in accordance with SMC 20.80.082 and relevant mitigation standards for the impacted critical area(s);

6. Consistent with SMC 20.80.050 Alteration of critical areas the proposal attempts to protect the existing critical area functions and values consistent with the best available science and attempts to mitigate adversely impacted critical area functions and values to the fullest extent possible; and

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

C. **Permit Conditions.** The Director may condition the proposed activity as necessary to mitigate the impacts to critical areas and to conform to the standards required by Chapter 20.80 SMC, Critical Areas. (Ord. 641 § 4 (Exh. A), 2012; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(I), 2000. Formerly 20.80.090.).

20.30.336 Critical areas reasonable use permit (Type C action).

A. **Purpose.** The purpose of the critical areas reasonable use permit is to allow development and use of private property when the strict application of the critical area regulations would otherwise deny all reasonable use of a property. This type of permit does not apply to flood hazard areas or within the shoreline jurisdiction.

B. **Decision Criteria.** A reasonable use permit shall be granted by the City only if the applicant demonstrates that:

1. The application of the critical area regulations, Chapter 20.80 SMC, Critical Areas, would deny all reasonable use of the property; and

2. There is no other reasonable use of the property with less impact on the critical area; and

3. Any alterations to the critical area would be the minimum necessary to allow for reasonable use of the property; and

4. The proposed development does not create a health or safety hazard on or off the development site, will not be materially detrimental to the property or improvements in the vicinity, is consistent with the general purposes of this title and the public interest, and all reasonable mitigation measures have been implemented or assured; and

5. The inability to derive reasonable economic use is not the result of the applicant's action unless the action 1) was approved as part of a final land use decision by the City or other agency with jurisdiction; or 2) otherwise resulted in a nonconforming use, lot or structure as defined in this title;

6. Any alterations permitted to the critical area are mitigated in accordance with SMC 20.80.082 and relevant mitigation standards for the impacted critical area(s);

7. Consistent with SMC 20.80.050 Alteration of critical areas the proposal attempts to protect the existing critical area functions and values consistent with the best available science and attempts to mitigate adversely impacted critical area functions and values to the fullest extent possible; and

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

C. **Development Standards.** To allow for reasonable use of property and to minimize impacts on critical areas the decision making authority may reduce setbacks by up to 50 percent, parking requirements by up to 50 percent, and may eliminate landscaping requirements. Such reductions shall be the minimum amount necessary to allow for reasonable use of the property, considering the character and scale of neighboring development.

D. **Priority.** When multiple critical areas and critical area buffers may be affected by the application, the decision making authority should consider exceptions to critical areas regulations that occur in the following order of priority with number 4 having the highest protection:

1. Geologic hazard area buffers;

2. Wetland buffers;

3. Fish and wildlife habitat conservation area buffers (excluding wetlands); and

4. Geologic hazard areas, wetlands, and fish and wildlife habitat conservation critical areas protection standards in the order listed above in items 1 through3. (Ord. 641 § 4 (Exh. A), 2012; Ord. 352 § 1, 2004; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(L), 2000. Formerly 20.80.120.).

20.30.353 Master development plan.

B. **Decision Criteria.** A master development plan shall be granted by the City only if the applicant demonstrates that:

1. The project is designated as either campus or essential public facility in the Comprehensive Plan and Development Code and is consistent with goals and policies of the Comprehensive Plan.

2. The master development plan includes a general phasing timeline of development and associated mitigation.

3. The master development plan meets or exceeds the current critical areas regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II, if critical areas or their buffers are present or project is within the shoreline jurisdiction.

4. The proposed development uses innovative, aesthetic, energy efficient and environmentally sustainable architecture and site design (including low impact development stormwater systems and substantial tree retention) to mitigate impacts to the surrounding neighborhoods.

5. There is either sufficient capacity and infrastructure (e.g., roads, sidewalks, bike lanes) in the transportation system (motorized and nonmotorized) to safely support the development proposed in all future phases or there will be adequate capacity and infrastructure by the time each phase of development is completed. If capacity or infrastructure must be increased to support the proposed master development plan, then the applicant must identify a plan for funding their proportionate share of the improvements.

6. There is either sufficient capacity within public services such as water, sewer and stormwater to adequately serve the development proposal in all future phases, or there will be adequate capacity available by the time each phase of development is completed. If capacity must be increased to support the proposed master development plan, then the applicant must identify a plan for funding their proportionate share of the improvements.

7. The master development plan proposal contains architectural design (including but not limited to building setbacks, insets, facade breaks, roofline variations) and site design standards, landscaping, provisions for open space and/or recreation areas, retention of significant trees, parking/traffic management and multimodal transportation standards that minimize conflicts and create transitions between the proposal site and adjacent neighborhoods and between institutional uses and residential uses.

8. The applicant shall demonstrate that proposed industrial, commercial or laboratory uses will be safe for the surrounding neighborhood and for other uses on the campus.

C. **Amendments.** Minor amendments to an approved master development plan may be approved by the Director if the amendment meets the development standards and criteria applicable to the zoning and requirements set forth in this section. Minor amendments include any revision or modification of the previously approved master development plan that would result in any one or more of the following:

1. An increase in the square footage of any proposed building or structure by 10 percent or less; or

2. A change of 15 percent or less in the number of new parking spaces, parking spaces created by restriping existing parking areas and/or a combination of both except for an increase in parking spaces for bicycles or electric vehicles; or

3. A change in the original phasing timeline for mitigation of the master development plan; or

4. Changes to building placement when located outside of the required setbacks and any required buffers for critical areas; or

5. A cumulative increase in impervious surface of 10 percent or less or a cumulative decrease in tree cover of 10 percent or less; or

6. Other specific changes as noted in the master development plan.

Major amendments are changes that exceed the thresholds for a minor amendment or were not analyzed as part of an approved master development plan. Major amendments to an approved master development plan shall be processed as a new master development plan.

F. **Early Community Input.** Applicants are encouraged to develop a community and stakeholders consensus-based master development plan. Community input is required to include soliciting input from stakeholders, community members and any other interested parties with bubble diagrams, diagrammatic site plans, or conceptual site plans. The meeting notice shall be provided at a minimum to property owners located within 1,000 feet of the proposal, the neighborhood chair as identified by the Shoreline Office of Neighborhoods (note: if a proposed development is within 1,000 feet of adjacent neighborhoods, those chairs shall also be notified), and to the City of Shoreline Planning & Community Development Department. Digital audio recording, video recording, or a court reporter transcription of this meeting or meetings is required at the time of application. The applicant shall provide an explanation of the comments of these entities to the City regarding the incorporation (or not) of these comments into the design and development of the proposal.

20.30.355 Development agreement (Type L).

C. **Decision Criteria.** A development agreement (general development agreement and development agreements in order to increase height above 70 feet) may be granted by the City only if the applicant demonstrates that:

1. The project is consistent with goals and policies of the Comprehensive Plan. If the project is located within

a subarea plan, then the project shall be consistent with the goals and policies of the subarea plan.

2. The proposed development uses innovative, aesthetic, energy efficient and environmentally sustainable architecture and site design.

3. There is either sufficient capacity and infrastructure (e.g., roads, sidewalks, bike lanes) in the transportation system (motorized and nonmotorized) to safely support the development proposed in all future phases or there will be adequate capacity and infrastructure by the time each phase of development is completed. If capacity or infrastructure must be increased to support the proposed development agreement, then the applicant must identify a plan for funding their proportionate share of the improvements.

4. There is either sufficient capacity within public services such as water, sewer and stormwater to adequately serve the development proposal in all future phases, or there will be adequate capacity available by the time each phase of development is completed. If capacity must be increased to support the proposed development agreement, then the applicant must identify a plan for funding their proportionate share of the improvements.

5. The development agreement proposal contains architectural design (including but not limited to building setbacks, insets, facade breaks, roofline variations) and site design standards, landscaping, provisions for open space and/or recreation areas, retention of significant trees, parking/traffic management and multimodal transportation improvements and other features that minimize conflicts and create transitions between the proposal site and property zoned R-4, R-6, R-8 or MUR-35'.

6. The project is consistent with the standards of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II.

Subchapter 7.

Subdivisions

20.30.370 Purpose.

Subdivision is a mechanism by which to divide land into lots, parcels, sites, plots, or tracts, for the purpose of sale. The purposes of subdivision regulations are:

A. To regulate division of land into two or more lots or tracts;

B. To protect the public health, safety and general welfare in accordance with the State standards;

C. To promote effective use of land;

D. To promote safe and convenient travel by the public on streets and highways;

E. To provide for adequate light and air;

F. To facilitate adequate provision for water, sewerage, stormwater drainage, parks and recreation areas, sites for schools and school grounds and other public requirements;

G. To provide for proper ingress and egress;

H. To provide for the expeditious review and approval of proposed subdivisions which conform to development standards and the Comprehensive Plan;

I. To adequately provide for the housing and commercial needs of the community;

J. To protect environmentally critical areas and their buffers as designated by Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II;

K. To require uniform monumenting of land subdivisions and conveyance by accurate legal description. (Ord. 695 § 1 (Exh. A), 2014; Ord. 238 Ch. III § 8(b), 2000).

20.30.410 Preliminary subdivision review procedures and criteria.

The short subdivision may be referred to as a short plat – Type B action.

The formal subdivision may be referred to as long plat – Type C action.

Time limit: A final short plat or final long plat meeting all of the requirements of this chapter and Chapter 58.17 RCW shall be submitted for approval within the time frame specified in RCW 58.17.140.

Review criteria: The following criteria shall be used to review proposed subdivisions:

A. **Environmental.**

1. Where environmental resources exist, such as trees, streams, geologic hazards, or wildlife habitats, the proposal shall be designed to fully implement the goals, policies, procedures and standards of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, and the tree conservation, land clearing, and site grading standards sections.

2. The proposal shall be designed to minimize grading by using shared driveways and by relating street, house site and lot placement to the existing topography.

3. Where conditions exist which could be hazardous to the future residents of the land to be divided, or to nearby residents or property, such as floodplains, landslide hazards, or unstable soil or geologic conditions,

a subdivision of the hazardous land shall be denied unless the condition can be permanently corrected, consistent with subsections (A)(1) and (2) of this section, Chapter 20.80 SMC Critical Areas, and Chapter 13.12 SMC, Floodplain Management.

Subchapter 9.

Code Enforcement

20.30.730 General provisions.

A. For the purposes of this subchapter, any person who causes or maintains a code violation and the owner, lessor, tenant or other person entitled to control, use, or occupancy of property where a code violation occurs shall be identified as the responsible party and shall be subject to enforcement action as provided in this subchapter.

However, if a property owner affirmatively demonstrates that the action which resulted in the violation was taken without the owner's knowledge or consent by someone other than the owner or someone acting on the owner's behalf, that owner shall be responsible only for bringing the property into compliance to the extent reasonably feasible under the circumstances, as determined by the Director. Should the responsible party not correct the violation, after service of the notice and order, civil penalties and abatement costs may be assessed.

B. It shall be the responsibility of any person identified as a responsible party to bring the property into a safe and reasonable condition to achieve compliance. Payment of fines, applications for permits, acknowledgment of stop work orders and compliance with other remedies does not substitute for performing the corrective work required and having the property brought into compliance to the extent reasonably possible under the circumstances. The date set for compliance in the notice and order takes precedence over any date established for the expiration of any required permit(s) and will be subordinate only to written extension of the notice and order.

C. The responsible parties have a duty to notify the Director of any actions taken to achieve compliance. A violation shall be considered ongoing until the responsible party has come into compliance and has notified the Director of this compliance, and an official inspection has verified compliance and all assessed penalties and costs have been paid to the City.

D. The procedures set forth in this subchapter are not exclusive, specifically the provisions in SMC 20.80.130 apply to code enforcement of violations of Chapter 20.80 SMC, Critical Areas. These procedures shall not in any manner limit or restrict the City from remedying or abating code violations in any other manner authorized by law. (Ord. 669 § 1 (Exh. A), 2013; Ord. 515 § 1, 2008; Ord. 406 § 1, 2006; Ord. 391 § 4, 2005; Ord. 238 Ch. III § 10(b), 2000).

20.30.770 Enforcement provisions.

A. **Infraction.** Whenever the Director has determined that a code violation has occurred, the Director may issue a Class 1 civil infraction, or other class of infraction specified in the particular ordinance violated, to any responsible party, according to the provisions set forth in Chapter 7.80 RCW.

B. **Misdemeanor.** Any person who willfully or knowingly causes, aids or abets a code violation by any act of commission or omission is guilty of a misdemeanor. Upon conviction, the person shall be punished by a fine not to exceed $1,000 and/or imprisonment in the County jail for a term not to exceed 90 days. Each week (seven days) such violation continues shall be considered a separate misdemeanor offense. A misdemeanor complaint or notice of infraction may be filed as an alternative, or in addition, to any other judicial or administrative remedy provided in this subchapter or by law or other regulation.

C. **Suspension, Revocation or Limitation of Permit.**

1. The Director may suspend, revoke or limit any permit issued whenever:

a. The permit holder has committed a code violation in the course of performing activities subject to that permit;

b. The permit holder has interfered with the Director in the performance of his or her duties relating to that permit;

c. The permit was issued in error or on the basis of materially incorrect information supplied to the City; or

d. Permit fees or costs were paid to the City by check and returned from a financial institution marked nonsufficient funds (NSF) or cancelled.

2. Such suspension, revocation or modification shall be carried out through the notice and order provisions of this subchapter and shall be effective upon the compliance date established by the notice and order. Such revocation, suspension or cancellation may be appealed to the Hearing Examiner using the appeal provisions of this subchapter. Notwithstanding any other provision of this subchapter, the Director may immediately suspend operations under any permit by issuing a stop work order.

D. **Civil Penalties.**

1. A civil penalty for violation of the terms and conditions of a notice and order shall be imposed in the amount of $500.00. The total initial penalties assessed for notice and orders and stop work orders pursuant to this section shall apply for the first 14-day period following the violation of the order, if no appeal is filed. The penalties for the next 14-day period shall be 150 percent of the initial penalties, and the penalties for the next 14-day period and each such period or portion thereafter shall be double the amount of the initial penalties.

2. Any responsible party who has committed a violation of the provisions of Chapter 20.50 SMC, General Development Standards (tree conservation, land clearing and site grading standards), or Chapter 20.80 SMC, Critical Areas, will not only be required to restore unlawfully removed trees or damaged critical areas, insofar as that is possible and beneficial, as determined by the Director, but will also be required to pay civil penalties in addition to penalties under subsection (D)(1) of this section, for the redress of ecological, recreation, and economic values lost or damaged due to the violation. Civil penalties will be assessed according to the following factors:

a. For violations within critical areas and required buffers, an amount determined pursuant to SMC 20.80.130(E); or

b. For violations not located within critical areas and required buffers, an amount determined to be equivalent to the economic benefit that the responsible party derives from the violation measured as the total of:

i. The resulting increase in market value of the property; and

ii. The value received by the responsible party; and

iii. The savings of construction costs realized by the responsible party as a result of performing any act in violation of the chapter; and

c. A penalty of $2,000 if the violation has severe ecological impacts, including temporary or permanent loss of resource values or functions.

3. An additional penalty of $2,000 if the violation was deliberate, the result of knowingly false information submitted by the property owner, agent, or contractor, or the result of reckless disregard on the part of the property owner, agent, or their contractor. The property owner shall assume the burden of proof for demonstrating that the violation was not deliberate.

4. A repeat violation means a violation of the same regulation in any location within the City by the same responsible party, for which voluntary compliance previously has been sought or any enforcement action taken, within the immediate preceding 24-consecutive-month period, and will incur double the civil penalties set forth above.

5. Under RCW 59.18.085, if, after 60 days from the date that the City first advanced relocation assistance

funds to displaced tenants, the landlord does not repay the amount of relocation assistance advanced by the City, the City shall assess civil penalties in the amount of $50.00 per day for each tenant to whom the City has advanced a relocation assistance payment.

6. The responsible parties have a duty to notify the Director of any actions taken to achieve compliance with the notice and order. For purposes of assessing civil penalties, a violation shall be considered ongoing until the responsible party has come into compliance with the notice and order and has notified the Director of this compliance, and an official inspection has verified compliance and all assessed penalties and costs have been paid to the City.

7. a. Civil penalties will be waived by the Director or will be reimbursed to the payer by the Director, with the concurrence of the Administrative Services Director, under the following documented circumstances:

i. The notice and order were issued in error; or

ii. The civil penalties were assessed in error; or

iii. Notice failed to reach the property owner due to unusual circumstances.

b. Civil penalties accrued under subsection (D)(1) of this section will be reduced by the Director to 20 percent of accrued penalties if voluntary compliance is achieved and the City is reimbursed its reasonable staff and professional costs incurred in enforcing the notice and order.

E. **Abatement.**

1. All public nuisances are subject to abatement under this subchapter.

2. **Imminent Nuisance and Summary Abatement.** If a condition, substance, act or nuisance exists which causes a condition, the continued existence of which constitutes an immediate and emergent threat to the public health, safety or welfare or to the environment, the City may summarily and without prior notice abate the condition. Notice of such abatement, including the reason for the abatement, shall be given to the person responsible for the property and the violation as soon as reasonably possible after the abatement. The Director shall make the determination of a condition, substance, act or other occurrence constituting an imminent nuisance requiring summary abatement. Costs, both direct and indirect, of the abatement may be assessed as provided in this chapter.

3. In the case of such unfit dwellings, buildings, structures, and premises or portions thereof, the Director, as an alternative to any other remedy provided in this subchapter, may abate such conditions by demolition, repair, removal, or securing the site and have abatement costs collected as taxes by the King County Treasury pursuant to SMC 20.30.775. If an occupied rental dwelling or its premises are declared unfit and required to be vacated by a notice and order, and the landlord fails to pay relocation assistance as set forth in RCW 59.18.085, the City shall advance relocation assistance funds to eligible tenants in accordance with RCW 59.18.085.

F. **Additional Enforcement Provisions.** The enforcement provisions of this section are not exclusive, and may be used in addition to other enforcement provisions authorized by the Shoreline Municipal Code or by State law, including filing for injunctive relief or filing of a civil action. (Ord. 669 § 1 (Exh. A), 2013; Ord. 631 § 1 (Exh. 1), 2012; Ord. 581 § 1 (Exh. 1), 2010; Ord. 466 § 2, 2007; Ord. 406 § 1, 2006; Ord. 391 § 4, 2005; Ord. 251 § 2(D), 2000; Ord. 238 Ch. III § 10(c), 2000. Formerly 20.30.740).

Chapter 20.40

Zoning and Use Provisions

Sections:

Subchapter 3. Index of Supplemental Use Criteria

20.40.230 Affordable housing.

Subchapter 3.

Index of Supplemental Use Criteria

20.40.230 Affordable housing.

A. Provisions for density bonuses for the provision of affordable housing apply to all land use applications, except the following which are not eligible for density bonuses: (a) the construction of one single-family dwelling on one lot that can accommodate only one dwelling based upon the underlying zoning designation, (b) provisions for accessory dwelling units, and (c) projects which are limited by the critical areas regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II.

Chapter 20.50

General Development Standards

Sections:

Subchapter 1. Dimensions and Density for Development

20.50.040 Setbacks – Designation and measurement.

Subchapter 5. Tree Conservation, Land Clearing and Site Grading Standards

20.50.310 Exemptions from permit.
20.50.320 Specific activities subject to the provisions of this subchapter.
20.50.330 Project review and approval.
20.50.350 Development standards for clearing activities.
20.50.360 Tree replacement and site restoration.

Subchapter 1.

Dimensions and Density for Development

20.50.040 Setbacks – Designation and measurement.

F. **Allowance for Optional Aggregate Setback.** For lots with unusual geometry, flag lots with undesignated setbacks, or site conditions, such as critical areas, an existing cluster of significant trees, or other unique natural or historic features that should be preserved without disturbance, the City may reduce the individual required setbacks, however, the total of setbacks shall be no less than the sum of the minimum front yard, rear yard, and side yards setbacks. In order to exercise this option, the City must determine that a public benefit is gained by relaxing any setback standard. The following criteria shall apply:

1. No rear or side yard setback shall be less than five feet.

2. The front yard setback adjacent to street shall be no less than 15 feet in R-4 and R-6 and 10 feet in all other zones. (See Exception 20.50.070(1).)

Subchapter 5.

Tree Conservation, Land Clearing and Site Grading Standards

20.50.310 Exemptions from permit.

A. **Complete Exemptions.** The following activities are exempt from the provisions of this subchapter and do not require a permit:

1. Emergency situation on private property involving danger to life or property or substantial fire hazards.

   a. **Statement of Purpose.** Retention of significant trees and vegetation is necessary in order to utilize natural systems to control surface water runoff, reduce erosion and associated water quality impacts, reduce the risk of floods and landslides, maintain fish and wildlife habitat and preserve the City's natural, wooded character. Nevertheless, when certain trees become unstable or damaged, they may constitute a hazard requiring cutting in whole or part. Therefore, it is the purpose of this section to provide a reasonable and effective mechanism to minimize the risk to human health and property while preventing needless loss of healthy, significant trees and vegetation, especially in critical areas and their buffers.

   b. For purposes of this section, "Director" means the Director of the Department and his or her designee.

   c. In addition to other exemptions of SMC 20.50.290 through 20.50.370, a request for the cutting of any tree that is an active and imminent hazard such as tree limbs or trunks that are demonstrably cracked, leaning toward overhead utility lines or structures, or are uprooted by flooding, heavy winds or storm events. After the tree removal, the City will need photographic proof or other documentation and the appropriate application approval, if any. The City retains the right to dispute the emergency and require that the party obtain a clearing permit and/or require that replacement trees be replanted as mitigation.

2. Removal of trees and/or ground cover by the City and/or utility provider in situations involving immediate danger to life or property, substantial fire hazards, or interruption of services provided by a utility. The City retains the right to dispute the emergency and require that the party obtain a clearing permit and/or require that replacement trees be replanted as mitigation.

3. Installation and regular maintenance of public utilities, under direction of the Director, except substation construction and installation or construction of utilities in parks or environmentally critical areas.

4. Cemetery graves involving less than 50 cubic yards of excavation, and related fill per each cemetery plot.

5. Removal of trees from property zoned NB, CB, MB and TC-1, 2 and 3, and MUR-70' unless within a critical area of critical area buffer.

6. Removal and restoration of vegetation within critical areas or their buffers consistent with the provisions of SMC 20.80.030(E) or removal of trees consistent with SMC 20.80.030(G) unless a permit is specifically noted under SMC 20.80.030(E).

B. **Partial Exemptions.** With the exception of the general requirements listed in SMC 20.50.300, the following are exempt from the provisions of this subchapter, provided the development activity does not occur in a critical area or critical area buffer. For those exemptions that refer to size or number, the thresholds are cumulative during a 36-month period for any given parcel:

1. The removal of up to a maximum of six significant trees (excluding trees greater than 30 inches DBH per tree) in accordance with Table 20.50.310(B)(1) (see Chapter 20.20 SMC, Definitions).

Table 20.50.310(B)(1) – Exempt Trees

Lot size in square feet	Number of trees
Up to 7,200	3
7,201 to 14,400	4
14,401 to 21,780	5
21,781 and above	6

2. The removal of any tree greater than 30 inches DBH, or exceeding the numbers of trees specified in the table above, shall require a clearing and grading permit (SMC 20.50.320 through 20.50.370).

3. Landscape maintenance and alterations on any property that involves the clearing of less than 3,000 square feet, or less than 1,500 square feet if located in a special drainage area, provided the tree removal threshold listed above is not exceeded. (Ord. 706 § 1 (Exh. A), 2015; Ord. 695 § 1 (Exh. A), 2014; Ord. 640 § 1 (Exh. A), 2012; Ord. 581 § 1 (Exh. 1), 2010; Ord. 560 § 4 (Exh. A), 2009; Ord. 531 § 1 (Exh. 1), 2009; Ord. 434 § 1, 2006; Ord. 398 § 1, 2006; Ord. 238 Ch. V § 5(C), 2000).

20.50.320 Specific activities subject to the provisions of this subchapter.

All activities listed below must comply with the provisions of this subchapter. For those exemptions that refer to size or number, the thresholds are cumulative during a 36-month period for any given parcel:

A. The construction of new residential, commercial, institutional, or industrial structures or additions.

B. Earthwork of 50 cubic yards or more. This means any activity which moves 50 cubic yards of earth, whether the material is excavated or filled and whether the material is brought into the site, removed from the site, or moved around on the site.

C. Clearing of 3,000 square feet of land area or more or 1,500 square feet or more if located in a special drainage area.

D. Removal of more than six significant trees from any property.

E. Any clearing, grading, or other land disturbing activity within a critical area or buffer of a critical area unless otherwise exempt from the provisions of this subchapter in SMC 20.50.310.

F. Any change of the existing grade by four feet or more.

G. Repealed by Ord. 640.

H. Any land surface modification not specifically exempted from the provisions of this subchapter.

I. Development that creates new, replaced or a total of new plus replaced impervious surfaces over 1,500 square feet in size, or 500 square feet in size if located in a landslide hazard area or special drainage area.

J. Any construction of public drainage facilities to be owned or operated by the City.

K. Any construction involving installation of private storm drainage pipes 12 inches in diameter or larger.

L. Any modification of or construction which affects a stormwater quantity or quality control system. (Does not include maintenance or repair to the original condition.)

M. Applicants for forest practice permits (Class IV – general permit) issued by the Washington State Department of Natural Resources (DNR) for the conversion of forested sites to developed sites are also required to obtain a clearing and grading permit. For all other forest practice permits (Class II, III, IV – special permit) issued by DNR for the purpose of commercial timber operations, no development permits will be issued for six years following tree removal. (Ord. 640 § 1 (Exh. A), 2012; Ord. 531 § 1 (Exh. 1), 2009; Ord. 398 § 1, 2006; Ord. 238

Ch. V § 5(D), 2000).

20.50.330 Project review and approval.

A. Review Criteria. The Director shall review the application and approve the permit, or approve the permit with conditions; provided, that the application demonstrates compliance with the criteria below.

1. The proposal complies with SMC 20.50.340 through 20.50.370, or has been granted a deviation from the Engineering Development Manual.

2. The proposal complies with all standards and requirements for the underlying permit.

3. If the project is located in a critical area or buffer, or has the potential to impact a critical area, the project must comply with the critical areas regulations, Chapter 20.80 SMC, or Shoreline Master Program, SMC Title 20, Division II.

4. The project complies with all requirements of the Engineering Development Manual and SMC 13.10.200, Surface Water Management Code and adopted standards.

5. All required financial guarantees or other assurance devices are posted with the City.

B. Professional Evaluation. In determining whether a tree removal and/or clearing is to be approved or conditioned, the Director may require the submittal of a professional evaluation and/or a tree protection plan prepared by a certified arborist at the applicant's expense, where the Director deems such services necessary to demonstrate compliance with the standards and guidelines of this subchapter. Third party review of plans, if required, shall also be at the applicant's expense. The Director shall have the sole authority to determine whether the professional evaluation submitted by the applicant is adequate, the evaluator is qualified and acceptable to the City, and whether third party review of plans is necessary. Required professional evaluation(s) and services may include:

1. Providing a written evaluation of the anticipated effects of proposed construction on the viability of trees on a site;

2. Providing a hazardous tree assessment;

3. Developing plans for, supervising, and/or monitoring implementation of any required tree protection or replacement measures; and/or

4. Conducting a post-construction site inspection and evaluation.

C. Conditions of Approval. The Director may specify conditions for work at any stage of the application or project as he/she deems necessary to ensure the proposal's compliance with requirements of this subchapter, critical area regulations, Chapter 20.80 SMC, or Shoreline Master Program, SMC Title 20, Division II, the Engineering Development Manual, the adopted stormwater management regulations, and any other section of the Shoreline Development Code, or to protect public or private property. These conditions may include, but are not limited to, hours or seasons within which work may be conducted, or specific work methods.

D. Designation of Protected Trees.

1. For the following areas, the retention and planting plan and any application and permit plans shall show all trees designated for protection: areas designated as "protected trees," "native growth protection areas," "critical areas," "critical area buffers," or such other designation as may be approved by the Director. Protected vegetation, including protected trees, shall not be modified, harmed or removed except as provided in this subchapter.

2. The Director may require that protected trees be permanently preserved within a tract, easement or other permanent protective mechanism. When required, the location, purpose, and limitation of these protected areas shall be shown on the face of the deed, plat, binding site plan, or similar document and

shall be recorded with the King County Recorder's Office or its successor. The recorded document shall include the requirement that the protected areas shall not be removed, amended or modified without the written approval of the City.

E. Preconstruction Meeting Required. Prior to the commencement of any permitted clearing and grading activity, a preconstruction meeting shall be held on-site with the permittee and appropriate City staff. The project site shall be marked in the field as follows:

1. The extent of clearing and grading to occur;

2. Delineation and protection with clearing limit fencing of any critical areas and critical area buffers;

3. Trees to be removed and retained; and

4. Property lines. (Ord. 631 § 1 (Exh. 1), 2012; Ord. 531 § 1 (Exh. 1), 2009; Ord. 398 § 1, 2006; Ord. 238 Ch. V § 5(E), 2000).

20.50.350 Development standards for clearing activities.

A. No trees or ground cover shall be removed from critical area or buffer unless the proposed activity is consistent with the critical area standards.

B. Minimum Retention Requirements. All proposed development activities that are not exempt from the provisions of this subchapter shall meet the following:

1. At least 20 percent of the significant trees on a given site shall be retained, excluding critical areas, and critical area buffers, or

2. At least 30 percent of the significant trees on a given site (which may include critical areas and critical area buffers) shall be retained.

3. Tree protection measures ensuring the preservation of all trees identified for retention on approved site plans shall be guaranteed during development through the posting of a performance bond equal to the value of the installation and maintenance of those protection measures.

4. The minimum amount of trees to be retained cannot be removed for a period of 36 months and shall be guaranteed through an approved maintenance agreement.

5. The Director may require the retention of additional trees to meet the stated purpose and intent of this title, as required by the critical areas regulations, Chapter 20.80 SMC, or Shoreline Master Program, SMC Title 20, Division II, or as site-specific conditions demand using SEPA substantive authority.

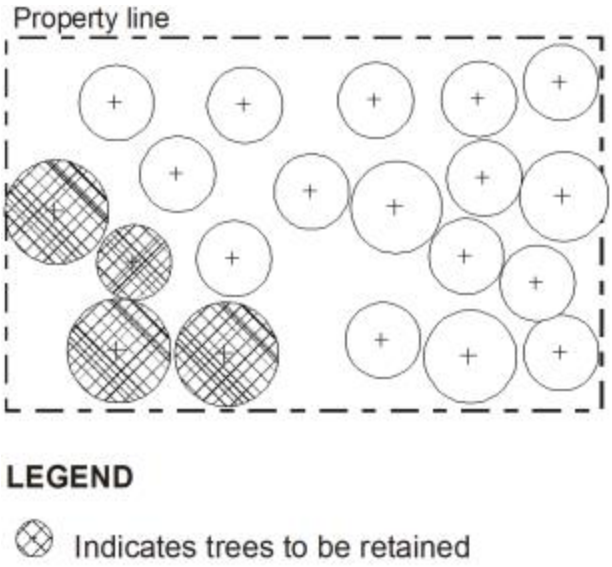


Figure 20.50.350(B)(1): Demonstration of the retention of 20 percent of the significant trees on a site containing no critical areas.

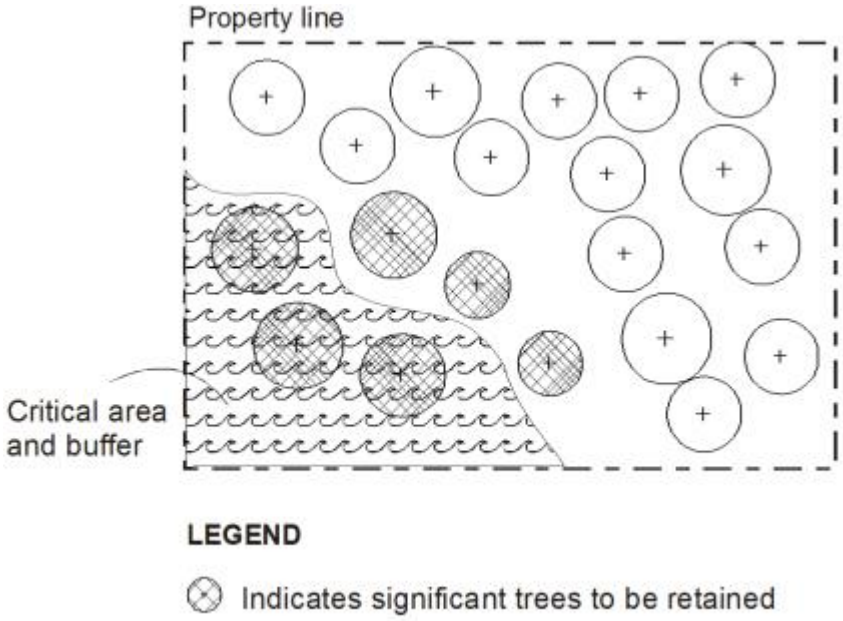


Figure 20.50.350(B)(2): Demonstration of the retention of 30 percent of the significant trees on a site containing a critical area.

Exception 20.50.350(B):

1. *The Director may allow a reduction in the minimum significant tree retention percentage to facilitate preservation of a greater number of smaller trees, a cluster or grove of trees, contiguous perimeter buffers, distinctive skyline features, or based on the City's concurrence with a written recommendation of an arborist certified by the International Society of Arboriculture and approved by the City that retention of the minimum percentage of trees is not advisable on an individual site.*

2. *In addition, the Director may allow a reduction in the minimum significant tree retention percentage if all of the following criteria are satisfied: The exception is necessary because:*

- *There are special circumstances related to the size, shape, topography, location or surroundings of the subject property.*
- *Strict compliance with the provisions of this Code may jeopardize reasonable use of property.*
- *Proposed vegetation removal, replacement, and any mitigation measures are consistent with the purpose and intent of the regulations.*
- *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. If an exception is granted to this standard, the applicant shall still be required to meet the basic tree replacement standards identified in SMC 20.50.360 for all significant trees removed beyond the minimum allowed per parcel without replacement and up to the maximum that would ordinarily be allowed under SMC 20.50.350(B).

4. In addition, the applicant shall be required to plant four trees for each significant tree removed that would otherwise count towards the minimum retention percentage. Trees replaced under this provision shall be at least 12 feet high for conifers and three inches in caliper if otherwise. This provision may be waived by the Director for restoration enhancement projects conducted under an approved vegetation management plan.

C. **Incentives for Higher Levels of Tree Protection.** The Director may grant reductions or adjustments to other site development standards if the protection levels identified in subsection (B) of this section are exceeded. On a case-by-case review, the Director shall determine the balance between tree protection that exceeds the established minimum percentage and variations to site development requirements. If the Director grants adjustments or reductions to site development standards under this provision, then tree protection requirements shall be recorded on the face of the plat, as a notice to title, or on some other legal document that runs with the property. Adjustments that may be considered are:

1. Reductions or variations of the area, width, or composition of required open space and/or landscaping;
2. Variations in parking lot design and/or any access driveway requirements;
3. Variations in building setback requirements;
4. Variations of grading and stormwater requirements.

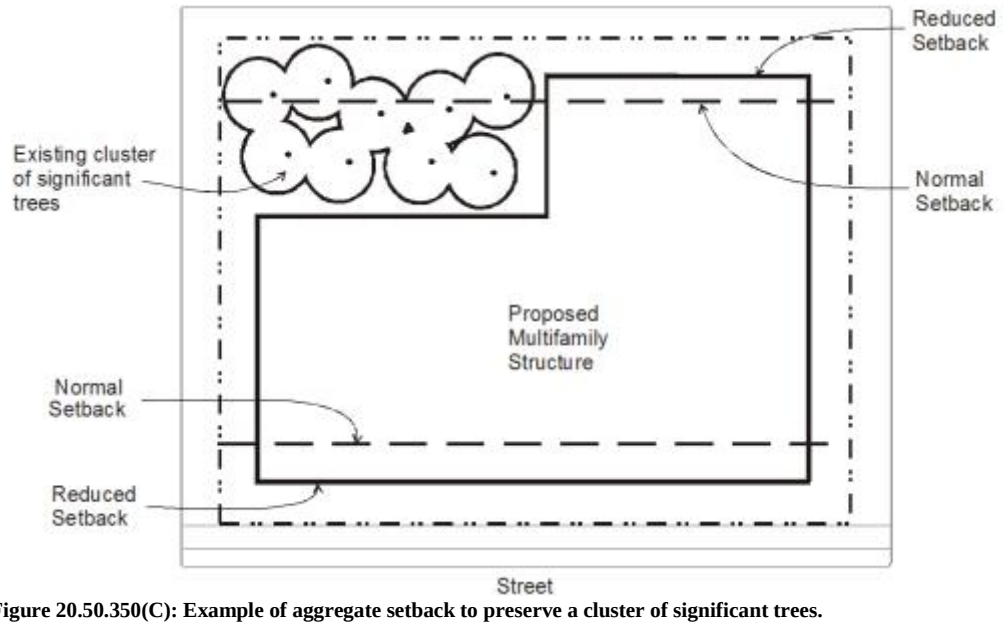


Figure 20.50.350(C): Example of aggregate setback to preserve a cluster of significant trees.

D. Site Design. Site improvements shall be designed and constructed to meet the following:

1. Trees should be protected within vegetated islands and stands rather than as individual, isolated trees scattered throughout the site.

2. Site improvements shall be designed to give priority to protection of trees with the following characteristics, functions, or location:

- Existing stands of healthy trees that have a reasonable chance of survival once the site is developed, are well shaped to withstand the wind and maintain stability over the long term, and will not pose a threat to life or property.
- Trees which exceed 50 feet in height.
- Trees and tree clusters which form a continuous canopy.
- Trees that create a distinctive skyline feature.
- Trees that have a screening function or provide relief from glare, blight, commercial or industrial harshness.
- Trees providing habitat value, particularly riparian habitat.
- Trees within the required yard setbacks or around the perimeter of the proposed development.
- Trees having a significant land stability function.
- Trees adjacent to public parks, open space, and critical area buffers.
- Trees having a significant water-retention function.

3. Building footprints, parking areas, roadways, utility corridors and other structures shall be designed and located with a consideration of tree protection opportunities.

4. The project grading plans shall accommodate existing trees and avoid alteration to grades around existing significant trees to be retained.

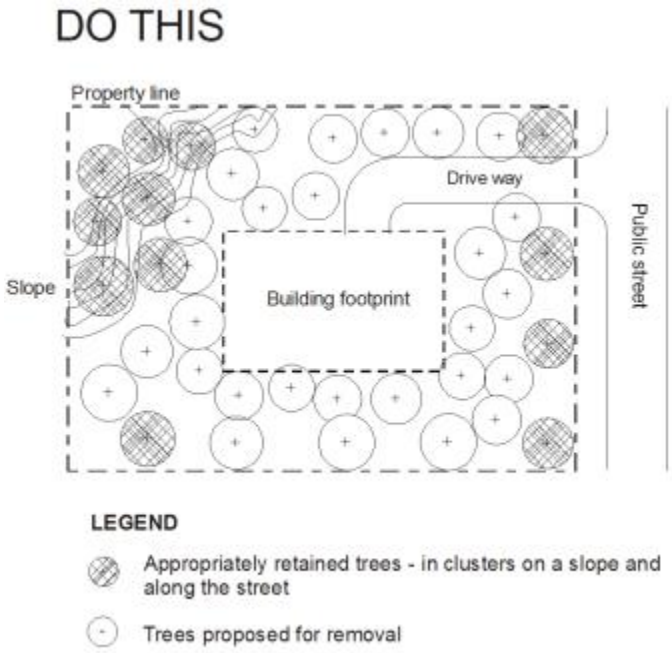
5. Required open space and recreational space shall be designed and located to protect existing stands of trees.

6. The site design and landscape plans shall provide suitable locations and adequate area for replacement trees as required in SMC 20.50.360.

7. In considering trees for protection, the applicant shall avoid selecting trees that may become hazardous because of wind gusts, including trees adjacent to utility corridors where falling trees may cause power outages or other damage. Remaining trees may be susceptible to blow downs because of loss of a buffer from other trees, grade changes affecting the tree health and stability and/or the presence of buildings in close proximity.

8. If significant trees have been removed from a closed, forested situation, an adequate buffer of smaller trees shall be retained or planted on the fringe of such significant trees as determined by a certified arborist.

9. All trees located outside of identified building footprints and driveways and at least 10 feet from proposed structures shall be considered as eligible for preservation. However, all significant trees on a site shall be considered when calculating the minimum retention percentage.



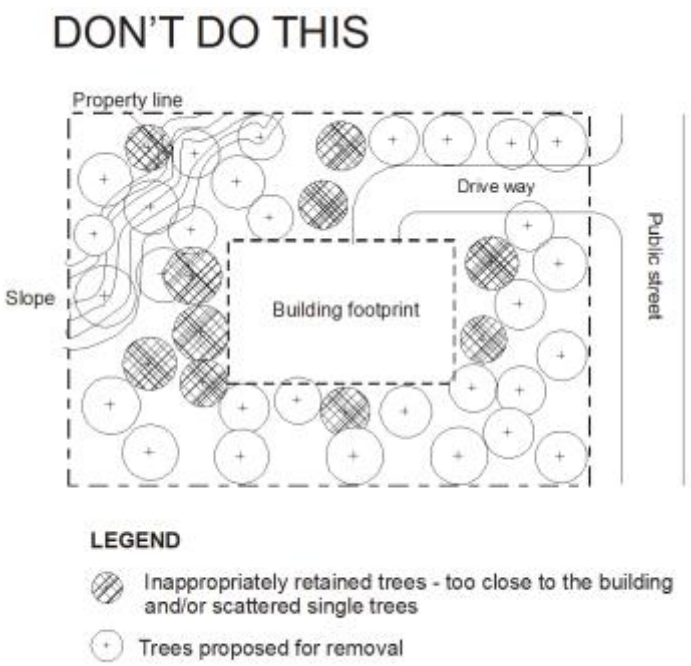


Figure 20.50.350(D): Example of the application of tree retention site design standards. Appropriate retention of a cluster of trees on a slope and frontage trees are shown above. Inappropriate retention of scattered single trees and trees near structures are shown below.

E. Cutting and Pruning of Protected Trees. Trees protected under the provisions of this section shall not be topped. Pruning and maintenance of protected trees shall be consistent with best management practices in the field of arboriculture, such as the American National Standard for Tree Care Operations – Tree, Shrub, and Other Wood Plant Maintenance- Standard Practices (ANSI A300) or similar, and further the long-term health of the tree. Excessive pruning, including topping, stripping, or imbalances, shall not be allowed unless necessary to protect life and property. Protected trees may be pruned to enhance views using methods such as windowing, interlimbing, or skirting up, when completed by a qualified professional arborist and consistent with best management practices.

F. Landmark Trees. Trees which have been designated as landmark trees by the City of Shoreline because they are 30 inches or larger in diameter or particularly impressive or unusual due to species, size, shape, age, historical significance and/or are an outstanding row or group of trees, have become a landmark to the City of Shoreline or are considered specimens of their species shall not be removed unless the applicant meets the exception requirements of subsection (B) of this section. The Director shall establish criteria and procedures for the designation of landmark trees. (Ord. 640 § 1 (Exh. A), 2012; Ord. 406 § 1, 2006; Ord. 398 § 1, 2006; Ord. 238 Ch. V § 5(G), 2000).

20.50.360 Tree replacement and site restoration.

A. Plans Required. Prior to any tree removal, the applicant shall demonstrate through a clearing and grading plan, tree retention and planting plan, landscape plan, critical area report, mitigation or restoration plans, or other plans acceptable to the Director that tree replacement will meet the minimum standards of this section. Plans shall be prepared by a qualified person or persons at the applicant's expense. Third party review of plans, if required, shall be at the applicant's expense.

B. The City may require the applicant to relocate or replace trees, shrubs, and ground covers, provide erosion control methods, hydroseed exposed slopes, or otherwise protect and restore the site as determined by the Director.

C. Replacement Required. Trees removed under the partial exemption in SMC 20.50.310(B)(1) may be removed

per parcel with no replacement of trees required. Any significant tree proposed for removal beyond this limit should be replaced as follows:

1. One existing significant tree of eight inches in diameter at breast height for conifers or 12 inches in diameter at breast height for all others equals one new tree.

2. Each additional three inches in diameter at breast height equals one additional new tree, up to three trees per significant tree removed.

3. Minimum size requirements for trees replaced under this provision: deciduous trees shall be at least 1.5 inches in caliper and evergreens six feet in height.

Exception 20.50.360(C):

1. No tree replacement is required when the tree is proposed for relocation to another suitable planting site; provided, that relocation complies with the standards of this section.

2. The Director may allow a reduction in the minimum replacement trees required or off-site planting of replacement trees if all of the following criteria are satisfied:

- *There are special circumstances related to the size, shape, topography, location or surroundings of the subject property.*
- *Strict compliance with the provisions of this Code may jeopardize reasonable use of property.*
- *Proposed vegetation removal, replacement, and any mitigation measures are consistent with the purpose and intent of the regulations.*
- *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. The Director may waive this provision for site restoration or enhancement projects conducted under an approved vegetation management plan.

D. The Director may require that a portion of the replacement trees be native species in order to restore or enhance the site to predevelopment character.

E. The condition of replacement trees shall meet or exceed current American Nursery and Landscape Association or equivalent organization's standards for nursery stock.

F. Replacement of removed trees with appropriate native trees at a ratio consistent with section C, or as determined by the Director based on recommendations in a critical area report, will be required in critical areas.

G. The Director may consider smaller-sized replacement plants if the applicant can demonstrate that smaller plants are more suited to the species, site conditions, and to the purposes of this subchapter, and are planted in sufficient quantities to meet the intent of this subchapter.

H. All required replacement trees and relocated trees shown on an approved permit shall be maintained in healthy condition by the property owner throughout the life of the project, unless otherwise approved by the Director in a subsequent permit.

I. Where development activity has occurred that does not comply with the requirements of this subchapter, the requirements of any other section of the Shoreline Development Code, or approved permit conditions, the Director may require the site to be restored to as near preproject original condition as possible. Such restoration shall be determined by the Director and may include, but shall not be limited to, the following:

1. Filling, stabilizing and landscaping with vegetation similar to that which was removed, cut or filled;

2. Planting and maintenance of trees of a size and number that will reasonably assure survival and that replace functions and values of removed trees; and

3. Reseeding and landscaping with vegetation similar to that which was removed, in areas without significant trees where bare ground exists.

J. Significant trees which would otherwise be retained, but which were unlawfully removed or damaged or destroyed through some fault of the applicant or their representatives shall be replaced in a manner determined by the Director.

K. **Performance Assurance.**

1. The Director may require a performance bond for tree replacement and site restoration permits to ensure the installation of replacement trees, and/or compliance with other landscaping requirements as identified on the approved site plans.

2. A maintenance bond shall be required after the installation of required site improvements and prior to the issuance of a certificate of occupancy or finalization of permit and following required landscape installation or tree replacement. The maintenance bond and associated agreement shall be in place to ensure adequate maintenance and protection of retained trees and site improvements. The maintenance bond shall be for an amount not to exceed the estimated cost of maintenance and protection measures for a minimum of 36 months or as determined by the Director.

3. The Director shall exempt individual single-family lots from a maintenance bond, except where a clearing violation has occurred or tree replacement is located within critical areas or critical area buffers.

L. **Monitoring.** The Director may require submittal of periodic monitoring reports as necessary to ensure survival of replacement trees. The contents of the monitoring report shall be determined by the Director.

M. **Discovery of Undocumented Critical Areas.** The Director may stop work authorized by a clearing and grading permit if previously undocumented critical areas are discovered on the site. The Director has the authority to require additional studies, plans and mitigations should previously undocumented critical areas be found on a site. (Ord. 640 § 1 (Exh. A), 2012; Ord. 406 § 1, 2006; Ord. 398 § 1, 2006; Ord. 299 § 1, 2002; Ord. 238 Ch. V § 5(H), 2000).

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Title 20

DEVELOPMENT CODE

Division I. Unified Development Code

20.20 Definitions
20.30 Procedures and Administration
20.40 Zoning and Use Provisions
20.50 General Development Standards

NOTE: Changes are indicated as follows –
Insertions are single underline
Deletions are ~~single strikethrough~~
Existing language moved from another section is double underline
Existing language deleted and moved to new location in the code is ~~double strikethrough~~

Chapter 20.20

Definitions*

Sections:

20.20.010 A definitions.
20.20.012 B definitions.
20.20.014 C definitions.
20.20.018 E definitions.
20.20.020 F definitions.
20.20.022 G definitions.
20.20.024 H definitions.
20.20.026 I definitions.
20.20.032 L definitions.
20.20.034 M definitions.
20.20.036 N definitions.
20.20.040 P definitions.
20.20.042 Q definitions.
20.20.044 R definitions.
20.20.046 S definitions.
20.20.054 W definitions.

*Code reviser's note: Ordinance 238 provided all of the definitions initially set out in this chapter. History notes following definitions indicate amending ordinances only.

20.20.010 A definitions.

Alteration	Any human induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to grading, filling, channelizing, dredging, clearing (vegetation), construction, compaction, excavation, or any other activity that changes the character of the critical area.
Anadromous Fish	Fish born in fresh water, which spend most of their lives in the sea and return to fresh water to spawn. Salmon, smelt, shad, striped bass, and sturgeon are common examples.
Aquifer	A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.
Aquifer Recharge Areas	A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

20.20.012 B definitions.

Best Available Science	Current scientific information used in the process to designate, protect, mitigate impacts to, or restore critical areas, that is derived from a valid scientific process as defined by WAC 365-196-900 through 925.
Bond	A financial guarantee in the form of a surety bond, cash deposit, escrow account assignment of savings, irrevocable letter of credit or other means acceptable to, or required by, the Director to guarantee work is in compliance with all applicable requirements.
Buffer	A designated area contiguous to and protects

a critical area which is required for the continued maintenance, functioning and/or structural stability of a critical area. ~~a steep slope or landslide hazard area intended to protect slope stability, attenuation of surface water flows and landslide hazards or a designated area contiguous to a stream or wetland intended to protect the stream or wetland and be an integral part of the stream or wetland ecosystem.~~

20.20.014 C definitions.

Certified Arborist	A person or firm with specialized knowledge of the horticultural requirements of trees, certified by the International Society of Arboriculture or by the ~~National Arborist Association~~ American Society of Consulting Arborists as a registered consulting arborist.
Compensatory Mitigation	Replacing project-induced losses or impacts to a critical area, and includes but is not limited to creation, restoration, re-establishment, enhancement, and preservation. The term mitigation is often used to refer to compensation, which is just one part of the overall mitigation sequence. See *mitigation.*
Conservation Easement	A legal agreement that the property owner enters into to restrict uses of the land. Such restrictions can include, but are not limited to, passive recreation uses such as trails or scientific uses and fences or other barriers to protect habitat. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property, therefore, providing permanent or long-term protection.
Critical Areas	An area or ecosystem with one or more of the following environmental characteristics: A. Geologic hazard areas, included but not limited to: 1. Landslide hazard areas, 2. Seismic hazard areas, and 3. Erosion hazard areas; B. ~~Flood hazard areas~~ Fish and wildlife habitat conservation areas; C. ~~Stream areas~~ Wetlands; D. ~~Aquifer recharge areas~~ Flood hazard areas; and E. ~~Wetlands~~ Aquifer recharge areas.~~; and~~ ~~F. Fish and wildlife habitat conservation areas.~~ (Ord. 398 § 1, 2006; Ord. 352 § 1, 2004).

20.20.018 E definitions.

Engineering Geologist	A person licensed by the State of Washington as a professional geologist with an engineering geologist endorsement who specializes in evaluating geologic site characteristics to determine the response of

	geologic processes and materials to development activities, such as removal of vegetation, site grading, buildings, and civil works.
Enhancement	Alteration of an existing resource to improve or increase its characteristics and processes without degrading other existing functions. Enhancements are to be distinguished from resource creation or restoration projects. ~~An action which increases the functions and values of a stream, wetland or other sensitive area or buffer.~~
~~Erosion Hazard Areas~~	~~Those areas in the City of Shoreline underlain by soils which are subject to severe erosion when disturbed. Such soils include, but are not limited to, those classified as having a severe to very severe erosion hazard according to the USDA Soil Conservation Service, the 1973 King County Soils Survey or any subsequent revisions or addition by or to these sources. These soils include, but are not limited to, any occurrence of River Wash (Rh) or Coastal Beaches (Cb) and the following when they occur on slopes 15 percent or steeper:~~ ~~A. The Alderwood gravely sandy loam (AgD);~~ ~~B. The Alderwood and Kitsap soils (AkF);~~ ~~C. The Beausite gravely sandy loam (BeD and BeF);~~ ~~D. The Kitsap silt loam (KpD);~~ ~~E. The Ovall gravely loam (OvD and OvF);~~ ~~F. The Ragnar fine sandy loam (RaD); and~~ ~~G. The Ragnar-Indianola Association (RdE).~~
Excessive Pruning	Pruning more than ~~four years of branch growth~~ 25 percent of the tree canopy in one growing season or over a five year period, unless necessary to restore the vigor of the tree or to protect life and property.

20.20.020 F definitions.

Fish and Wildlife Habitat Conservation Areas	Areas, as designated by SMC 20.80.270, necessary to maintain populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created.
Fish Habitat	Habitat that is used by fish at any life stage at any time of the year, including potential habitat likely to be used by fish that could be recovered by restoration or management and includes off-channel habitat.
Functions and Values	The beneficial roles served by critical areas and their buffers including, but not limited to, water quality protection and enhancement;

		fish and wildlife habitat; food chain support; flood storage, conveyance, and attenuation; ground water recharge and discharge; erosion control; wave attenuation; protection from hazards; historical, archaeological, and aesthetic value protection; educational opportunities; and recreation. These beneficial roles are not listed in order of priority. Critical area functions and values can be used to help set targets (species composition, structure, etc.) for mitigation sites.
20.20.022	**G definitions.**	
	Geologic Hazard Areas	Critical areas which are susceptible to erosion, land sliding, seismic, or other geological events as designated by SMC 20.80.210. These areas may not be suited for any development activities, because they may pose a threat to public health and safety, or environmental standards.
	Geologist	~~A person who has earned at least a Bachelor of Science degree in the geological sciences from an accredited college or university or who has equivalent educational training and at least four years of professional experience.~~ A person trained in geological sciences and licensed by the State of Washington as a professional geologist.
	Grading	The movement or redistribution, including ~~Any~~ excavation, filling, or removing, of the soil, sand, rock, gravel, sediment, or ~~the~~ duff layer ~~or any combination thereof.~~ or other material on a site in a manner that alters the natural contour of the land.
20.20.024	**H definitions.**	
	Habitat Conservation Areas	Areas designated as fish and wildlife habitat conservation areas.
	Habitats of Local Importance	Areas identified as important by the City and designated as fish and wildlife habitat conservation areas that include a seasonal range or habitat element with which a given species has a primary association, and which, if altered may reduce the likelihood that the species will maintain and reproduce over the long-term.
	Hand-held Equipment	Equipment, such as shovels or chainsaws that are compact enough to be used or operated while being held in the hand or hands. Does not include equipment operated on the ground by pushing or self-propulsion such as lawn mowers or rototillers.
	Hazardous Substance	Any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090 or 173-303-100. ~~as defined in RCW 70.105.010.~~
20.20.026	**I definitions.**	
	Invasive Species	Any nonnative organisms that cause economic or environmental harm and are capable of spreading to new areas of the state. Invasive species do not include domestic

livestock, intentionally planted agronomic crops, or nonharmful exotic organisms. Invasive species include but are not limited to noxious weeds.

20.20.032 L definitions.

Lands Covered by Water — All lands underlying the water areas of the state below the ordinary high water mark, including salt waters, tidal waters, estuarine waters, natural water courses, lakes, ponds, artificially impounded waters, and wetlands consistent with WAC 197-11-756.

~~Landslide Hazard Areas~~ — ~~Those areas in the City of Shoreline subject to severe risks of landslides, including the following:~~

~~A. Any area with a combination of:~~

~~1. Slopes steeper than 15 percent;~~

~~2. Impermeable soils, such as silt and clay, frequently interceded with granular soils, such as sand and gravel; and~~

~~3. Springs or ground water seepage;~~

~~B. Any area which has shown movement during the Holocene epoch, from 10,000 years ago to the present, or which is underlain by mass wastage debris from that epoch;~~

~~C. Any area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by wave action;~~

~~D. Any area which shows evidence of or is at risk from snow avalanches; or~~

~~E. Any area located on an alluvial fan, presently subject to or potentially subject to inundation by debris flows or deposition of stream-transported sediments.~~

20.20.034 M definitions.

Marine Environment/Marine Waters — Aquatic lands and waters under tidal influence, including saltwaters and estuaries to the ordinary high water mark.

Mitigation — Avoiding, minimizing, or compensating for adverse impacts, including ~~The~~ use of any or all of the following actions listed in descending order of preference:

A. Avoiding the impact by not taking a certain action or parts of an action;

B. Minimizing the impact 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 the impact;

C. Rectifying the impact by repairing, rehabilitating or restoring the affected ~~sensitive~~ critical area or buffer to the conditions existing at the time of initiation of the project;

D. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area

through biological, engineered, or other methods;

E. Reducing or eliminating the impact or hazard over time by preservation or maintenance operations during the life of the development proposal;

~~E~~F. Compensating for the impact by replacing, enhancing or providing substitute ~~sensitive~~ critical areas and environments; and

~~F~~G. Monitoring the hazard or required mitigation ~~impact~~ and taking appropriate corrective measures when necessary.

Mitigation for individual actions may include a combination of the above measures.

20.20.036 N definitions.

Native Growth Protection Area (NGPA)	A tract or easement recorded with an ~~City~~ approved subdivision or easement, established for the purposes of protecting vegetation, providing open space, maintaining wildlife corridors, maintaining slope stability, controlling runoff and erosion, and/or any other purpose designated in the ~~subdivision~~ development approval.
Native Vegetation, Native Plant(s)	~~A tree, shrub or groundcover plant of a species that is native to western Washington.~~ Vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest, which reasonably could have been expected to naturally occur on the site.

20.20.040 P definitions.

Practical Alternative	An alternative that is available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes, and has less adverse impacts to critical areas.
Priority Habitat	Habitat type or elements with unique or significant value to one or more species as classified by the state Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element.
Protected Tree/Protected Vegetation	A tree or area of understory vegetation identified on an approved tree protection and replacement plan (or other plan determined to be acceptable by the Director) to be retained and protected during construction and/or permanently protected by easement, tract, or covenant restriction. A protected tree may be located outside or within a NGPA, ~~sensitive~~ critical area or ~~sensitive~~ critical area buffer.

20.20.042 Q definitions.

Qualified Professional	A person with experience, training and competence in the pertinent discipline. A qualified professional must be licensed to practice in the State of Washington in the related professional field, if such field is licensed. If not licensed, a qualified

professional must have a national certification in the pertinent field. If national certification in the field does not exist, the minimum qualification should be a bachelor's degree with 10 years of related professional work, or master's degree in the field and three years of related professional work. Minimum qualifications for specific fields of practice shall include but not be limited to the following:

A. Arborists must be certified arborists as defined in SMC 20.20.014 and have a valid ISA Tree Risk Assessment Qualification (TRAQ).

B. Professionals for geologic hazard areas must be licensed and endorsed in the State of Washington as a geotechnical engineer or engineering geologist as defined in SMC 20.20.018 and 20.20.022.

C. Professionals for streams and other fish and wildlife habitat must have a degree in biology, environmental planning, natural science, stream ecology or related field and the minimum years of experience, listed above, related to the subject habitat or species.

D. Professionals for vegetation restoration planning where specific expertise for wetlands, streams or other fish and wildlife habitat is not required, must have a degree in botany, environmental planning, natural science, ecology, landscape architecture or a related field and the minimum years of experience, listed above, with an emphasis on restoration ecology and vegetation management associated with critical areas and buffers. Professionals must demonstrate a minimum of three years of experience with the type of critical area or buffer for which the critical area report is being submitted.

E. Professionals for wetlands must be currently certified as a Professional Wetland Scientist (PWS) with the Society of Wetland Scientists or meet the minimum education and years of experience, listed above, as a wetlands professional.

F. Minimum qualifications of professionals for other disciplines shall be determined by the Director consistent with the minimum qualifications defined above and specific to the discipline identified. (Ord. 324 § 1, 2003).

20.20.044 R definitions.

Remediation

To restore a site to a condition that ~~compiles~~ complies with ~~sensitive~~ critical area or other regulatory requirements as they existed when the violation occurred; or, for sites that have been degraded under prior ownerships, restore to a condition which does not pose a probable threat to the environment or to the public health, safety, or welfare. Remediation

	does not mandate a return to pre-development conditions in critical areas.
Restoration	~~Returning a stream, wetland, other sensitive area or any associated buffer to a state in which its stability and functions approach its unaltered state as closely as possible.~~ Measures taken to restore an altered or damaged critical area or any associated buffer to a state in which its stability and functions approach its unaltered state as closely as possible, including: A. Active steps taken to restore damaged critical areas or their buffers to the functioning condition that existed prior to an unauthorized alteration; and B. Actions performed to reestablished structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.
Riparian Habitat	Areas adjacent to aquatic systems with flowing water that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife. Widths shall be measured from the ordinary high water mark or from the top of bank if the ordinary high water mark cannot be identified. It includes the entire extent of the floodplain and the extent of vegetation adapted to wet conditions as well as adjacent upland plant communities that directly influence the stream system. Riparian habitat areas include those riparian areas severely altered or damaged due to human development activities.

20.20.046 S definitions.

Salmonid	A member of the fish family salmonidae, including: A. Chinook, coho, chum, sockeye and pink salmon; B. Rainbow, steelhead and cutthroat trout or salmon; C. Brown trout; D. Brook and dolly varden trout or char; E. Kokanee; and F. Whitefish.
~~Seismic Hazard Areas~~	~~Those areas in the City of Shoreline subject to severe risk of earthquake damage as a result of soil liquefaction in areas underlain by cohesionless soils of low density and usually in association with a shallow ground water~~

	~~table or of other seismically induced settlement.~~
Site Development Permit	A permit, issued by the City, to develop, redevelop or partially develop a site exclusive of any required building or land use permit. A site development permit may include one or more of the following activities: paving, grading, clearing, tree removal, on-site utility installation, stormwater facilities, walkways, striping, wheelstops or curbing for parking and circulation, landscaping, critical area and buffer mitigation, enhancement, remediation, or restoration. (Ord. 439 § 1, 2006; Ord. 352 § 1, 2004).
Site Plan	The development plan for one or more lots on which is shown the existing and proposed conditions of the lot, including topography, vegetation, drainage, flood plains, wetlands, ~~and~~ waterways, critical areas and critical area buffers; landscaping and open spaces; walkways; means of ingress and egress; circulation; utility services; structures and buildings; signs and lighting; berms, buffers, and screening devices; surrounding development; and any other information that reasonably may be required in order that an informed decision can be made by the approving authority.
~~Steep Slope Hazard Areas~~	~~Those areas in the City of Shoreline on slopes 40 percent or steeper within a vertical elevation change of at least 10 feet. A slope is delineated by establishing its toe and top and is measured by averaging the inclination over at least 10 feet of vertical relief. For the purpose of this definition:~~ ~~A. The toe of a slope is a distinct topographic break in slope which separates slopes inclined at less than 40 percent from slopes 40 percent or steeper. Where no distinct break exists, the toe of a steep slope is the lower most limit of the area where the ground surface drops 10 feet or more vertically within a horizontal distance of 25 feet; and~~ ~~B. The top of a slope is a distinct, topographic break in slope which separates slopes inclined at less than 40 percent from slopes 40 percent or steeper. Where no distinct break exists, the top of a steep slope is the upper most limit of the area where the ground surface drops 10 feet or more vertically within a horizontal distance of 25 feet.~~
Streams	Those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses, unless they are used by ~~salmonids~~ fish or are used to convey streams naturally occurring prior to construction. A channel or bed need not contain water year-round; provided, that there is evidence of at least intermittent flow during years of normal rainfall. (Ord. 398 § 1, 2006).

~~Substantial Development~~	~~Any extension, repair, reconstruction, or other improvement of a property, the cost of which equals or exceeds 50 percent of the fair market value of a property either before the improvement is started or, if the property has been damaged and is being restored, before the damage occurred.~~

20.20.054 W definitions.

~~Water Dependent Use~~	~~A land use which can only exist when the interface between wet meadows, grazed land and water provides the biological or physical conditions necessary for the use.~~
Wetland Creation	The manipulation of the physical, chemical, or biological characteristics to develop a wetland on an upland or deepwater site, where a wetland did no previously exist. Creation results in a gain in wetland acreage and function. A typical action is the excavation of upland soils to elevations that will produce a wetland hydroperiod and hydric soils, and support the growth of hydrophytic plant species.
Wetland Delineation	A technical procedure performed by a ~~wetland specialist~~ qualified professional with expertise in wetlands and documented in a critical area report to determine the area of a wetland, ascertaining the wetland's classification, function, and value, and to define the boundary between a wetland and adjacent uplands.
Wetland Edge	The line delineating the outer edge of a wetland established based on the definitions and methods contained in Title 20.80 ~~by using the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, 1987, jointly published by the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers and the U.S. Soil Conservation Service~~.
Wetland Enhancement	The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in a change in wetland function(s) and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Examples are planting vegetation, controlling non-native or invasive species, and modifying site elevations to alter hydroperiods.
~~Wetland, Forested~~	~~A wetland which is characterized by woody vegetation at least 20 feet tall.~~
~~Wetland, Isolated~~	~~A wetland which has a total size less than 2,500 square feet excluding buffers, which is hydrologically isolated from other wetlands or streams and which does not have permanent open water.~~

Wetland Re-establishment	The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Re-establishment results in rebuilding a former wetland and results in a gain in wetland acres and functions. Activities could include removing fill, plugging ditches, or breaking drain tiles.
Wetland Rehabilitation	The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain or returning tidal influence to a wetland.
Wetlands	Those areas ~~in Shoreline which~~ that are inundated or saturated by ground 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 swamps, marshes, bogs 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, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.
Wetland Scientist	A scientist, including but not limited to ecologists, hydrologists, and soil scientists, who study the physical and biological characteristics of wetlands and their functions.

Chapter 20.30

Procedures and Administration

Sections:

Subchapter 3. Permit Review Procedures

20.30.080 Preapplication meeting.

Subchapter 5. Nonconforming Uses, Lots, and Structures

20.30.280 Nonconformance.

Subchapter 6. Review and/or Decision Criteria

20.30.290 Deviation from the engineering standards (Type A action).
20.30.295 Temporary use.
20.30.310 Zoning variance (Type B action).
20.30.330 Special use permit-SUP (Type C action).
20.30.333 Critical areas special use permit (Type C action).
20.30.336 Critical areas reasonable use permit (Type C action).
20.30.353 Master development plan.
20.30.355 Development agreement (Type L).

Subchapter 7. Subdivisions

20.30.370 Purpose.
20.30.410 Preliminary subdivision review procedures and criteria.

Subchapter 9. Code Enforcement

20.30.730 General Provisions.
20.30.770 Enforcement provisions.

Subchapter 3.

Permit Review Procedures

20.30.080 Preapplication meeting.

A preapplication meeting is required prior to submitting an application for any Type B or Type C action and/or for an application for a project ~~located within~~ that may impact a critical area or its buffer consistent with SMC 20.80.045.

Applicants for development permits under Type A actions are encouraged to participate in preapplication meetings with the City. Preapplication meetings with staff provide an opportunity to discuss the proposal in general terms, identify the applicable City requirements and the project review process including the permits required by the action, timing of the permits and the approval process.

Preapplication meetings are required prior to the neighborhood meeting.

The Director shall specify submittal requirements for preapplication meetings, which shall include a critical areas ~~checklist~~ worksheet and, if available, preliminary critical area reports. Plans presented at the preapplication meeting are nonbinding and do not "vest" an application. (Ord. 439 § 1, 2006; Ord. 324 § 1, 2003; Ord. 238 Ch. III § 4(a), 2000).

Subchapter 5.

Nonconforming Uses, Lots, and Structures

20.30.280 Nonconformance.

A. Any use, structure, lot or other site improvement (e.g., landscaping or signage), which was legally established prior to the effective date of a land use regulation that rendered it nonconforming, shall be considered nonconforming if:

1. The use is now prohibited or cannot meet use limitations applicable to the zone in which it is located; or

2. The use or structure does not comply with the development standards or other requirements of this code;

3. A change in the required permit review process shall not create a nonconformance.

B. **Abatement of Illegal Use, Structure or Development.** Any use, structure, lot or other site improvement not established in compliance with use, lot size, building, and development standards in effect at the time of establishment shall be deemed illegal and shall be discontinued or terminated and subject to removal.

C. **Continuation and Maintenance of Nonconformance.** A nonconformance may be continued or physically maintained as provided by this code.

1. Any nonconformance that is brought into conformance for any period of time shall forfeit status as a nonconformance.

2. **Discontinuation of Nonconforming Use.** A nonconforming use shall not be resumed when abandonment or discontinuance extends for 12 consecutive months.

3. **Repair or Reconstruction of Nonconforming Structure.** Any structure nonconforming as to height or setback standards may be repaired or reconstructed; provided, that:

a. The extent of the previously existing nonconformance is not increased;

b. The building permit application for repair or reconstruction is submitted within 12 months of the occurrence of damage or destruction; and

c. The provisions of Chapter 13.12 SMC, Floodplain Management, are met when applicable.

4. **Modifications to Nonconforming Structures.** Modifications to a nonconforming structure may be permitted; provided, the modification does not increase the area, height or degree of an existing nonconformity. Single-family additions shall be limited to 50 percent of the use area or 1,000 square feet, whichever is lesser, and shall not require a conditional use permit in the MUR-45' and MUR-70' zones. Modification of structures that are nonconforming with regards to critical areas may only be permitted consistent with SMC 20.80.040.

D. **Expansion of Nonconforming Use.** A nonconforming use may be expanded subject to approval of a conditional use permit unless the indexed supplemental criteria (SMC 20.40.200) require a special use permit for expansion of the use under the code. A nonconformance with the development standards shall not be created or increased and the total expansion shall not exceed 10 percent of the use area.

E. **Nonconforming Lots.** Any permitted use may be established on an undersized lot, which cannot satisfy the lot size or width requirements of this code; provided, that:

1. All other applicable standards of the code are met; or a variance has been granted;

2. The lot was legally created and satisfied the lot size and width requirements applicable at the time of

creation;

3. The lot cannot be combined with contiguous undeveloped lots to create a lot of required size;

4. No unsafe condition is created by permitting development on the nonconforming lot; and

5. The lot was not created as a “special tract” to protect critical area, provide open space, or as a public or private access tract.

Subchapter 6.

Review and/or Decision Criteria

20.30.290 Deviation from the engineering standards (Type A action).

B. Decision Criteria. The Director shall grant an engineering standards deviation only if the applicant demonstrates all of the following:

1. The granting of such deviation will not be materially detrimental to the public welfare or injurious or create adverse impacts to the property or other property(s) and improvements in the vicinity and in the zone in which the subject property is situated;

2. The authorization of such deviation will not adversely affect the implementation of the Comprehensive Plan adopted in accordance with State law;

3. The deviation is not in conflict with the standards of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II;

4. A deviation from engineering standards shall only be granted if the proposal meets the following criteria:

   a. Conform to the intent and purpose of the Code;

   b. Produce a compensating or comparable result which is in the public interest; and

   c. Meet the objectives of safety, function and maintainability based upon sound engineering judgement.;

45. Deviations from road standards must meet the objectives for fire protection. Any deviation from road standards, which does not meet the International Fire Code, shall also require concurrence by the Fire Marshal.;

56. Deviations from drainage standards contained in the Stormwater Manual and Chapter 13.10 SMC must meet the objectives for appearance and environmental protection.;

67. Deviations from drainage standards contained in the Stormwater Manual and Chapter 13.10 SMC must be shown to be justified and required for the use and situation intended.;

78. Deviations from drainage standards for facilities that request use of emerging technologies, an experimental water quality facility or flow control facilities must meet these additional criteria:

   a. The new design is likely to meet the identified target pollutant removal goal or flow control performance based on limited data and theoretical consideration.;

   b. Construction of the facility can, in practice, be successfully carried out; and

   c. Maintenance considerations are included in the design, and costs are not excessive or are borne and reliably performed by the applicant or property owner;

89. Deviations from utility standards shall only be granted if following facts and conditions exist:

   a. The deviation shall not constitute a grant of special privilege inconsistent with the limitation upon uses of other properties in the vicinity and in the zone in which the property on behalf of which the application was filed is located;

   b. The deviation is necessary because of special circumstances relating to the size, shape, topography, location or surrounding of the subject property in order to provide it with use rights and privileges

permitted to other properties in the vicinity and in the zone in which the subject property is located; and

c. The granting of such deviation is necessary for the preservation and enjoyment of a substantial property right of the applicant possessed by the owners of other properties in the same zone or vicinity. (Ord. 531 § 1 (Exh. 1), 2009; Ord. 406 § 1, 2006; Ord. 238 Ch. III § 7(a), 2000).

20.30.295 Temporary use.

B. The Director may approve or modify and approve an application for a temporary use permit if:

1. The temporary use will not be materially detrimental to public health, safety, or welfare, nor injurious to property and improvements in the immediate vicinity of the subject temporary use; ~~and~~

2. The temporary use is not incompatible in intensity and appearance with existing land uses in the immediate vicinity of the temporary use; ~~and~~

3. Adequate parking is provided for the temporary use and, if applicable, the temporary use does not create a parking shortage for the existing uses on the site; ~~and~~

4. Hours of operation of the temporary use are specified; ~~and~~

5. The temporary use will not create noise, light, or glare which would adversely impact surrounding uses and properties: and

6. The temporary use is not in conflict with the standards of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, and is located outside the shoreline jurisdiction regulated by the Shoreline Master Program, SMC Title 20, Division II.

20.30.310 Zoning variance (Type B action).

B. Decision Criteria. A variance shall be granted by the City, only if the applicant demonstrates all of the following:

1. The variance is necessary because of the unique size, shape, topography, or location of the subject property;

2. The strict enforcement of the provisions of this title creates an unnecessary hardship to the property owner;

3. The subject property is deprived, by provisions of this title, of rights and privileges enjoyed by other properties in the vicinity and under an identical zone;

4. The need for the variance is not the result of deliberate actions of the applicant or property owner, including any past owner of the same property;

5. The variance is compatible with the Comprehensive Plan;

6. The variance does not create a health or safety hazard;

7. The granting of the variance will not be materially detrimental to the public welfare or injurious to:

   a. The property or improvements in the vicinity, or

   b. The zone in which the subject property is located;

8. The variance does not relieve an applicant from:

a. Any of the procedural or administrative provisions of this title, or

b. Any standard or provision that specifically states that no variance from such standard or provision is permitted, or

c. Use or building restrictions, or

d. Any provisions of the critical areas ~~development standards~~ regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II;

9. The variance from setback or height requirements does not infringe upon or interfere with easement or covenant rights or responsibilities;

10. The variance does not allow the establishment of a use that is not otherwise permitted in the zone in which the proposal is located; or

11. The variance is the minimum necessary to grant relief to the applicant. (Ord. 324 § 1, 2003; Ord. 238 Ch. III § 7(c), 2000).

20.30.330 Special use permit-SUP (Type C action).

B. Decision Criteria. A special use permit shall be granted by the City, only if the applicant demonstrates that:

1. The use will provide a public benefit or satisfy a public need of the neighborhood, district or City;

2. The characteristics of the special use will be compatible with the types of uses permitted in surrounding areas;

3. The special use will not materially endanger the health, safety and welfare of the community;

4. The proposed location shall not result in either the detrimental over-concentration of a particular use within the City or within the immediate area of the proposed use, unless the proposed use is deemed a public necessity;

5. The special use is such that pedestrian and vehicular traffic associated with the use will not be hazardous or conflict with existing and anticipated traffic in the neighborhood;

6. The special use will be supported by adequate public facilities or services and will not adversely affect public services to the surrounding area or conditions can be established to mitigate adverse impacts;

7. The location, size and height of buildings, structures, walls and fences, and screening vegetation for the special use shall not hinder or discourage the appropriate development or use of neighboring properties;

8. The special use is not in conflict with the policies of the Comprehensive Plan or the basic purposes of this title; and

9. The special use is not in conflict with the standards of the critical areas ~~overlay~~ regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II. (Ord. 238 Ch. III § 7(e), 2000).

20.30.333 Critical area special use permit (Type C action).

A. **Purpose.** The purpose of the critical areas special use permit is to allow development by a public agency or public utility when the strict application of the critical areas standards would otherwise unreasonably prohibit the provision of public services. This type of permit does not apply to flood hazard areas or within the shoreline jurisdiction.

B. **Decision Criteria.** A critical areas special use permit shall be granted by the City only if the utility or public agency applicant demonstrates that:

1. The application of the critical areas ~~development standards~~ regulations, Chapter 20.80 SMC, Critical Areas, would unreasonably restrict the ability of the public agency or utility to provide services to the public; ~~and~~

2. There is no other practical alternative to the proposal by the public agency or utility which would cause less impact on the critical area; ~~and~~

3. The proposed development does not create a health or safety hazard on or off the development site, will not be materially detrimental to the property or improvements in the vicinity; ~~and~~

4. This special use permit process shall not allow the use of the following critical areas for regional retention/detention facilities except where the Hearing Examiner makes a finding that the facility is necessary to protect public health and safety or repair damaged natural resources:

   a. Type ~~I~~ S or Type F-anadromous streams or buffers;

   b. ~~Type~~ Category I wetlands or buffers with plant associations of infrequent occurrence; or

   c. ~~Type~~ Category I or II wetlands or buffers which provide critical or outstanding habitat for herons, raptors or State or Federal designated endangered or threatened species unless clearly demonstrated by the applicant, using best available science, that there will be no impact on such habitat;

5. Any alterations permitted to the critical area are mitigated in accordance with SMC 20.80.082 and relevant mitigation standards for the impacted critical area(s);

6. Consistent with SMC 20.80.050 Alteration of critical areas the proposal attempts to protect the existing critical area functions and values consistent with the best available science and attempts to mitigate adversely impacted critical area functions and values to the fullest extent possible; and

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

C. **Permit Conditions.** The Director may condition the proposed activity as necessary to mitigate the impacts to critical areas and to conform to the standards required by Chapter 20.80 SMC, Critical Areas. (Ord. 641 § 4 (Exh. A), 2012; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(I), 2000. Formerly 20.80.090.).

20.30.336 Critical areas reasonable use permit (Type C action).

A. **Purpose.** The purpose of the critical areas reasonable use permit is to allow development and use of private property when the strict application of the critical area ~~standards~~ regulations would otherwise deny all reasonable use of a property. This type of permit does not apply to flood hazard areas or within the shoreline jurisdiction.

B. **Decision Criteria.** A reasonable use permit shall be granted by the City only if the applicant demonstrates that:

1. The application of the ~~development standards~~ critical area regulations, Chapter 20.80 SMC, Critical Areas, would deny all reasonable use of the property; and

2. There is no other reasonable use of the property with less impact on the critical area; and

3. Any alterations to the critical area would be the minimum necessary to allow for reasonable use of the property; and

4. The proposed development does not create a health or safety hazard on or off the development site, will not be materially detrimental to the property or improvements in the vicinity, is consistent with the

general purposes of this title and the public interest, and all reasonable mitigation measures have been implemented or assured; and

5. The inability to derive reasonable economic use is not the result of the applicant's action unless the action 1) was approved as part of a final land use decision by the City or other agency with jurisdiction; or 2) otherwise resulted in a nonconforming use, lot or structure as defined in this title;

6. Any alterations permitted to the critical area are mitigated in accordance with SMC 20.80.082 and relevant mitigation standards for the impacted critical area(s);

7. Consistent with SMC 20.80.050 Alteration of critical areas the proposal attempts to protect the existing critical area functions and values consistent with the best available science and attempts to mitigate adversely impacted critical area functions and values to the fullest extent possible; and

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

C. **Development Standards.** To allow for reasonable use of property and to minimize impacts on critical areas the decision making authority may reduce setbacks by up to 50 percent, parking requirements by up to 50 percent, and may eliminate landscaping requirements. Such reductions shall be the minimum amount necessary to allow for reasonable use of the property, considering the character and scale of neighboring development.

D. **Priority.** When multiple critical areas and critical area buffers may be affected by the application, the decision making authority should consider exceptions to critical areas ~~standards~~ regulations that occur in the following order of priority with number ~~5~~4 having the highest protection:

1. Geologic hazard area buffers;

2. Wetland buffers;

3. ~~Stream buffers;~~

~~4.~~ Fish and wildlife habitat conservation area buffers (excluding wetlands); and

~~5~~4. Geologic~~al~~ hazard areas, wetlands, ~~stream,~~ and fish and wildlife habitat conservation critical areas protection standards in the order listed above in items 1 through ~~4~~3. (Ord. 641 § 4 (Exh. A), 2012; Ord. 352 § 1, 2004; Ord. 324 § 1, 2003; Ord. 238 Ch. VIII § 1(L), 2000. Formerly 20.80.120.).

20.30.353 Master development plan.

B. **Decision Criteria.** A master development plan shall be granted by the City only if the applicant demonstrates that:

1. The project is designated as either campus or essential public facility in the Comprehensive Plan and Development Code and is consistent with goals and policies of the Comprehensive Plan.

2. The master development plan includes a general phasing timeline of development and associated mitigation.

3. The master development plan meets or exceeds the current ~~regulations for~~ critical areas regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II, if critical areas or their buffers are present or project is within the shoreline jurisdiction.

4. The proposed development uses innovative, aesthetic, energy efficient and environmentally sustainable architecture and site design (including low impact development stormwater systems and substantial tree retention) to mitigate impacts to the surrounding neighborhoods.

5. There is either sufficient capacity and infrastructure (e.g., roads, sidewalks, bike lanes) in the

transportation system (motorized and nonmotorized) to safely support the development proposed in all future phases or there will be adequate capacity and infrastructure by the time each phase of development is completed. If capacity or infrastructure must be increased to support the proposed master development plan, then the applicant must identify a plan for funding their proportionate share of the improvements.

6. There is either sufficient capacity within public services such as water, sewer and stormwater to adequately serve the development proposal in all future phases, or there will be adequate capacity available by the time each phase of development is completed. If capacity must be increased to support the proposed master development plan, then the applicant must identify a plan for funding their proportionate share of the improvements.

7. The master development plan proposal contains architectural design (including but not limited to building setbacks, insets, facade breaks, roofline variations) and site design standards, landscaping, provisions for open space and/or recreation areas, retention of significant trees, parking/traffic management and multimodal transportation standards that minimize conflicts and create transitions between the proposal site and adjacent neighborhoods and between institutional uses and residential uses.

8. The applicant shall demonstrate that proposed industrial, commercial or laboratory uses will be safe for the surrounding neighborhood and for other uses on the campus.

C. **Amendments.** Minor amendments to an approved master development plan may be approved by the Director if the amendment meets the development standards and criteria applicable to the zoning and requirements set forth in this section. Minor amendments include any revision or modification of the previously approved master development plan that would result in any one or more of the following:

1. An increase in the square footage of any proposed building or structure by 10 percent or less; or

2. A change of 15 percent or less in the number of new parking spaces, parking spaces created by restriping existing parking areas and/or a combination of both except for an increase in parking spaces for bicycles or electric vehicles; or

3. A change in the original phasing timeline for mitigation of the master development plan; or

4. Changes to building placement when located outside of the required setbacks and any required ~~setbacks~~ buffers for critical areas; or

5. A cumulative increase in impervious surface of 10 percent or less or a cumulative decrease in tree cover of 10 percent or less; or

6. Other specific changes as noted in the master development plan.

Major amendments are changes that exceed the thresholds for a minor amendment or were not analyzed as part of an approved master development plan. Major amendments to an approved master development plan shall be processed as a new master development plan.

F. **Early Community Input.** Applicants are encouraged to develop a community and stakeholders consensus-based master development plan. Community input is required to include soliciting input from stakeholders, community members and any other interested parties with bubble diagrams, diagrammatic site plans, or conceptual site plans. The meeting notice shall be provided at a minimum to property owners located within 1,000 feet of the proposal, the neighborhood chair as identified by the Shoreline Office of Neighborhoods (note: if a proposed development is within 1,000 feet of adjacent neighborhoods, those chairs shall also be notified), and to the City of Shoreline Planning ~~and~~ & Community Development ~~Services~~ Department. Digital audio recording, video recording, or a court reporter transcription of this meeting or meetings is required at the time of application. The applicant shall provide an explanation of the comments of these entities to the City regarding the incorporation (or not) of these comments into the design and development of the proposal.

20.30.355 Development agreement (Type L).

C. **Decision Criteria.** A development agreement (general development agreement and development agreements in order to increase height above 70 feet) may be granted by the City only if the applicant demonstrates that:

1. The project is consistent with goals and policies of the Comprehensive Plan. If the project is located within a subarea plan, then the project shall be consistent with the goals and policies of the subarea plan.

2. The proposed development uses innovative, aesthetic, energy efficient and environmentally sustainable architecture and site design.

3. There is either sufficient capacity and infrastructure (e.g., roads, sidewalks, bike lanes) in the transportation system (motorized and nonmotorized) to safely support the development proposed in all future phases or there will be adequate capacity and infrastructure by the time each phase of development is completed. If capacity or infrastructure must be increased to support the proposed development agreement, then the applicant must identify a plan for funding their proportionate share of the improvements.

4. There is either sufficient capacity within public services such as water, sewer and stormwater to adequately serve the development proposal in all future phases, or there will be adequate capacity available by the time each phase of development is completed. If capacity must be increased to support the proposed development agreement, then the applicant must identify a plan for funding their proportionate share of the improvements.

5. The development agreement proposal contains architectural design (including but not limited to building setbacks, insets, facade breaks, roofline variations) and site design standards, landscaping, provisions for open space and/or recreation areas, retention of significant trees, parking/traffic management and multimodal transportation improvements and other features that minimize conflicts and create transitions between the proposal site and property zoned R-4, R-6, R-8 or MUR-35'.

6. The project is consistent with the standards of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II.

Subchapter 7.

Subdivisions

20.30.370 Purpose.

Subdivision is a mechanism by which to divide land into lots, parcels, sites, plots, or tracts, for the purpose of sale. The purposes of subdivision regulations are:

A. To regulate division of land into two or more lots or tracts;

B. To protect the public health, safety and general welfare in accordance with the State standards;

C. To promote effective use of land;

D. To promote safe and convenient travel by the public on streets and highways;

E. To provide for adequate light and air;

F. To facilitate adequate provision for water, sewerage, stormwater drainage, parks and recreation areas, sites for schools and school grounds and other public requirements;

G. To provide for proper ingress and egress;

H. To provide for the expeditious review and approval of proposed subdivisions which conform to development standards and the Comprehensive Plan;

I. To adequately provide for the housing and commercial needs of the community;

J. To protect environmentally ~~sensitive~~ critical areas and their buffers as designated by ~~in the critical area overlay districts chapter,~~ Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II;

K. To require uniform monumenting of land subdivisions and conveyance by accurate legal description. (Ord. 695 § 1 (Exh. A), 2014; Ord. 238 Ch. III § 8(b), 2000).

20.30.410 Preliminary subdivision review procedures and criteria.

The short subdivision may be referred to as a short plat – Type B action.

The formal subdivision may be referred to as long plat – Type C action.

Time limit: A final short plat or final long plat meeting all of the requirements of this chapter and Chapter 58.17 RCW shall be submitted for approval within the time frame specified in RCW 58.17.140.

Review criteria: The following criteria shall be used to review proposed subdivisions:

A. **Environmental.**

1. Where environmental resources exist, such as trees, streams, ~~ravines~~ geologic hazards, or wildlife habitats, the proposal shall be designed to fully implement the goals, policies, procedures and stan-dards of the critical areas ~~chapter~~ regulations, Chapter 20.80 SMC, Critical Areas, and the tree conservation, land clearing, and site grading standards sections.

2. The proposal shall be designed to minimize grading by using shared driveways and by relating street, house site and lot placement to the existing topography.

3. Where conditions exist which could be hazardous to the future residents of the land to be divided, or to nearby residents or property, such as floodplains, ~~steep slopes~~ landslide hazards, or unstable soil or

geologic conditions, a subdivision of the hazardous land shall be denied unless the condition can be permanently corrected, consistent with subsections (A)(1) and (2) of this section, Chapter 20.80 SMC Critical Areas, and Chapter 13.12 SMC, Floodplain Management.

Subchapter 9.

Code Enforcement

20.30.730 General provisions.

A. For the purposes of this subchapter, any person who causes or maintains a code violation and the owner, lessor, tenant or other person entitled to control, use, or occupancy of property where a code violation occurs shall be identified as the responsible party and shall be subject to enforcement action as provided in this subchapter.

However, if a property owner affirmatively demonstrates that the action which resulted in the violation was taken without the owner's knowledge or consent by someone other than the owner or someone acting on the owner's behalf, that owner shall be responsible only for bringing the property into compliance to the extent reasonably feasible under the circumstances, as determined by the Director. Should the responsible party not correct the violation, after service of the notice and order, civil penalties and abatement costs may be assessed.

B. It shall be the responsibility of any person identified as a responsible party to bring the property into a safe and reasonable condition to achieve compliance. Payment of fines, applications for permits, acknowledgment of stop work orders and compliance with other remedies does not substitute for performing the corrective work required and having the property brought into compliance to the extent reasonably possible under the circumstances. The date set for compliance in the notice and order takes precedence over any date established for the expiration of any required permit(s) and will be subordinate only to written extension of the notice and order.

C. The responsible parties have a duty to notify the Director of any actions taken to achieve compliance. A violation shall be considered ongoing until the responsible party has come into compliance and has notified the Director of this compliance, and an official inspection has verified compliance and all assessed penalties and costs have been paid to the City.

D. The procedures set forth in this subchapter are not exclusive, specifically the provisions in SMC 20.80.130 apply to code enforcement of violations of Chapter 20.80 SMC, Critical Areas. These procedures shall not in any manner limit or restrict the City from remedying or abating code violations in any other manner authorized by law. (Ord. 669 § 1 (Exh. A), 2013; Ord. 515 § 1, 2008; Ord. 406 § 1, 2006; Ord. 391 § 4, 2005; Ord. 238 Ch. III § 10(b), 2000).

20.30.770 Enforcement provisions.

A. **Infraction.** Whenever the Director has determined that a code violation has occurred, the Director may issue a Class 1 civil infraction, or other class of infraction specified in the particular ordinance violated, to any responsible party, according to the provisions set forth in Chapter 7.80 RCW.

B. **Misdemeanor.** Any person who willfully or knowingly causes, aids or abets a code violation by any act of commission or omission is guilty of a misdemeanor. Upon conviction, the person shall be punished by a fine not to exceed $1,000 and/or imprisonment in the County jail for a term not to exceed 90 days. Each week (seven days) such violation continues shall be considered a separate misdemeanor offense. A misdemeanor complaint or notice of infraction may be filed as an alternative, or in addition, to any other judicial or administrative remedy provided in this subchapter or by law or other regulation.

C. **Suspension, Revocation or Limitation of Permit.**

1. The Director may suspend, revoke or limit any permit issued whenever:

a. The permit holder has committed a code violation in the course of performing activities subject to that permit;

b. The permit holder has interfered with the Director in the performance of his or her duties relating to that permit;

c. The permit was issued in error or on the basis of materially incorrect information supplied to the City; or

d. Permit fees or costs were paid to the City by check and returned from a financial institution marked nonsufficient funds (NSF) or cancelled.

2. Such suspension, revocation or modification shall be carried out through the notice and order provisions of this subchapter and shall be effective upon the compliance date established by the notice and order. Such revocation, suspension or cancellation may be appealed to the Hearing Examiner using the appeal provisions of this subchapter. Notwithstanding any other provision of this subchapter, the Director may immediately suspend operations under any permit by issuing a stop work order.

D. **Civil Penalties.**

1. A civil penalty for violation of the terms and conditions of a notice and order shall be imposed in the amount of $500.00. The total initial penalties assessed for notice and orders and stop work orders pursuant to this section shall apply for the first 14-day period following the violation of the order, if no appeal is filed. The penalties for the next 14-day period shall be 150 percent of the initial penalties, and the penalties for the next 14-day period and each such period or portion thereafter shall be double the amount of the initial penalties.

2. Any responsible party who has committed a violation of the provisions of Chapter 20.50 SMC, General Development Standards (tree conservation, land clearing and site grading standards), or Chapter 20.80 SMC, Critical Areas, will not only be required to restore unlawfully removed trees or damaged critical areas, insofar as that is possible and beneficial, as determined by the Director, but will also be required to pay civil penalties in addition to penalties under subsection (D)(1) of this section, for the redress of ecological, recreation, and economic values lost or damaged due to the violation. Civil penalties will be assessed according to the following factors:

a. For violations within critical areas and required buffers, an amount determined pursuant to SMC 20.80.130(E); or

b. For violations not located within critical areas and required buffers, Aan amount determined to be equivalent to the economic benefit that the responsible party derives from the violation measured as the total of:

i. The resulting increase in market value of the property; and

ii. The value received by the responsible party; and

iii. The savings of construction costs realized by the responsible party as a result of performing any act in violation of the chapter; and

~~b~~c. A penalty of $2,000 if the violation has severe ecological impacts, including temporary or permanent loss of resource values or functions.

3. An additional penalty of $2,000 if the violation was deliberate, the result of knowingly false information submitted by the property owner, agent, or contractor, or the result of reckless disregard on the part of the property owner, agent, or their contractor. The property owner shall assume the burden of proof for demonstrating that the violation was not deliberate.

4. A repeat violation means a violation of the same regulation in any location within the City by the same responsible party, for which voluntary compliance previously has been sought or any enforcement action taken, within the immediate preceding 24-consecutive-month period, and will incur double the civil penalties set forth above.

5. Under RCW 59.18.085, if, after 60 days from the date that the City first advanced relocation assistance

funds to displaced tenants, the landlord does not repay the amount of relocation assistance advanced by the City, the City shall assess civil penalties in the amount of $50.00 per day for each tenant to whom the City has advanced a relocation assistance payment.

6. The responsible parties have a duty to notify the Director of any actions taken to achieve compliance with the notice and order. For purposes of assessing civil penalties, a violation shall be considered ongoing until the responsible party has come into compliance with the notice and order and has notified the Director of this compliance, and an official inspection has verified compliance and all assessed penalties and costs have been paid to the City.

7. a. Civil penalties will be waived by the Director or will be reimbursed to the payer by the Director, with the concurrence of the Administrative Services Director, under the following documented circumstances:

i. The notice and order were issued in error; or

ii. The civil penalties were assessed in error; or

iii. Notice failed to reach the property owner due to unusual circumstances.

b. Civil penalties accrued under subsection (D)(1) of this section will be reduced by the Director to 20 percent of accrued penalties if voluntary compliance is achieved and the City is reimbursed its reasonable staff and professional costs incurred in enforcing the notice and order.

E. **Abatement.**

1. All public nuisances are subject to abatement under this subchapter.

2. **Imminent Nuisance and Summary Abatement.** If a condition, substance, act or nuisance exists which causes a condition, the continued existence of which constitutes an immediate and emergent threat to the public health, safety or welfare or to the environment, the City may summarily and without prior notice abate the condition. Notice of such abatement, including the reason for the abatement, shall be given to the person responsible for the property and the violation as soon as reasonably possible after the abatement. The Director shall make the determination of a condition, substance, act or other occurrence constituting an imminent nuisance requiring summary abatement. Costs, both direct and indirect, of the abatement may be assessed as provided in this chapter.

3. In the case of such unfit dwellings, buildings, structures, and premises or portions thereof, the Director, as an alternative to any other remedy provided in this subchapter, may abate such conditions by demolition, repair, removal, or securing the site and have abatement costs collected as taxes by the King County Treasury pursuant to SMC 20.30.775. If an occupied rental dwelling or its premises are declared unfit and required to be vacated by a notice and order, and the landlord fails to pay relocation assistance as set forth in RCW 59.18.085, the City shall advance relocation assistance funds to eligible tenants in accordance with RCW 59.18.085.

F. **Additional Enforcement Provisions.** The enforcement provisions of this section are not exclusive, and may be used in addition to other enforcement provisions authorized by the Shoreline Municipal Code or by State law, including filing for injunctive relief or filing of a civil action. (Ord. 669 § 1 (Exh. A), 2013; Ord. 631 § 1 (Exh. 1), 2012; Ord. 581 § 1 (Exh. 1), 2010; Ord. 466 § 2, 2007; Ord. 406 § 1, 2006; Ord. 391 § 4, 2005; Ord. 251 § 2(D), 2000; Ord. 238 Ch. III § 10(c), 2000. Formerly 20.30.740).

Chapter 20.40

Zoning and Use Provisions

Sections:

Subchapter 3. Index of Supplemental Use Criteria

20.40.230 Affordable housing.

Subchapter 3.

Index of Supplemental Use Criteria

20.40.230 Affordable housing.

A. Provisions for density bonuses for the provision of affordable housing apply to all land use applications, except the following which are not eligible for density bonuses: (a) the construction of one single-family dwelling on one lot that can accommodate only one dwelling based upon the underlying zoning designation, (b) provisions for accessory dwelling units, and (c) projects which are limited by the critical areas ~~requirements~~ regulations, Chapter 20.80 SMC, Critical Areas, or Shoreline Master Program, SMC Title 20, Division II.

Chapter 20.50

General Development Standards

Sections:

Subchapter 1. Dimensions and Density for Development

20.50.040 Setbacks – Designation and measurement.

Subchapter 5. Tree Conservation, Land Clearing and Site Grading Standards

20.50.310 Exemptions from permit.
20.50.320 Specific activities subject to the provisions of this subchapter.
20.50.330 Project review and approval.
20.50.350 Development standards for clearing activities.
20.50.360 Tree replacement and site restoration.

Subchapter 1.

Dimensions and Density for Development

20.50.040 Setbacks – Designation and measurement.

F. **Allowance for Optional Aggregate Setback.** For lots with unusual geometry, flag lots with undesignated setbacks, or site conditions, such as ~~steep slopes~~ critical areas, an existing cluster of significant trees, or other unique natural or historic features that should be preserved without disturbance, the City may reduce the individual required setbacks, however, the total of setbacks shall be no less than the sum of the minimum front yard, rear yard, and side yards setbacks. In order to exercise this option, the City must determine that a public benefit is gained by relaxing any setback standard. The following criteria shall apply:

1. No rear or side yard setback shall be less than five feet.

2. The front yard setback adjacent to street shall be no less than 15 feet in R-4 and R-6 and 10 feet in all other zones. (See Exception 20.50.070(1).)

Subchapter 5.

Tree Conservation, Land Clearing and Site Grading Standards

20.50.310 Exemptions from permit.

A. **Complete Exemptions.** The following activities are exempt from the provisions of this subchapter and do not require a permit:

1. Emergency situation on private property involving danger to life or property or substantial fire hazards.

   a. **Statement of Purpose.** Retention of significant trees and vegetation is necessary in order to utilize natural systems to control surface water runoff, reduce erosion and associated water quality impacts, reduce the risk of floods and landslides, maintain fish and wildlife habitat and preserve the City's natural, wooded character. Nevertheless, when certain trees become unstable or damaged, they may constitute a hazard requiring cutting in whole or part. Therefore, it is the purpose of this section to provide a reasonable and effective mechanism to minimize the risk to human health and property while preventing needless loss of healthy, significant trees and vegetation, especially in critical areas and their buffers.

   b. For purposes of this section, "Director" means the Director of the Department and his or her designee.

   c. In addition to other exemptions of SMC 20.50.290 through 20.50.370, a request for the cutting of any tree that is an active and imminent hazard such as tree limbs or trunks that are demonstrably cracked, leaning toward overhead utility lines or structures, or are uprooted by flooding, heavy winds or storm events. After the tree removal, the City will need photographic proof or other documentation and the appropriate application approval, if any. The City retains the right to dispute the emergency and require that the party obtain a clearing permit and/or require that replacement trees be replanted as mitigation.

2. Removal of trees and/or ground cover by the City and/or utility provider in situations involving immediate danger to life or property, substantial fire hazards, or interruption of services provided by a utility. The City retains the right to dispute the emergency and require that the party obtain a clearing permit and/or require that replacement trees be replanted as mitigation.

3. Installation and regular maintenance of public utilities, under direction of the Director, except substation construction and installation or construction of utilities in parks or environmentally ~~sensitive~~ critical areas.

4. Cemetery graves involving less than 50 cubic yards of excavation, and related fill per each cemetery plot.

5. Removal of trees from property zoned NB, CB, MB and TC-1, 2 and 3, and MUR-70' unless within a critical area of critical area buffer.

6. Removal and restoration of vegetation within critical areas or their buffers consistent with the provisions of SMC 20.80.030(E) or removal of trees consistent with SMC 20.80.030(G) unless a permit is specifically noted under SMC 20.80.030(E).~~Within City-owned property, removal of noxious weeds or invasive vegetation as identified by the King County Noxious Weed Control Board in a wetland buffer, stream buffer or the area within a three-foot radius of a tree on a steep slope is allowed when:~~

   ~~a. Undertaken with hand labor, including handheld mechanical tools, unless the King County Noxious Weed Control Board otherwise prescribes the use of riding mowers, light mechanical cultivating equipment, herbicides or biological control methods; and~~

   ~~b. Performed in accordance with SMC 20.80.085, Pesticides, herbicides and fertilizers on City-owned property, and King County best management practices for noxious weeds and invasive vegetation; and~~

   ~~c. The cleared area is revegetated with native vegetation and stabilized against erosion in accordance~~

~~with the Department of Ecology 2005 Stormwater Management Manual for Western Washington; and~~

~~d. All work is performed above the ordinary high water mark and above the top of a stream bank; and~~

~~e. No more than 3,000 square feet of soil may be exposed at any one time.~~

B. **Partial Exemptions.** With the exception of the general requirements listed in SMC 20.50.300, the following are exempt from the provisions of this subchapter, provided the development activity does not occur in a critical area or critical area buffer. For those exemptions that refer to size or number, the thresholds are cumulative during a 36-month period for any given parcel:

1. The removal of up to a maximum of six significant trees (excluding trees greater than 30 inches DBH per tree) in accordance with Table 20.50.310(B)(1) (see Chapter 20.20 SMC, Definitions).

Table 20.50.310(B)(1) – Exempt Trees

Lot size in square feet	Number of trees
Up to 7,200	3
7,201 to 14,400	4
14,401 to 21,780	5
21,781 and above	6

2. The removal of any tree greater than 30 inches DBH, or exceeding the numbers of trees specified in the table above, shall require a clearing and grading permit (SMC 20.50.320 through 20.50.370).

3. Landscape maintenance and alterations on any property that involves the clearing of less than 3,000 square feet, or less than 1,500 square feet if located in a special drainage area, provided the tree removal threshold listed above is not exceeded. (Ord. 706 § 1 (Exh. A), 2015; Ord. 695 § 1 (Exh. A), 2014; Ord. 640 § 1 (Exh. A), 2012; Ord. 581 § 1 (Exh. 1), 2010; Ord. 560 § 4 (Exh. A), 2009; Ord. 531 § 1 (Exh. 1), 2009; Ord. 434 § 1, 2006; Ord. 398 § 1, 2006; Ord. 238 Ch. V § 5(C), 2000).

20.50.320 Specific activities subject to the provisions of this subchapter.

All activities listed below must comply with the provisions of this subchapter. For those exemptions that refer to size or number, the thresholds are cumulative during a 36-month period for any given parcel:

A. The construction of new residential, commercial, institutional, or industrial structures or additions.

B. Earthwork of 50 cubic yards or more. This means any activity which moves 50 cubic yards of earth, whether the material is excavated or filled and whether the material is brought into the site, removed from the site, or moved around on the site.

C. Clearing of 3,000 square feet of land area or more or 1,500 square feet or more if located in a special drainage area.

D. Removal of more than six significant trees from any property.

E. Any clearing, ~~or~~ grading, or other land disturbing activity within a critical area or buffer of a critical area unless otherwise exempt from the provisions of this subchapter in SMC 20.50.310.

F. Any change of the existing grade by four feet or more.

G. Repealed by Ord. 640.

H. Any land surface modification not specifically exempted from the provisions of this subchapter.

I. Development that creates new, replaced or a total of new plus replaced impervious surfaces over 1,500 square feet in size, or 500 square feet in size if located in a landslide hazard area or special drainage area.

J. Any construction of public drainage facilities to be owned or operated by the City.

K. Any construction involving installation of private storm drainage pipes 12 inches in diameter or larger.

L. Any modification of or construction which affects a stormwater quantity or quality control system. (Does not include maintenance or repair to the original condition.)

M. Applicants for forest practice permits (Class IV – general permit) issued by the Washington State Department of Natural Resources (DNR) for the conversion of forested sites to developed sites are also required to obtain a clearing and grading permit. For all other forest practice permits (Class II, III, IV – special permit) issued by DNR for the purpose of commercial timber operations, no development permits will be issued for six years following tree removal. (Ord. 640 § 1 (Exh. A), 2012; Ord. 531 § 1 (Exh. 1), 2009; Ord. 398 § 1, 2006; Ord. 238 Ch. V § 5(D), 2000).

20.50.330 Project review and approval.

A. Review Criteria. The Director shall review the application and approve the permit, or approve the permit with conditions; provided, that the application demonstrates compliance with the criteria below.

1. The proposal complies with SMC 20.50.340 through 20.50.370, or has been granted a deviation from the Engineering Development Manual.

2. The proposal complies with all standards and requirements for the underlying permit.

3. If the project is located in a critical area or buffer, or has the potential to impact a critical area, the project must comply with the critical areas ~~standards~~ regulations, Chapter 20.80 SMC, or Shoreline Master Program, SMC Title 20, Division II.

4. The project complies with all requirements of the Engineering Development Manual and SMC 13.10.200, Surface Water Management Code and adopted standards.

5. All required financial guarantees or other assurance devices are posted with the City.

B. Professional Evaluation. In determining whether a tree removal and/or clearing is to be approved or conditioned, the Director may require the submittal of a professional evaluation and/or a tree protection plan prepared by a certified arborist at the applicant's expense, where the Director deems such services necessary to demonstrate compliance with the standards and guidelines of this subchapter. Third party review of plans, if required, shall also be at the applicant's expense. The Director shall have the sole authority to determine whether the professional evaluation submitted by the applicant is adequate, the evaluator is qualified and acceptable to the City, and whether third party review of plans is necessary. Required professional evaluation(s) and services may include:

1. Providing a written evaluation of the anticipated effects of proposed construction on the viability of trees on a site;

2. Providing a hazardous tree assessment;

3. Developing plans for, supervising, and/or monitoring implementation of any required tree protection or replacement measures; and/or

4. Conducting a post-construction site inspection and evaluation.

C. Conditions of Approval. The Director may specify conditions for work at any stage of the application or project

as he/she deems necessary to ensure the proposal's compliance with requirements of this subchapter, critical area ~~standards~~ regulations, Chapter 20.80 SMC, or Shoreline Master Program, SMC Title 20, Division II, the Engineering Development Manual, the adopted stormwater management regulations, and any other section of the Shoreline Development Code, or to protect public or private property. These conditions may include, but are not limited to, hours or seasons within which work may be conducted, or specific work methods.

D. Designation of Protected Trees.

1. For the following areas, the retention and planting plan and any application and permit plans shall show all trees designated for protection: areas designated as "protected trees," "native growth protection areas," "~~sensitive~~ critical areas," "~~sensitive~~ critical area buffers," or such other designation as may be approved by the Director. Protected vegetation, including protected trees, shall not be modified, harmed or removed except as provided in this subchapter.

2. The Director may require that protected trees be permanently preserved within a tract, easement or other permanent protective mechanism. When required, the location, purpose, and limitation of these protected areas shall be shown on the face of the deed, plat, binding site plan, or similar document and shall be recorded with the King County ~~Department of~~ Recorder's Office ~~and Elections~~ or its successor. The recorded document shall include the requirement that the protected areas shall not be removed, amended or modified without the written approval of the City.

E. Preconstruction Meeting Required. Prior to the commencement of any permitted clearing and grading activity, a preconstruction meeting shall be held on-site with the permittee and appropriate City staff. The project site shall be marked in the field as follows:

1. The extent of clearing and grading to occur;

2. Delineation and protection with clearing limit fencing of any critical areas and critical area buffers;

3. Trees to be removed and retained; and

4. Property lines. (Ord. 631 § 1 (Exh. 1), 2012; Ord. 531 § 1 (Exh. 1), 2009; Ord. 398 § 1, 2006; Ord. 238 Ch. V § 5(E), 2000).

20.50.350 Development standards for clearing activities.

A. No trees or ground cover shall be removed from critical area or buffer unless the proposed activity is consistent with the critical area standards.

B. Minimum Retention Requirements. All proposed development activities that are not exempt from the provisions of this subchapter shall meet the following:

1. At least 20 percent of the significant trees on a given site shall be retained, excluding critical areas, and critical area buffers, or

2. At least 30 percent of the significant trees on a given site (which may include critical areas and critical area buffers) shall be retained.

3. Tree protection measures ensuring the preservation of all trees identified for retention on approved site plans shall be guaranteed during development through the posting of a performance bond equal to the value of the installation and maintenance of those protection measures.

4. The minimum amount of trees to be retained cannot be removed for a period of 36 months and shall be guaranteed through an approved maintenance agreement.

5. The Director may require the retention of additional trees to meet the stated purpose and intent of this title, as required by the critical areas ~~standards~~ regulations, Chapter 20.80 SMC, or Shoreline Master Program, SMC Title 20, Division II, or as site-specific conditions demand using SEPA substantive

authority.

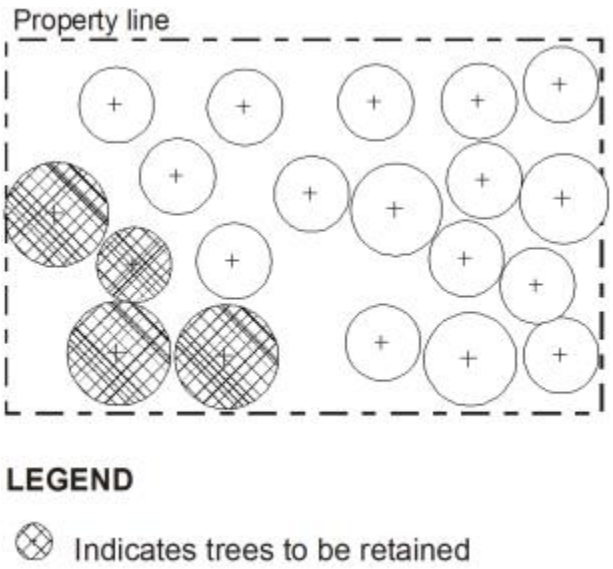


Figure 20.50.350(B)(1): Demonstration of the retention of 20 percent of the significant trees on a site containing no critical areas.

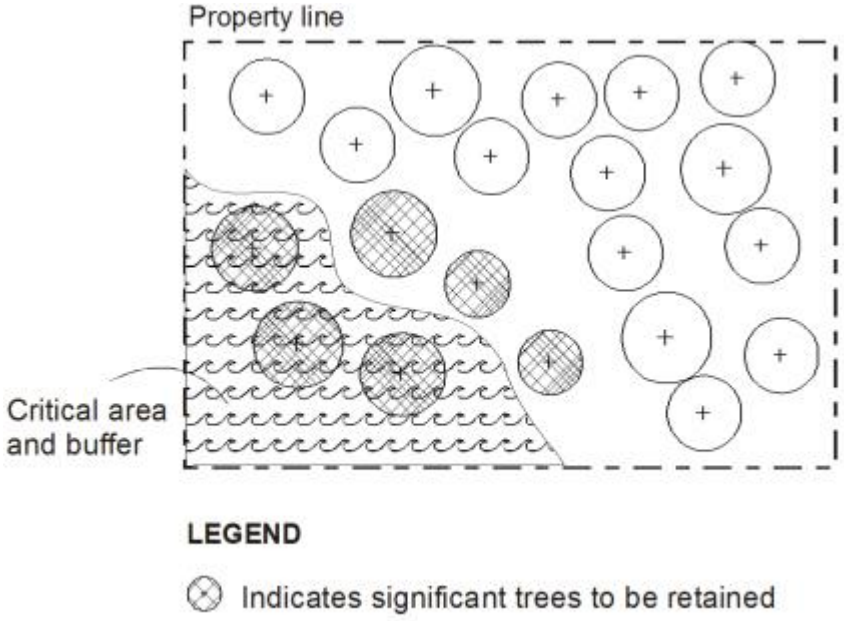


Figure 20.50.350(B)(2): Demonstration of the retention of 30 percent of the significant trees on a site containing a critical area.

Exception 20.50.350(B):

1. *The Director may allow a reduction in the minimum significant tree retention percentage to facilitate preservation of a greater number of smaller trees, a cluster or grove of trees, contiguous perimeter buffers, distinctive skyline features, or based on the City's concurrence with a written recommendation of an arborist certified by the International Society of Arboriculture and approved by the City that retention*

of the minimum percentage of trees is not advisable on an individual site.

2. *In addition, the Director may allow a reduction in the minimum significant tree retention percentage if all of the following criteria are satisfied: The exception is necessary because:*

   - *There are special circumstances related to the size, shape, topography, location or surroundings of the subject property.*
   - *Strict compliance with the provisions of this Code may jeopardize reasonable use of property.*
   - *Proposed vegetation removal, replacement, and any mitigation measures are consistent with the purpose and intent of the regulations.*
   - *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. *If an exception is granted to this standard, the applicant shall still be required to meet the basic tree replacement standards identified in SMC 20.50.360 for all significant trees removed beyond the minimum allowed per parcel without replacement and up to the maximum that would ordinarily be allowed under SMC 20.50.350(B).*

4. *In addition, the applicant shall be required to plant four trees for each significant tree removed that would otherwise count towards the minimum retention percentage. Trees replaced under this provision shall be at least 12 feet high for conifers and three inches in caliper if otherwise. This provision may be waived by the Director for restoration enhancement projects conducted under an approved vegetation management plan.*

C. **Incentives for Higher Levels of Tree Protection.** The Director may grant reductions or adjustments to other site development standards if the protection levels identified in subsection (B) of this section are exceeded. On a case-by-case review, the Director shall determine the balance between tree protection that exceeds the established minimum percentage and variations to site development requirements. If the Director grants adjustments or reductions to site development standards under this provision, then tree protection requirements shall be recorded on the face of the plat, as a notice to title, or on some other legal document that runs with the property. Adjustments that may be considered are:

1. Reductions or variations of the area, width, or composition of required open space and/or landscaping;
2. Variations in parking lot design and/or any access driveway requirements;
3. Variations in building setback requirements;
4. Variations of grading and stormwater requirements.

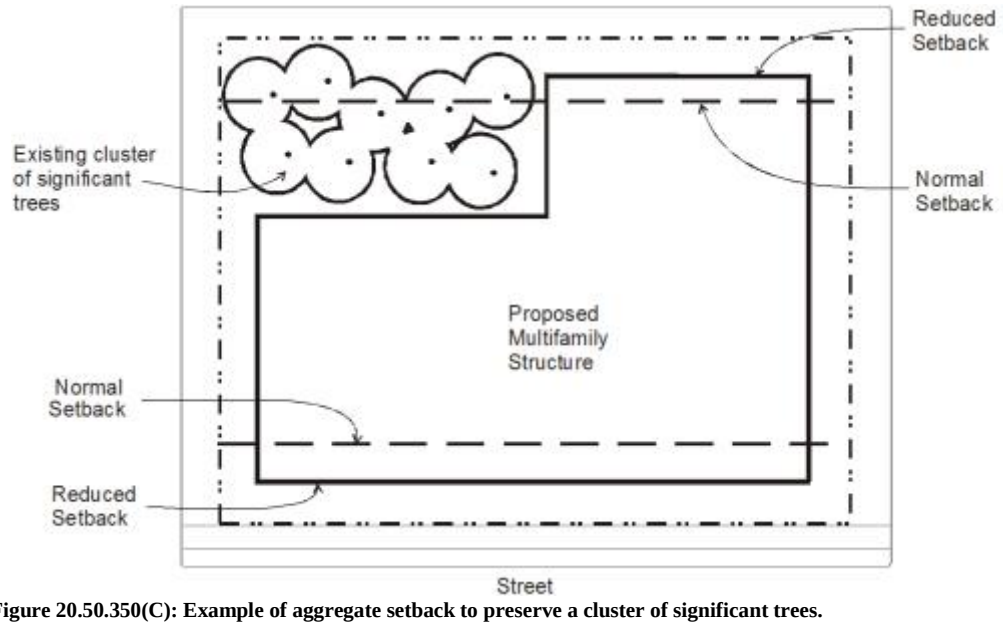


Figure 20.50.350(C): Example of aggregate setback to preserve a cluster of significant trees.

D. Site Design. Site improvements shall be designed and constructed to meet the following:

1. Trees should be protected within vegetated islands and stands rather than as individual, isolated trees scattered throughout the site.

2. Site improvements shall be designed to give priority to protection of trees with the following characteristics, functions, or location:

- Existing stands of healthy trees that have a reasonable chance of survival once the site is developed, are well shaped to withstand the wind and maintain stability over the long term, and will not pose a threat to life or property.
- Trees which exceed 50 feet in height.
- Trees and tree clusters which form a continuous canopy.
- Trees that create a distinctive skyline feature.
- Trees that have a screening function or provide relief from glare, blight, commercial or industrial harshness.
- Trees providing habitat value, particularly riparian habitat.
- Trees within the required yard setbacks or around the perimeter of the proposed development.
- Trees having a significant land stability function.
- Trees adjacent to public parks, open space, and ~~sensitive~~ critical area buffers.
- Trees having a significant water-retention function.

3. Building footprints, parking areas, roadways, utility corridors and other structures shall be designed and located with a consideration of tree protection opportunities.

4. The project grading plans shall accommodate existing trees and avoid alteration to grades around existing significant trees to be retained.

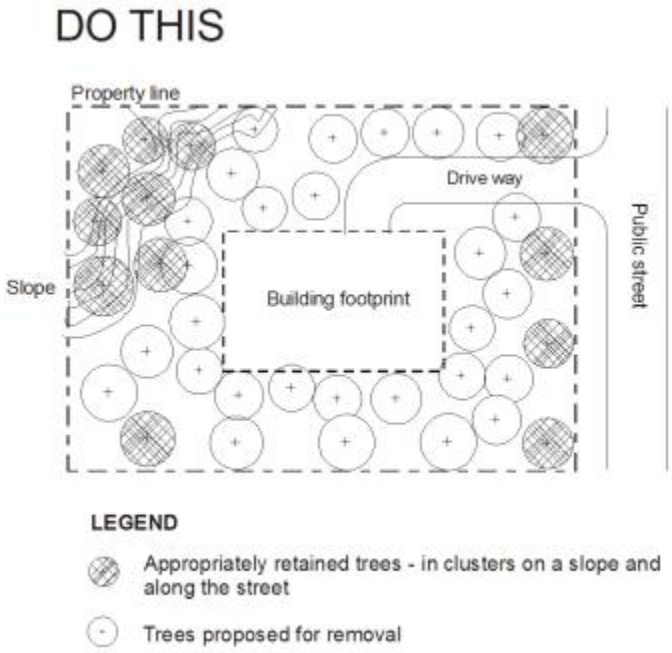
5. Required open space and recreational space shall be designed and located to protect existing stands of trees.

6. The site design and landscape plans shall provide suitable locations and adequate area for replacement trees as required in SMC 20.50.360.

7. In considering trees for protection, the applicant shall avoid selecting trees that may become hazardous because of wind gusts, including trees adjacent to utility corridors where falling trees may cause power outages or other damage. Remaining trees may be susceptible to blow downs because of loss of a buffer from other trees, grade changes affecting the tree health and stability and/or the presence of buildings in close proximity.

8. If significant trees have been removed from a closed, forested situation, an adequate buffer of smaller trees shall be retained or planted on the fringe of such significant trees as determined by a certified arborist.

9. All trees located outside of identified building footprints and driveways and at least 10 feet from proposed structures shall be considered as eligible for preservation. However, all significant trees on a site shall be considered when calculating the minimum retention percentage.



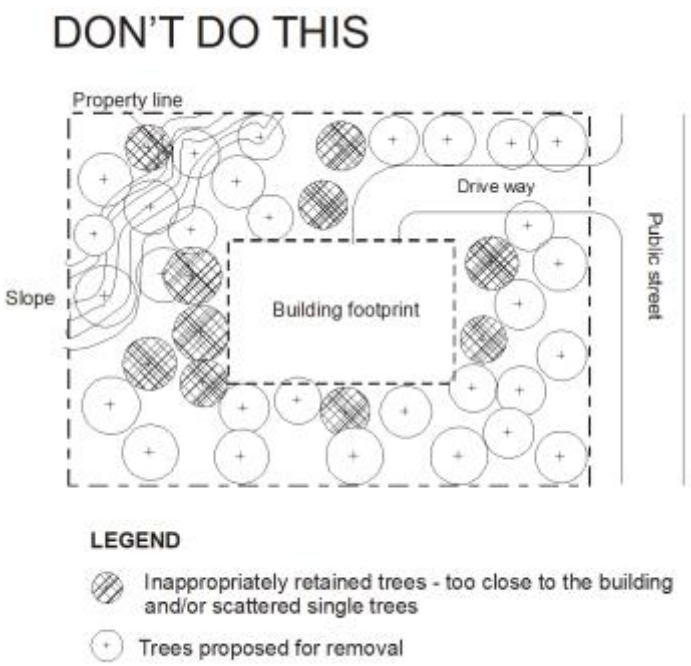


Figure 20.50.350(D): Example of the application of tree retention site design standards. Appropriate retention of a cluster of trees on a slope and frontage trees are shown above. Inappropriate retention of scattered single trees and trees near structures are shown below.

E. Cutting and Pruning of Protected Trees. Trees protected under the provisions of this section shall not be topped. Pruning and maintenance of protected trees shall be consistent with best management practices in the field of arboriculture, such as the American National Standard for Tree Care Operations – Tree, Shrub, and Other Wood Plant Maintenance- Standard Practices (ANSI A300) or similar, and further the long-term health of the tree. Excessive pruning, including topping, stripping, or imbalances, shall not be allowed unless necessary to protect life and property. Protected trees may be pruned to enhance views using methods such as windowing, interlimbing, or skirting up, when completed by a qualified professional arborist and consistent with best management practices.

F. Landmark Trees. Trees which have been designated as landmark trees by the City of Shoreline because they are 30 inches or larger in diameter or particularly impressive or unusual due to species, size, shape, age, historical significance and/or are an outstanding row or group of trees, have become a landmark to the City of Shoreline or are considered specimens of their species shall not be removed unless the applicant meets the exception requirements of subsection (B) of this section. The Director shall establish criteria and procedures for the designation of landmark trees. (Ord. 640 § 1 (Exh. A), 2012; Ord. 406 § 1, 2006; Ord. 398 § 1, 2006; Ord. 238 Ch. V § 5(G), 2000).

20.50.360 Tree replacement and site restoration.

A. Plans Required. Prior to any tree removal, the applicant shall demonstrate through a clearing and grading plan, tree retention and planting plan, landscape plan, critical area report, ~~protection and~~ mitigation or restoration plans, or other plans acceptable to the Director that tree replacement will meet the minimum standards of this section. Plans shall be prepared by a qualified person or persons at the applicant's expense. Third party review of plans, if required, shall be at the applicant's expense.

B. The City may require the applicant to relocate or replace trees, shrubs, and ground covers, provide erosion control methods, hydroseed exposed slopes, or otherwise protect and restore the site as determined by the Director.

C. Replacement Required. Trees removed under the partial exemption in SMC 20.50.310(B)(1) may be removed

per parcel with no replacement of trees required. Any significant tree proposed for removal beyond this limit should be replaced as follows:

1. One existing significant tree of eight inches in diameter at breast height for conifers or 12 inches in diameter at breast height for all others equals one new tree.

2. Each additional three inches in diameter at breast height equals one additional new tree, up to three trees per significant tree removed.

3. Minimum size requirements for trees replaced under this provision: deciduous trees shall be at least 1.5 inches in caliper and evergreens six feet in height.

Exception 20.50.360(C):

1. No tree replacement is required when the tree is proposed for relocation to another suitable planting site; provided, that relocation complies with the standards of this section.

2. The Director may allow a reduction in the minimum replacement trees required or off-site planting of replacement trees if all of the following criteria are satisfied:

- *There are special circumstances related to the size, shape, topography, location or surroundings of the subject property.*
- *Strict compliance with the provisions of this Code may jeopardize reasonable use of property.*
- *Proposed vegetation removal, replacement, and any mitigation measures are consistent with the purpose and intent of the regulations.*
- *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. The Director may waive this provision for site restoration or enhancement projects conducted under an approved vegetation management plan.

D. The Director may require that a portion of the replacement trees be native species in order to restore or enhance the site to predevelopment character.

E. The condition of replacement trees shall meet or exceed current American Nursery and Landscape Association or equivalent organization's standards for nursery stock.

F. Replacement of removed trees with appropriate native trees at a ratio consistent with section C, or as determined by the Director based on recommendations in a critical area report, will be required in critical areas.

G. The Director may consider smaller-sized replacement plants if the applicant can demonstrate that smaller plants are more suited to the species, site conditions, and to the purposes of this subchapter, and are planted in sufficient quantities to meet the intent of this subchapter.

H. All required replacement trees and relocated trees shown on an approved permit shall be maintained in healthy condition by the property owner throughout the life of the project, unless otherwise approved by the Director in a subsequent permit.

I. Where development activity has occurred that does not comply with the requirements of this subchapter, the requirements of any other section of the Shoreline Development Code, or approved permit conditions, the Director may require the site to be restored to as near preproject original condition as possible. Such restoration shall be determined by the Director and may include, but shall not be limited to, the following:

1. Filling, stabilizing and landscaping with vegetation similar to that which was removed, cut or filled;

2. Planting and maintenance of trees of a size and number that will reasonably assure survival and that replace functions and values of removed trees; and

3. Reseeding and landscaping with vegetation similar to that which was removed, in areas without significant trees where bare ground exists.

J. Significant trees which would otherwise be retained, but which were unlawfully removed or damaged or destroyed through some fault of the applicant or their representatives shall be replaced in a manner determined by the Director.

K. **Performance Assurance.**

1. The Director may require a performance bond for tree replacement and site restoration permits to ensure the installation of replacement trees, and/or compliance with other landscaping requirements as identified on the approved site plans.

2. A maintenance bond shall be required after the installation of required site improvements and prior to the issuance of a certificate of occupancy or finalization of permit and following required landscape installation or tree replacement. The maintenance bond and associated agreement shall be in place to ensure adequate maintenance and protection of retained trees and site improvements. The maintenance bond shall be for an amount not to exceed the estimated cost of maintenance and protection measures for a minimum of 36 months or as determined by the Director.

3. The Director shall exempt individual single-family lots from a maintenance bond, except where a clearing violation has occurred or tree replacement is located within critical areas or critical area buffers.

L. **Monitoring.** The Director may require submittal of periodic monitoring reports as necessary to ensure survival of replacement trees. The contents of the monitoring report shall be determined by the Director.

M. **Discovery of Undocumented Critical Areas.** The Director may stop work authorized by a clearing and grading permit if previously undocumented critical areas are discovered on the site. The Director has the authority to require additional studies, plans and mitigations should previously undocumented critical areas be found on a site. (Ord. 640 § 1 (Exh. A), 2012; Ord. 406 § 1, 2006; Ord. 398 § 1, 2006; Ord. 299 § 1, 2002; Ord. 238 Ch. V § 5(H), 2000).

Title 20

DEVELOPMENT CODE

Division II. Shoreline Master Plan

20.210 SMP Definitions
20.230 SMP Shoreline Policies and Regulations

NOTE: The only changes to 20.210 SMP Definitions are deletions. This clean copy does not include any other definitions. Please see existing code for remaining definitions. See moved and revised definitions in Chapter 20.20 in the draft Miscellaneous Title 20 Changes document.

20.210.010 Definitions.
The Master Program shall be implemented according to the definitions contained in Chapter 20.20 SMC, Chapter 90.58 RCW, and WAC 173-26-020. Where definitions contained in Chapter 20.20 SMC conflict or differ from definitions contained in the Shoreline Management Act, the definitions in the RCW and WAC shall prevail.

(Ord. 668 § 4 (Exh. 3), 2013).

Chapter 20.230

SMP Shoreline Policies and Regulations

Sections:

Subchapter 1. General Policies and Regulations

20.230.020 Environmental.
C. Water.

Policies

1. Shoreline development and activities shall result in no net loss of ecological functions.

2. Development and regulated activities shall minimize impacts to hydrogeologic processes, surface water drainage, and ground water recharge.

3. Measures shall be incorporated into the development, use, or activity to protect water bodies and wetlands from all sources of pollution including, but not limited to, sediment and silt, petrochemicals, and wastes and dredge spoils.

4. Adequate provisions to prevent water runoff from contaminating surface and ground water shall be included in development design. The Director may specify the method of surface water control and maintenance programs.

5. All measures for the treatment of surface water runoff for the purpose of maintaining and/or enhancing water quality shall be conducted on site. Off-site treatment facilities may be considered if on-site treatment is not feasible.

6. Point and nonpoint source pollution should be managed on a basin-wide basis to protect water quality and support the efforts of shoreline property owners to maintain shoreline ecological functions.

Regulations

1. Pesticides, herbicides and fertilizers that have been identified by State or Federal agencies as harmful to humans, wildlife, or fish shall not be used on City-owned property within the shoreline jurisdiction or for development or uses approved under a substantial development permit, shoreline conditional use permit or shoreline variance, except as allowed by the Director for the following circumstances:

a. When use of pesticides, herbicides and fertilizers is consistent with the best management practices (BMPs) for the project or use proposed;

b. When the Director determines that an emergency situation exists where there is a serious threat to public safety, health or the environment and that an otherwise prohibited application must be used as a last resort.

Where chemical fertilizer, herbicide, or pesticide use is necessary to protect existing natural vegetation or establish new vegetation as part of an erosion control or mitigation plan, the use of time release fertilizer and herbicides shall be preferred over liquid or concentrate application, except as used in targeted hand applications.

2. The release of oil, chemical, or hazardous materials onto or into the water is prohibited. Equipment for the transportation, storage, handling, or application of such materials shall be maintained in a safe and leakproof condition. If there is evidence of leakage, the further use of such equipment shall be suspended until the deficiency has been satisfactorily corrected. During construction, vehicle refueling and vehicle maintenance shall occur outside of regulated shoreline areas.

3. The bulk storage of oil, fuel, chemical, or hazardous materials, on either a temporary or a permanent basis, is prohibited, except for uses allowed by the zoning classification. For the purpose of this section, heating oil, small boat

fuel, yard maintenance, equipment fuel, propane, sewage sumps, and similar items common to single-family residential uses are not included in this definition.

4. Surface water control must comply with the adopted stormwater manual and be consistent with the Western Washington Phase II Municipal Stormwater Permit.

20.230.030 Environmentally sensitive areas within the shoreline.

A. **Critical Areas.**

General Policy

1. Preserve and protect unique, rare, and fragile natural and manmade features and wildlife habitats.

2. Enhance the diversity of aquatic life, wildlife, and habitat within the shoreline.

3. Conserve and maintain designated open spaces for ecological, educational, and recreational purposes.

4. Recognize that the interest and concern of the public are essential to the improvement of the environment, and sponsor and support public information programs.

5. The level of public access should be appropriate to the degree of uniqueness or fragility of the geological and biological characteristics of the shoreline (e.g., wetlands, spawning areas).

6. Discourage intensive development of shoreline areas that are identified as hazardous or environmentally sensitive.

General Regulations

1. Critical areas in shoreline jurisdiction are regulated by the critical areas regulations (which were updated and adopted on November 2, 2015 by Ordinance No. 723 and including the floodplain management regulations adopted on August 6, 2012 by Ordinance No. 641) codified under Chapter 20.80 SMC, Critical Areas, which is herein incorporated into this SMP with the exceptions of the following:

a. SMC 20.80.010(C).

b. SMC 20.80.030.

c. SMC 20.80.040.

d. Provisions of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, that are not consistent with the Shoreline Management Act, Chapter 90.85 RCW, and supporting Washington Administrative Code chapters shall not apply in the shoreline jurisdictions.

e. Provisions of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, that include application of critical areas reasonable use and critical areas special use permit provisions of SMC 20.30.333 and 20.30.336 shall not apply within the shoreline jurisdiction. Within shoreline jurisdiction, the purpose of a variance permit is strictly limited to granting relief from specific bulk, dimensional or performance standards set forth in the applicable master program where there are extraordinary circumstances relating to the physical character or configuration of property such that the strict implementation of the master program will impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020. Specifically, the reasonable use and special use references in the following sections shall not apply:

i. 20.80.224(C)

ii. 20.80.274(A).

iii. 20.80.276(D).

iv. 20.80.300(C).

v. 20.80.324(C).

vi. 20.80.330(A)(7).

2. The provisions of Chapter 20.80 SMC, Critical Areas, must be factored into decisions regarding development within the regulated shoreline and associated critical areas.

3. All shoreline uses and activities shall be located, designed, constructed, and managed to protect or at least not adversely affect those natural features which are valuable, fragile, or unique in the region. They should also facilitate the appropriate intensity of human use of such features, including but not limited to:

a. Wetlands, including but not limited to marshes, bogs, and swamps;

b. Fish and wildlife habitats, including streams, nesting areas and migratory routes, spawning areas, and the presence of proposed or listed species;

c. Natural or manmade vistas or features;

d. Flood hazard areas; and/or

e. Geologic hazard areas, including erosion, landslide, and seismic hazard areas.

4. The standards of the City of Shoreline's critical area regulations shall apply within the shoreline jurisdiction, where critical areas are present. If there are any conflicts or unclear distinctions between the Master Program and the City's critical areas regulations, the most restrictive requirements apply as determined by the City.

5. Development within the regulated shoreline and associated critical areas must be consistent with the Western Washington Phase II Municipal Stormwater Permit and the adopted stormwater manual.

B. **Floodplain Management.** The following policies and regulations must be factored into decisions regarding all flood management planning and development within that portion of the 100-year floodplain that falls within Shoreline's shoreline jurisdiction (within 200 feet of OHWM).

Floodplain management involves actions taken with the primary purpose of preventing or mitigating damage due to flooding. Floodplain management can involve planning and zoning to control development, either to reduce risks to human life and property, or to prevent development from contributing to the severity of flooding. Floodplain management can also address the design of developments to reduce flood damage and the construction of flood controls, such as dikes, dams, engineered floodways, and bioengineering.

Policy

1. Flood management planning should be undertaken in a coordinated manner among affected property owners and public agencies and should consider the entire coastal system. This planning should consider off-site impacts such as erosion, accretion, and/or flood damage that might occur if shore protection structures are constructed.

2. Nonstructural control solutions are preferred over structural flood control devices, and should be used wherever possible when control devices are needed. Nonstructural controls include such actions as prohibiting or limiting development in areas that are historically flooded or limiting increases in peak flow runoff from new upland development. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions would not be able to reduce the damage.

3. Substantial stream channel modification, realignment, and straightening should be discouraged as a means of flood protection.

4. Where possible, public access should be integrated into the design of publicly financed flood management facilities.

5. The City supports the protection and preservation of the aquatic environment and the habitats it provides, and advocates balancing these interests with the City's intention to ensure protection of life and property from damage caused by flooding.

6. Development should avoid potential channel migration impacts.

C. **Wetlands.** Presently, the wetlands within the City's shoreline jurisdiction have not been delineated and rated using current State standards. As the wetland category combined with the habitat functions rating defines the required buffers using current State standards, the requirements of this section apply to any new development application in the vicinity of an associated wetland. At that time, the wetland and its buffers would need to be categorized and delineated and the activities would be regulated using the following standards.

1. **Policy.**

a. Wetland ecosystems serve many important ecological and environmental functions, which are beneficial to the public welfare. Such functions include, but are not limited to, providing food, breeding, nesting and/or rearing habitat for fish and wildlife; recharging and discharging ground water; contributing to stream flow during low flow periods; stabilizing stream banks and shorelines; storing storm and floodwaters to reduce flooding and erosion; and improving water quality through biofiltration, adsorption, and retention and transformation of sediments, nutrients, and toxicants; as well as education and scientific research.

b. Wetland areas should be identified according to established identification and delineation procedures and provided appropriate protection consistent with the policies and regulations of this Master Program.

c. The greatest protection should be provided to wetlands of exceptional resource value, which are defined as those wetlands that include rare, sensitive, or irreplaceable systems such as:

i. Documented or potential habitat for an endangered, threatened, or sensitive species;

ii. High quality native wetland systems as determined by the Washington State Natural Heritage Program;

iii. Significant habitat for fish or aquatic species as determined by the appropriate State resource agency;

iv. Diverse wetlands exhibiting a high mixture of wetland classes and subclasses as defined in the U.S. Fish and Wildlife Service classification system;

v. Mature forested swamp communities; and/or

vi. Sphagnum bogs or fens.

d. A wetland buffer of adequate width should be maintained between a wetland and the adjacent development to protect the functions and integrity of the wetland.

e. The width of the established buffer zone should be based upon the functions and sensitivity of the wetland, the characteristics of the existing buffer, and the potential impacts associated with the adjacent land use.

f. All activities that could potentially affect wetland ecosystems should be controlled both within the wetland and the buffer zone to prevent adverse impacts to the wetland functions.

g. No wetland alteration should be authorized unless it can be shown that the impact is both unavoidable and necessary, and that resultant impacts are offset through the deliberate restoration, creation, or enhancement of wetlands.

h. Wetland restoration, creation, and enhancement projects should result in no net loss of wetland acreage and functions. Where feasible, wetland quality should be improved.

i. Wetlands that are impacted by activities of a temporary nature should be restored immediately upon project completion.

j. In-kind replacement of functional wetland values is preferred. Where in-kind replacement is not feasible or practical due to the characteristics of the existing wetland, substitute ecological resources of equal or greater value should be provided.

k. On-site replacement of wetlands is preferred. Where on-site replacement of a wetland is not feasible or practical due to characteristics of the existing location, replacement should occur within the same watershed and in as close proximity to the original wetland as possible.

l. Where possible, wetland restoration, creation, and enhancement projects should be completed prior to wetland alteration. In all other cases, replacement should be completed prior to use or occupancy of the activity or development.

m. Applicants should develop comprehensive mitigation plans to ensure long-term success of the wetland restoration, creation, or enhancement project. Such plans should provide for sufficient monitoring and contingencies to ensure wetland persistence.

n. Applicants should demonstrate sufficient scientific expertise, supervisory capability, and financial resources to complete and monitor the mitigation project.

o. Proposals for restoration, creation, or enhancement should be coordinated with appropriate resource agencies to ensure adequate design and consistency with other regulatory requirements.

p. Activities should be prevented in wetland buffer zones except where such activities have no adverse impacts on wetland ecosystem functions.

q. Wetland buffer zones should be retained in their natural condition unless revegetation is necessary to improve or restore the buffer.

r. Land use should be regulated to avoid adverse effects on wetlands and maintain the functions and values of wetlands throughout Shoreline, and review procedures should be established for development proposals in and adjacent to wetlands.

Title 20

DEVELOPMENT CODE

Division II. Shoreline Master Plan

20.210 SMP Definitions
20.230 SMP Shoreline Policies and Regulations

NOTE: Changes are indicated as follows –
Insertions are single underline
Deletions are ~~single strikethrough~~
Existing language moved from another section is double underline
Existing language deleted and moved to new location in the code is ~~double strikethrough~~

The only definitions included here are the ones proposed to be deleted or moved to Chapter 20.20 Definitions.

20.210.010 Definitions.
The Master Program shall be implemented according to the definitions contained in Chapter 20.20 SMC, Chapter 90.58 RCW, and WAC 173-26-020. Where definitions contained in Chapter 20.20 SMC conflict or differ from definitions contained in the Shoreline Management Act, the definitions in the RCW and WAC shall prevail.

~~**Anadromous Fish.** Fish born in fresh water, which spend most of their lives in the sea and return to fresh water to spawn. Salmon, smelt, shad, striped bass, and sturgeon are common examples.~~

~~**Enhancement.** Alteration of an existing resource to improve or increase its characteristics and processes without degrading other existing functions. Enhancements are to be distinguished from resource creation or restoration projects.~~

~~**Grading.** The movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.~~

~~**Native Vegetation.** Vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been expected to naturally occur on the site. Examples include trees such as madrona, Douglas fir, western hemlock, western red cedar, alder, big leaf maple, and vine maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.~~

~~**Restoration.** The reestablishment or upgrading of impaired ecological processes or functions. This may be accomplished through measures including but not limited to revegetation, removal of intrusive structures, toxic materials, or invasive or nonnative plants. Restoration does not imply a requirement for returning the area to pre-European settlement conditions.~~

~~**Wetland Delineation.** A technical procedure performed by a wetland specialist to determine the area of a wetland, ascertaining the wetland's classification, function, and value, and to define the boundary between a wetland and adjacent uplands. Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved Federal wetland delineation manual and applicable regional supplements. All areas within the City meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this program.~~

~~**Wetlands.** Areas that are inundated or saturated by surface water or ground 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 swamps, marshes, bogs, and similar areas. Wetlands do~~

~~not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands.~~(Ord. 668 § 4 (Exh. 3), 2013).

Chapter 20.230

SMP Shoreline Policies and Regulations

Sections:

Subchapter 1. General Policies and Regulations

20.230.020 Environmental.
C. Water.

Policies

1. Shoreline development and activities shall result in no net loss of ecological functions.

2. Development and regulated activities shall minimize impacts to hydrogeologic processes, surface water drainage, and ground water recharge.

3. Measures shall be incorporated into the development, use, or activity to protect water bodies and wetlands from all sources of pollution including, but not limited to, sediment and silt, petrochemicals, and wastes and dredge spoils.

4. Adequate provisions to prevent water runoff from contaminating surface and ground water shall be included in development design. The Director may specify the method of surface water control and maintenance programs. ~~Surface water control must comply with the adopted stormwater manual.~~

5. All measures for the treatment of surface water runoff for the purpose of maintaining and/or enhancing water quality shall be conducted on site. Off-site treatment facilities may be considered if on-site treatment is not feasible.

6. Point and nonpoint source pollution should be managed on a basin-wide basis to protect water quality and support the efforts of shoreline property owners to maintain shoreline ecological functions.

Regulations

1. Pesticides, herbicides and fertilizers that have been identified by State or Federal agencies as harmful to humans, wildlife, or fish shall not be used on City-owned property within the shoreline jurisdiction or for development or uses approved under a substantial development permit, shoreline conditional use permit or shoreline variance, except as allowed by the Director for the following circumstances:

a. When use of pesticides, herbicides and fertilizers is consistent with the best management practices (BMPs) for the project or use proposed;

b. When the Director determines that an emergency situation exists where there is a serious threat to public safety, health or the environment and that an otherwise prohibited application must be used as a last resort.

Where chemical fertilizer, herbicide, or pesticide use is necessary to protect existing natural vegetation or establish new vegetation as part of an erosion control or mitigation plan, the use of time release fertilizer and herbicides shall be preferred over liquid or concentrate application, except as used in targeted hand applications.

2. The release of oil, chemical, or hazardous materials onto or into the water is prohibited. Equipment for the transportation, storage, handling, or application of such materials shall be maintained in a safe and leakproof condition. If there is evidence of leakage, the further use of such equipment shall be suspended until the deficiency has been satisfactorily corrected. During construction, vehicle refueling and vehicle maintenance shall occur outside of regulated shoreline areas.

3. The bulk storage of oil, fuel, chemical, or hazardous materials, on either a temporary or a permanent basis, is prohibited, except for uses allowed by the zoning classification. For the purpose of this section, heating oil, small boat

fuel, yard maintenance, equipment fuel, propane, sewage sumps, and similar items common to single-family residential uses are not included in this definition.

4. Surface water control must comply with the adopted stormwater manual and be consistent with the Western Washington Phase II Municipal Stormwater Permit.

20.230.030 Environmentally sensitive areas within the shoreline.

A. **Critical Areas.**

General Policy

1. Preserve and protect unique, rare, and fragile natural and manmade features and wildlife habitats.

2. Enhance the diversity of aquatic life, wildlife, and habitat within the shoreline.

3. Conserve and maintain designated open spaces for ecological, educational, and recreational purposes.

4. Recognize that the interest and concern of the public are essential to the improvement of the environment, and sponsor and support public information programs.

5. The level of public access should be appropriate to the degree of uniqueness or fragility of the geological and biological characteristics of the shoreline (e.g., wetlands, spawning areas).

6. Discourage intensive development of shoreline areas that are identified as hazardous or environmentally sensitive.

General Regulations

1. Critical areas in shoreline jurisdiction are regulated by the critical areas regulations (which were updated and adopted on ~~February 27, 2006, by Ordinance No. 398~~ November 2, 2015 by Ordinance No. 723 and including the floodplain management regulations adopted on August 6, 2012 by Ordinance No. 641) codified under Chapter 20.80 SMC, Critical Areas, which is herein incorporated into this SMP with the exceptions of the following:

a. SMC 20.80.010(C).

b. SMC 20.80.030.

~~b~~c. SMC 20.80.040.

d. Provisions of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, that are not consistent with the Shoreline Management Act, Chapter 90.85 RCW, and supporting Washington Administrative Code chapters shall not apply in the shoreline jurisdictions.

e. Provisions of the critical areas regulations, Chapter 20.80 SMC, Critical Areas, that include application of critical areas reasonable use and critical areas special use permit provisions of SMC 20.30.333 and 20.30.336 shall not apply within the shoreline jurisdiction. Within shoreline jurisdiction, the purpose of a variance permit is strictly limited to granting relief from specific bulk, dimensional or performance standards set forth in the applicable master program where there are extraordinary circumstances relating to the physical character or configuration of property such that the strict implementation of the master program will impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020. Specifically, the reasonable use and special use references in the following sections shall not apply:

i. 20.80.224(C)

ii. 20.80.274(A).

iii. 20.80.276(D).

iv. 20.80.300(C).

v. 20.80.324(C).

vi. 20.80.330(A)(7).

~~c. Chapter 20.80 SMC, Subchapter 4, Wetlands.~~

~~d. SMC 20.80.310.~~

~~e. SMC 20.80.320.~~

~~f. SMC 20.80.330.~~

~~g. SMC 20.80.340.~~

~~h. SMC 20.80.350.~~

2. The provisions of Chapter 20.80 SMC, Critical Areas, must be factored into decisions regarding development within the regulated shoreline and associated critical areas.

3. All shoreline uses and activities shall be located, designed, constructed, and managed to protect or at least not adversely affect those natural features which are valuable, fragile, or unique in the region. They should also facilitate the appropriate intensity of human use of such features, including but not limited to:

a. Wetlands, including but not limited to marshes, bogs, and swamps;

b. Fish and wildlife habitats, including streams ~~and wetlands~~, nesting areas and migratory routes, spawning areas, and the presence of proposed or listed species;

c. Natural or manmade vistas or features;

d. Flood hazard areas; and/or

e. Geologic~~ally~~ hazard~~ous~~ areas, including erosion, landslide, and seismic hazard areas.

4. The standards of the City of Shoreline's critical area regulations shall apply within the shoreline jurisdiction, where critical areas are present. If there are any conflicts or unclear distinctions between the Master Program and the City's critical areas regulations, the most restrictive requirements apply as determined by the City.

5. Development within the regulated shoreline and associated critical areas must be consistent with the Western Washington Phase II Municipal Stormwater Permit and the adopted stormwater manual.

B. **Floodplain Management.** The following policies and regulations must be factored into decisions regarding all flood management planning and development within that portion of the 100-year floodplain that falls within Shoreline's shoreline jurisdiction (within 200 feet of OHWM).

Floodplain management involves actions taken with the primary purpose of preventing or mitigating damage due to flooding. Floodplain management can involve planning and zoning to control development, either to reduce risks to human life and property, or to prevent development from contributing to the severity of flooding. Floodplain management can also address the design of developments to reduce flood damage and the construction of flood controls, such as dikes, dams, engineered floodways, and bioengineering.

Policy

1. Flood management planning should be undertaken in a coordinated manner among affected property owners and public agencies and should consider the entire coastal system. This planning should consider off-site impacts such as erosion, accretion, and/or flood damage that might occur if shore protection structures are constructed.

2. Nonstructural control solutions are preferred over structural flood control devices, and should be used wherever possible when control devices are needed. Nonstructural controls include such actions as prohibiting or limiting development in areas that are historically flooded or limiting increases in peak flow runoff from new upland development. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions would not be able to reduce the damage.

3. Substantial stream channel modification, realignment, and straightening should be discouraged as a means of flood protection.

4. Where possible, public access should be integrated into the design of publicly financed flood management facilities.

5. The City supports the protection and preservation of the aquatic environment and the habitats it provides, and advocates balancing these interests with the City's intention to ensure protection of life and property from damage caused by flooding.

6. Development should avoid potential channel migration impacts.

~~Regulations~~

~~1. The City shall require and utilize the following information as appropriate during its review of shoreline flood management projects and programs:~~

~~a. Stream channel hydraulics and floodway characteristics, up and downstream from the project area;~~

~~b. Existing shoreline stabilization and flood protection works within the area;~~

~~c. Physical, geological, and soil characteristics of the area;~~

~~d. Biological resources and predicted impact to coastal ecology, including fish, vegetation, and animal habitat;~~

~~e. Predicted impact upon area, shore, and hydraulic processes, adjacent properties, and shoreline and water uses; and/or~~

~~f. Analysis of alternative flood protection measures, both nonstructural and structural.~~

~~2. The City shall require engineered design of flood protection works where such projects may cause interference with normal geohydraulic processes, off-site impacts, or adverse effects to shoreline resources and uses. Nonstructural methods of flood protection shall be preferred over structural solutions when the relocation of existing shoreline development is not feasible.~~

C. **Wetlands.** Presently, the wetlands within the City's shoreline jurisdiction have not been delineated and rated using current State standards. As the wetland category combined with the habitat functions rating defines the required buffers using current State standards, the requirements of this section apply to any new development application in the vicinity of an associated wetland. At that time, the wetland and its buffers would need to be categorized and delineated and the activities would be regulated using the following standards.

1. **Policy.**

a. Wetland ecosystems serve many important ecological and environmental functions, which are beneficial to the public welfare. Such functions include, but are not limited to, providing food, breeding, nesting and/or rearing habitat for fish and wildlife; recharging and discharging ground water; contributing to

stream flow during low flow periods; stabilizing stream banks and shorelines; storing storm and floodwaters to reduce flooding and erosion; and improving water quality through biofiltration, adsorption, and retention and transformation of sediments, nutrients, and toxicants; as well as education and scientific research.

b. Wetland areas should be identified according to established identification and delineation procedures and provided appropriate protection consistent with the policies and regulations of this Master Program.

c. The greatest protection should be provided to wetlands of exceptional resource value, which are defined as those wetlands that include rare, sensitive, or irreplaceable systems such as:

i. Documented or potential habitat for an endangered, threatened, or sensitive species;

ii. High quality native wetland systems as determined by the Washington State Natural Heritage Program;

iii. Significant habitat for fish or aquatic species as determined by the appropriate State resource agency;

iv. Diverse wetlands exhibiting a high mixture of wetland classes and subclasses as defined in the U.S. Fish and Wildlife Service classification system;

v. Mature forested swamp communities; and/or

vi. Sphagnum bogs or fens.

d. A wetland buffer of adequate width should be maintained between a wetland and the adjacent development to protect the functions and integrity of the wetland.

e. The width of the established buffer zone should be based upon the functions and sensitivity of the wetland, the characteristics of the existing buffer, and the potential impacts associated with the adjacent land use.

f. All activities that could potentially affect wetland ecosystems should be controlled both within the wetland and the buffer zone to prevent adverse impacts to the wetland functions.

g. No wetland alteration should be authorized unless it can be shown that the impact is both unavoidable and necessary, and that resultant impacts are offset through the deliberate restoration, creation, or enhancement of wetlands.

h. Wetland restoration, creation, and enhancement projects should result in no net loss of wetland acreage and functions. Where feasible, wetland quality should be improved.

i. Wetlands that are impacted by activities of a temporary nature should be restored immediately upon project completion.

j. In-kind replacement of functional wetland values is preferred. Where in-kind replacement is not feasible or practical due to the characteristics of the existing wetland, substitute ecological resources of equal or greater value should be provided.

k. On-site replacement of wetlands is preferred. Where on-site replacement of a wetland is not feasible or practical due to characteristics of the existing location, replacement should occur within the same watershed and in as close proximity to the original wetland as possible.

l. Where possible, wetland restoration, creation, and enhancement projects should be completed prior to wetland alteration. In all other cases, replacement should be completed prior to use or occupancy of the activity or development.

m. Applicants should develop comprehensive mitigation plans to ensure long-term success of the wetland restoration, creation, or enhancement project. Such plans should provide for sufficient monitoring and contingencies to ensure wetland persistence.

n. Applicants should demonstrate sufficient scientific expertise, supervisory capability, and financial resources to complete and monitor the mitigation project.

o. Proposals for restoration, creation, or enhancement should be coordinated with appropriate resource agencies to ensure adequate design and consistency with other regulatory requirements.

p. Activities should be prevented in wetland buffer zones except where such activities have no adverse impacts on wetland ecosystem functions.

q. Wetland buffer zones should be retained in their natural condition unless revegetation is necessary to improve or restore the buffer.

r. Land use should be regulated to avoid adverse effects on wetlands and maintain the functions and values of wetlands throughout Shoreline, and review procedures should be established for development proposals in and adjacent to wetlands.

~~2. **Regulations.**~~

~~a. **Identification and Delineation.** Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved Federal wetland delineation manual and applicable regional supplements. All areas within the City meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this chapter. Wetland delineations are valid for five years; after such date the City shall determine whether a revision or additional assessment is necessary.~~

~~b. **Rating.** Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington (Ecology Publication #04-06-025, or as revised and Wetlands Guidance for Small Cities Western approved by Ecology), which contains the definitions and methods for determining whether the criteria below are met.~~

~~i. **Category I.** Category I wetlands are: (1) relatively undisturbed estuarine wetlands larger than one acre; (2) wetlands that are identified by scientists of the Washington Natural Heritage Program/DNR as high quality wetlands; (3) bogs; (4) mature and old-growth forested wetlands larger than one acre; (5) wetlands in undisturbed coastal lagoons; and (6) wetlands that perform many functions well (scoring 70 points or more). These wetlands: (1) represent unique or rare wetland types; (2) are more sensitive to disturbance than most wetlands; (3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (4) provide a high level of functions.~~

~~ii. **Category II.** Category II wetlands are: (1) estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre; (2) interdunal wetlands larger than one acre; (3) disturbed coastal lagoons or (4) wetlands with a moderately high level of functions (scoring between 51 and 69 points).~~

~~iii. **Category III.** Category III wetlands are: (1) wetlands with a moderate level of functions (scoring between 30 and 50 points); and (2) interdunal wetlands between 0.1 and one acre. Wetlands scoring between 30 and 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.~~

~~iv. **Category IV.** Category IV wetlands have the lowest levels of functions (scoring fewer than 30 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.~~

c. **Illegal Modifications.** Wetland rating categories shall not change due to illegal modifications made by the applicant or with the applicant's knowledge.

3. **Regulated Activities.**

a. For any regulated activity, a critical areas report (see SMC 20.80.110) may be required to support the requested activity.

b. The following activities are regulated if they occur in a regulated wetland or its buffer:

i. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;

ii. The dumping of, discharging of, or filling with any material;

iii. The draining, flooding, or disturbing of the water level or water table;

iv. Pile driving;

v. The placing of obstructions;

vi. The construction, reconstruction, demolition, or expansion of any structure;

vii. The destruction or alteration of wetland vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland;

viii. "Class IV – General Forest Practices" under the authority of the "1992 Washington State Forest Practices Act Rules and Regulations," WAC 222-12-030, or as thereafter amended; and/or

ix. Activities that result in:

(A) A significant change of water temperature;

(B) A significant change of physical or chemical characteristics of the sources of water to the wetland;

(C) A significant change in the quantity, timing, or duration of the water entering the wetland; and/or

(D) The introduction of pollutants.

c. **Subdivisions.** The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:

i. Land that is located wholly within a wetland or its buffer may not be subdivided; and

ii. Land that is located partially within a wetland or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is:

(A) Located outside of the wetland and its buffer; and

(B) Meets the minimum lot size requirements of SMC Table 20.50.020(1).

d. **Activities Allowed in Wetlands.** The activities listed below are allowed in wetlands. These activities do not require submission of a critical area report, except where such activities result in a loss of the functions and values of a wetland or wetland buffer. These activities include:

i. Those activities and uses conducted pursuant to the Washington State Forest Practices Act and its rules and regulations, WAC 222-12-030, where State law specifically exempts local authority, except

those developments requiring local approval for Class 4 – General Forest Practice Permits (conversions) as defined in Chapter 76.09 RCW and Chapter 222-12 WAC.

ii. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.

iii. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

iv. Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column will be disturbed.

v. Enhancement of a wetland through the removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

vi. Educational and scientific research activities.

vii. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not expand the footprint of the facility or right-of-way.

4. **Wetland Buffers.**

a. **Buffer Requirements.** The standard buffer widths in Table 20.230.031 have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington.

i. The use of the standard buffer widths requires the implementation of the measures in Table 20.230.032, where applicable, to minimize the impacts of the adjacent land uses.

ii. If an applicant chooses not to apply the mitigation measures in Table 20.230.032, then a 33 percent increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.

iii. The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided.

iv. Additional buffer widths are added to the standard buffer widths. For example, a Category I wetland scoring 32 points for habitat function would require a buffer of 225 feet (75 + 150).

Table 20.230.031 Wetland Buffer Requirements for Western Washington

Wetland Category	Standard Buffer Width	Additional buffer width if wetland scores 21 – 25 habitat points	Additional buffer width if wetland scores 26 – 29 habitat points	Additional buffer width if wetland scores 30 – 36 habitat points
Category I: Based on total score	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category I: Forested	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category I: Estuarine	150 ft	NA	NA	NA
Category II: Based on score	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category III (all)	60 ft	Add 45 ft	Add 105 ft	NA
Category IV (all)	40 ft	NA	NA	NA

Table 20.230.032 Required measures to minimize impacts to wetlands

(Measures are required, where applicable to a specific proposal)

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 ft heavily vegetated buffer strip immediately adjacent to the outer 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 ft 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 techniques (per PSAT publication on LID techniques).
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.
Disruption of corridors or connections	Maintain connections to off-site areas that are undisturbed. Restore corridors.

v. **Increased Wetland Buffer Area Width.** Buffer widths shall be increased on a case-by-case basis as determined by the Administrator when a larger buffer is necessary to protect wetland functions and values. This determination shall be supported by appropriate documentation showing that it is reasonably related to protection of the functions and values of the wetland. The documentation must include, but not be limited to, the following criteria:

(A) The wetland is used by a plant or animal species listed by the Federal government or the State as endangered, threatened, candidate, sensitive, monitored or documented priority species or habitats, or essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or

(B) The adjacent land is susceptible to severe erosion, and erosion control measures will not effectively prevent adverse wetland impacts; or

(C) The adjacent land has minimal vegetative cover or slopes greater than 30 percent.

vi. Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:

(A) The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a "dual-rated" wetland with a Category I area adjacent to a lower rated area;

(B) 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 from a qualified wetland professional;

(C) The total area of the buffer after averaging is equal to the area required without averaging; and

(D) The buffer at its narrowest point is never less than either three-fourths 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.

vii. Averaging through a shoreline variance may be permitted when all of the following are met:

(A) There are no feasible alternatives to the site design that could be accomplished without buffer averaging;

(B) The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report from a qualified wetland professional;

(C) The total buffer area after averaging is equal to the area required without averaging; and

(D) The buffer at its narrowest point is never less than either three-fourths 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.

b. To facilitate long-range planning using a landscape approach, the Administrator may identify and preassess wetlands using the rating system and establish appropriate wetland buffer widths for such wetlands. The Administrator will prepare maps of wetlands that have been preassessed in this manner.

c. **Measurement of Wetland Buffers.** All buffers shall be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland. Only fully vegetated buffers will be considered. Lawns, walkways, driveways, and other mowed or paved areas will not be considered buffers or included in buffer area calculations.

d. **Buffers on Mitigation Sites.** All mitigation sites shall have buffers consistent with the buffer requirements of this chapter. Buffers shall be based on the expected or target category of the proposed wetland mitigation site.

e. **Buffer Maintenance.** Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive nonnative weeds is required for the duration of the mitigation bond (subsection (C)(6)(h)(ii)(A)(8) of this section).

f. **Impacts to Buffers.** Requirements for the compensation for impacts to buffers are outlined in subsection (C)(6) of this section.

g. **Overlapping Critical Area Buffers.** If buffers for two contiguous critical areas overlap (such as buffers for a stream and a wetland), the wider buffer applies.

h. **Allowed Buffer Uses.** The following uses may be allowed within a wetland buffer in accordance with the review procedures of this chapter, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

i. **Conservation and Restoration Activities.** Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

ii. **Passive Recreation.** Passive recreation facilities designed and in accordance with an approved critical area report, including:

(A) Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer 25 percent of the wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five feet in width for pedestrian use only. Raised boardwalks utilizing nontreated pilings may be acceptable; and/or

(B) Wildlife viewing structures.

iii. Educational and scientific research activities.

iv. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.

v. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops, and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

vi. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.

vii. Enhancement of a wetland buffer through the removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

viii. **Stormwater Management Facilities.** Stormwater management facilities are limited to stormwater dispersion outfalls and bioswales. They may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only; provided, that:

(A) No other location is feasible;

(B) The location of such facilities will not degrade the functions or values of the wetland; and

(C) Stormwater management facilities are not allowed in buffers of Category I or II wetlands.

ix. **Nonconforming Uses.** Repair and maintenance of nonconforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.

~~i. **Signs and Fencing of Wetlands and Buffers.**~~

~~i. **Temporary Markers.** The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary "clearing limits" fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Administrator prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.~~

~~ii. **Permanent Signs.** As a condition of any permit or authorization issued pursuant to this chapter, the Administrator may require the applicant to install permanent signs along the boundary of a wetland or buffer.~~

~~(A) Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another nontreated material of equal durability. Signs must be posted at an interval of one per lot or every 50 feet, whichever is less, and must be maintained by the property owner in perpetuity. The signs shall be worded as follows or with alternative language approved by the Administrator:~~

~~Protected Wetland Area Do Not Disturb~~

~~Contact the City of Shoreline Regarding Uses, Restrictions, and Opportunities for Stewardship~~

~~(B) The provisions of subsection (C)(4)(i)(ii)(A) of this section may be modified as necessary to assure protection of sensitive features.~~

~~iii. **Fencing.** Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.~~

~~5. **Critical Area Report for Wetlands.**~~

~~a. If the Administrator determines that the site of a proposed development includes, is likely to include, or is adjacent to a wetland, a wetland report, prepared by a qualified professional, shall be required. The expense of preparing the wetland report shall be borne by the applicant.~~

~~b. **Minimum Standards for Wetland Reports.** The written report and the accompanying plan sheets shall contain the following information, at a minimum:~~

~~i. The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the wetland critical area report; a description of the proposal; identification of all the local, State, and/or Federal wetland-related permit(s) required for the project; and a vicinity map for the project.~~

~~ii. A statement specifying the accuracy of the report and all assumptions made and relied upon.~~

~~iii. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc.~~

~~iv. A description of the methodologies used to conduct the wetland delineations, rating system forms, or impact analyses including references.~~

~~v. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, floodplains, and buffers on or adjacent to the proposed project area. For areas off site of the project site, estimate conditions within 300 feet of the project boundaries using the best available information.~~

~~vi. For each wetland identified on site and within 300 feet of the project site provide: the wetland rating, including a description of and score for each function, per wetland ratings (subsection (C)(2)(b)~~

of this section); required buffers; hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site.

vii. A description of the proposed actions, including an estimation of acreages of impacts to wetlands and buffers based on the field delineation and survey and an analysis of site development alternatives, including a no-development alternative.

viii. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development.

ix. A description of reasonable efforts made to apply mitigation sequencing pursuant to Mitigation Sequencing (subsection (C)(6)(a) of this section) to avoid, minimize, and mitigate impacts to critical areas.

x. A discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.

xi. A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions.

c. An evaluation of the functions of the wetland and adjacent buffer. Include reference for the method used and data sheets.

d. A copy of the site plan sheet(s) for the project must be included with the written report and must include, at a minimum:

i. Maps (to scale) depicting delineated and surveyed wetland and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; grading and clearing limits; areas of proposed impacts to wetlands and/or buffers (include square footage estimates);

ii. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project; and

iii. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project.

6. **Compensatory Mitigation.**

a. **Mitigation Sequencing.** Before impacting any wetland or its buffer, an applicant shall demonstrate that the following actions have been taken. Actions are listed in the order of preference:

i. Avoid the impact altogether by not taking a certain action or parts of an action.

ii. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.

iii. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.

iv. Reduce or eliminate the impact over time by preservation and maintenance operations.

v. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.

vi. Monitor the required compensation and take remedial or corrective measures when necessary.

b. **Requirements for Compensatory Mitigation.**

i. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1), Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised.

ii. Mitigation ratios shall be consistent with subsection (C)(6)(g) of this section.

iii. Mitigation requirements may also be determined using the credit/debit tool described in "Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Operational Draft" (Ecology Publication No. 10-06-011, February 2011, or as revised) consistent with subsection (C)(6)(h) of this section.

c. **Compensating for Lost or Affected Functions.** Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:

i. The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or

ii. Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.

d. **Preference of Mitigation Actions.** Methods to achieve compensation for wetland functions shall be approached in the following order of preference:

i. Restoration (reestablishment and rehabilitation) of wetlands.

ii. Creation (establishment) of wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to the wetland community that is anticipated in the design.

iii. Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

iv. **Preservation.** Preservation of high-quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high-quality, at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

(A) Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA listed species;

(B) There is no net loss of habitat functions within the watershed or basin;

(C) Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost; and

(D) The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low functioning system (Category III or IV wetland).

All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

e. **Type and Location of Compensatory Mitigation.** Unless it is demonstrated that a higher level of ecological functioning would result from an alternative approach, compensatory mitigation for ecological functions shall be either in kind and on site, or in kind and within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration except when all of the following apply:

i. There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);

ii. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and

iii. Off-site locations shall be in the same sub-drainage basin unless:

(A) Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; or

(B) Credits from a State-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the bank's certification.

iv. The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.

f. **Timing of Compensatory Mitigation.** It is preferred that compensatory mitigation projects be completed prior to activities that will disturb wetlands. At the least, compensatory mitigation shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

i. The Administrator may authorize a one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified wetland professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the City.

g. **Wetland Mitigation Ratios.**

Category and Type of Wetland	Creation or Reestablishment	Rehabilitation	Enhancement	Preservation
Category I: Bog, Natural Heritage site	Not considered possible	6:1	Case by case	10:1
Category I: Mature forested	6:1	12:1	24:1	24:1
Category I: Based on functions	4:1	8:1	16:1	20:1
Category II	3:1	6:1	12:1	20:1
Category III	2:1	4:1	8:1	15:1
Category IV	1.5:1	3:1	6:1	10:1

h. **Compensatory Mitigation Plan.** When a project involves wetland and/or buffer impacts, a compensatory mitigation plan prepared by a qualified professional shall be required, meeting the following minimum standards:

• Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or reestablishment. See Table 1a or 1b, Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance – Version 1 (Ecology Publication No. 06-06-011a, Olympia, WA, March 2006 or as revised).

i. **Wetland Critical Area Report.** A critical area report for wetlands must accompany or be included in the compensatory mitigation plan and include the minimum parameters described in the "Minimum Standards for Wetland Reports" section of this chapter.

ii. **Compensatory Mitigation Report.** The report must include a written report and plan sheets that must contain, at a minimum, the elements listed below. Full guidance can be found in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology Publication No. 06-06-011b, Olympia, WA, March 2006 or as revised).

(A) The written report must contain, at a minimum:

(1) The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the compensatory mitigation report; a description of the proposal; a summary of the impacts and proposed compensation concept; identification of all the local, State, and/or Federal wetland-related permit(s) required for the project; and a vicinity map for the project;

(2) Description of how the project design has been modified to avoid, minimize, or reduce adverse impacts to wetlands;

~~(3) Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding land uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on wetland ratings (subsection (C)(2)(b) of this section);~~

~~(4) Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are not undertaken (i.e., how would this site progress through natural succession?);~~

~~(5) A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands;~~

~~(6) A description of the proposed mitigation construction activities and timing of activities;~~

~~(7) A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands);~~

~~(8) A bond estimate for the entire compensatory mitigation project, including the following elements: site preparation, plant materials, construction materials, installation oversight, maintenance twice per year for up to five years, annual monitoring field work and reporting, and contingency actions for a maximum of the total required number of years for monitoring; and~~

~~(9) Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas.~~

~~(B) The scaled plan sheets for the compensatory mitigation must contain, at a minimum:~~

~~(1) Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions;~~

~~(2) Existing topography, ground-proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be impacted, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation;~~

~~(3) Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions;~~

~~(4) Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes;~~

~~(5) Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter;~~

~~(6) A plant schedule for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species by community type, timing of installation; and~~

~~(7) Performance standards (measurable standards reflective of years post-installation) for upland and wetland communities, monitoring schedule, and maintenance schedule and actions by each biennium.~~

~~i. **Buffer Mitigation Ratios.** Impacts to buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.~~ (Ord. 668 § 4 (Exh. 3), 2013).