

ORDINANCE NO. 3700

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MOUNT VERNON, WASHINGTON, AMENDING CERTAIN SECTIONS OF MOUNT VERNON MUNICIPAL CODE CHAPTERS 13.33, STORMWATER DRAINAGE UTILITY; 13.35, SURFACE WATER UTILITY – SYSTEM AND STRUCTURE OF RATES; AND 15.40 CRITICAL AREAS; PROVIDING FOR SEVERABILITY; AND ESTABLISHING EFFECTIVE DATES.

WHEREAS, the National Pollutant Discharge Elimination System (NPDES) is the program created under the Federal Clean Water Act for administering stormwater discharge permits and establishing pretreatment requirements for discharges to surface waters of the state from point sources. These permits are referred to as NPDES permits and are administered by the Washington State Department of Ecology for Washington State; and

WHEREAS, the Washington State Department of Ecology (Ecology) issued Washington State’s first Phase II Municipal Stormwater Permit to Western Washington municipalities in 2007. Ecology issued this permit as one general permit with the general permit conditions applicable to all Phase II municipalities in Western Washington which includes the City of Mount Vernon. The Phase II Permit was appealed by several parties and the permit was modified in 2009. In August 2012, Ecology extended the first Permit and issued a new 5-year Permit (2013–2018) effective August 1, 2013, and also issued a new 2012 Ecology Stormwater Management Manual for Western Washington (2012 Ecology Manual); and

WHEREAS, the new Ecology, 2013-2018 Permit requirements are phased in over the 5-year Permit term. One of the key compliance date is December 31, 2016 when Phase II jurisdictions (like Mount Vernon) are required to: 1) adopt new stormwater development regulations (codes and standards) specified in the Permit and the new Ecology Stormwater Management Manual, and new Low Impact Development (LID) Best Management Practices (BMPs); 2) implement new plan review, inspection, and escalating enforcement processes and procedures necessary to implement the program in accordance with Permit conditions; 3) conduct a review and revision process of city-wide land use and development-related policies, codes, and standards or other enforceable documents to implement LID principles that minimize impervious surfaces, native vegetation loss, and stormwater runoff; and 4) establish maintenance standards for facilities (private facilities per S5.C.4 and municipal facilities per S5.C.5) that are as protective as or more protective of facility function than those specified in Chapter 4, of Volume V of the 2012 Stormwater Management Manual for Western Washington, as amended in December 2014 (the 2014 SWMMWW); and

WHEREAS, the City has revised Mount Vernon Municipal Code Chapters 13.33, 13.35, and 15.40 of the Mount Vernon Municipal Code to comply with the Western Washington Phase II Stormwater Permit requirements outlined above; and

WHEREAS, all cities and counties in Washington are required to adopt critical areas regulations by the Growth Management Act (GMA) (RCW 36.70A.060). As defined by the GMA, "Critical areas" include the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas. [RCW 36.70A.030(5)] Counties and cities are required to include the best available science in developing policies and development regulations to protect the functions and values of critical areas (RCW 36.70A.172). All jurisdictions are required to review, evaluate, and, if necessary, revise their critical areas ordinances according to an update schedule provided in RCW 36.70A.130; and

WHEREAS, on March 14, 2007 the City adopted development regulations for critical areas based on best available science with Ordinance 3353. With the adoption of Ordinance 3353 the City Council found that the draft and final EIS and its best available science review adequately addressed the science and related environmental issues and provided a sound basis for the adoption of an alternative program; and

WHEREAS, the amendments to Chapter 15.40 of the Mount Vernon Municipal Code ensure that the City's development regulations with regard to critical areas continue to be based on best available science; and

WHEREAS, the Department of Commerce was notified of the proposed amendments on October 4, 2016, an acknowledgement letter was received from Commerce dated October 4, 2016, and Commerce granted the City expedited review on October 19, 2016 (their identification number: 22919); and as such, the City is in compliance with RCW 36.70A.106 (1); and

WHEREAS, a SEPA Threshold Determination of Non-significance, non-project action, was issued on October 7, 2016 and published on October 11, 2016 and no comments were received or appeals filed; and,

WHEREAS, the requisite Planning Commission hearing held on July 19, 2016; and the City Council hearing held on August 10, 2016 were preceded with appropriate notice issued on July 7, 2016; and

WHEREAS public hearing notices were published for both the Planning Commission and City Council hearings on October 11, 2016 and October 21, 2016; and

WHEREAS, the requirements for public participation in the development of this amendment as required by the State Growth Management Act (GMA) and by the provisions of City of Mount Vernon Resolution No. 491 have all been met; and

WHEREAS, the City utilized the State Attorney General Advisory Memorandum: Avoiding Unconstitutional Takings of Private Property for evaluating constitutional issues, in conjunction with and to inform its review of the Ordinance. The City has utilized the process, a process protected under Attorney-Client privilege pursuant to law including RCW 36.70A.370(4), with the City Attorney's Office which has reviewed the Advisory Memorandum and discussed this Memorandum, including the "warning signals" identified in the Memorandum, with decisions makers, and conducted an evaluation of all constitutional provisions potentially at issue and advised of the genuine legal risks, if any, with the adoption of this Ordinance to assure that the proposed regulatory or administrative actions did not result in an unconstitutional taking of private property, consistent with RCW 36.70A.370(2).

NOW, THEREFORE,

THE CITY COUNCIL OF THE CITY OF MOUNT VERNON, WASHINGTON, DO ORDAIN AS FOLLOWS:

SECTION ONE. The City Council does hereby adopt the above listed recitals as set forth fully herein.

SECTION TWO. PLANNING COMMISSION RECOMMENDATION ADOPTED. The City Council adopts the Planning Commission’s findings of fact and conclusions of law, outlined below, in their entirety.

A. Planning Commission’s Findings of Fact:

1. The procedural requirements outlined in MVMC Chapter 14.05, Procedures, have been satisfied by City staff. This includes the Notice of Public Hearing, the environmental review pursuant to the SEPA statute, and receiving expedited review from the State Department of Commerce.

B. Planning Commission’s Conclusions of Law:

1. The proposed amendments ensure that the City’s development regulations are internally consistent.
2. The requirements for public participation in the development of this amendment as required by the State Growth Management Act (GMA) and by the provisions of City of Mount Vernon Resolution No. 491 have all been met.
3. The proposed amendment is found to be in compliance with the State Growth Management Act.
4. The amendments to Chapters 13.33, 13.35, and 15.40 ensure that the City remains in compliance with its National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit (Permit) issued by the Washington State Department of Ecology (Ecology).

C. Planning Commission Recommendation to the City Council:

At their public hearing on November 1, 2016 after review of the materials presented by City staff and holding a public hearing the Planning Commission made a recommendation to adopt the amendments to the Mount Vernon Municipal Code that are contained in this Ordinance.

SECTION THREE. That the index of sections listed in Chapter 13.33, Storm Water Drainage Utility, is hereby repealed and reenacted, the new section to read as follows.

Sections:

- 13.33.010 Purpose.
- 13.33.020 Definitions.
- 13.33.030 Regulated activities.
- 13.33.040 Exemptions.
- 13.33.050 General provisions.
- 13.33.060 General storm water requirements.
- 13.33.070 Low impact development.
- 13.33.080 Illicit discharges.
- 13.33.090 Administration.
- 13.33.100 Review and approval.
- 13.33.110 Inspection – Construction.
- 13.33.120 Modification of facilities during construction.
- 13.33.130 City acceptance of storm water facilities.
- 13.33.140 Consultant and consultant fees.
- 13.33.150 Prohibited acts.
- 13.33.160 Monitoring facilities.
- 13.33.170 Sampling and analysis requirements.
- 13.33.180 Deviations
- 13.33.190 Development in critical areas.
- 13.33.200 Establishment of regional facilities.
- 13.33.210 Applicability to governmental entities.
- 13.33.220 Other permits and requirements.
- 13.33.230 Protection of public and private rights.
- 13.33.240 Enforcement, violations and penalties.

SECTION FOUR. That section 13.33.020, Definitions, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

13.33.020 Definitions.

Words and phrases used in this chapter have the meaning set forth in this section:

1. “Appendix 1” refers to Appendix 1 of the Western Washington Phase II Municipal Stormwater Permit which contains the minimum technical requirements for development and redevelopment.
2. “Biofiltration facility” means the simultaneous processes of filtration, infiltration, absorption and biological uptake of pollutants in storm water that take place when runoff flows over and through vegetated treatment facilities.
3. “Best management practices (BMPs)” are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the Washington State Department of Ecology that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.
4. “Computations” means calculations, including coefficients and other pertinent data, made to determine the rates of flow for storm water plans, with units given in cubic feet per second.
5. “Critical area” shall mean, at a minimum, areas that include wetland areas with a critical recharging effect on aquifers used for potable water, fish, and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, including unstable slopes and associated areas and ecosystems. See Chapter 15.40 MVMC.

6. “Current conditions” means the state, status, or condition of the subject property at the time a legally sufficient and complete permit application is made for those regulated activities described in MVMC 13.33.030, which may include existing buildings, impervious areas, and topography as is.
7. “Design storm” refers to a prescribed hyetograph and total precipitation amount (for a specific duration and recurrence frequency) used to estimate runoff for a hypothetical storm of interest or concern for the purposes of analyzing existing drainage, designing new drainage facilities, or assessing other impacts of a proposed project on the flow of surface water. A hyetograph is a graph of percentages of total precipitation for a series of time steps representing the total time during which the precipitation occurs.
8. “Detention facilities” means an above or below ground facility, such as a pond or tank, that temporarily stores storm water runoff and subsequently releases it at a slower rate than it is collected by the drainage facility.
9. “Developed conditions” means the state, status, or condition of the subject property at the time the proposed project has been completed, which may include existing buildings, impervious areas, and topography as is.
10. “Developer” means the individual(s) or corporation(s) or governmental agency(ies) applying for the permits or approvals described in MVMC 13.33.030.
11. “Development” means new development, redevelopment, or both. See definitions for each.
12. “Developmental coverage” means all developed surface areas within the subject property including, but not limited to, rooftops, driveways, carports, accessory buildings, parking areas, and any other impervious surfaces. During construction, “development coverage” includes the above in addition to the full extent of any alteration of previously occurring soils, slope, or vegetation due to grading, temporary storage, access areas, or any other short-term causes.
13. “Drainage area” means the watershed contributing water runoff to and including the subject property.
14. “Drainage facility” refers to structures or features, natural or artificial, that convey, treat, and/or abate surface water runoff including, but not limited to, detention facilities, retention facilities, and drainage retention/abatement facilities.
15. “Drainage site” means a geographical area that serves a common or combined use including, but not limited to, shopping malls and strips, condominiums, apartment complexes, office parks and housing tracts. A site may include one or more parcels and/or include one or more buildings. Also see “Development.”
16. “Drainage system” refers to the drainage system consisting of natural and artificial systems that convey surface water within the city of Mount Vernon. This system includes pipes, culverts, ditches, open channels, swales, streams, lakes, rivers, ponds, and detention and retention ponds, as well as other types of conveyance, storage and infiltration facilities. Depending on its context, a drainage system refers to either the public drainage system or a private drainage system, or both.
17. “Drainage treatment/abatement facilities” means any facilities installed or constructed in conjunction with a drainage plan for the purpose of treating urban runoff to improve water quality.
18. “Effective impervious surface” means those impervious surfaces that are connected via sheet flow, or discrete conveyance to a drainage system. Impervious surfaces are considered ineffective if:
 - a. The runoff is dispersed through at least one hundred feet of native vegetation in accordance with BMP T5.30 – Full Dispersion” as described in Chapter 5 of Volume V of the Stormwater Management Manual for Western Washington.
 - b. Residential roof runoff is infiltrated in accordance with Downspout Full Infiltration Systems in BMP T5.10A in Volume III of the Stormwater Management Manual for Western Washington; or
 - c. Approved Continuous runoff modeling methods indicate that the entire runoff file is infiltrated.

19. “Environmentally critical areas” means critical areas defined by Chapter 15.40 MVMC to which this chapter shall apply.
20. “Hard Surface” means an impervious surface, a permeable pavement, or a vegetated roof.
21. “Illicit connection” means any infrastructure connection to the MS4 that is not intended, permitted or used for collecting and conveying stormwater or non-stormwater discharges allowed as specified in MVMC 13.30.080. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the MS4.
22. “Illicit discharge” means any discharge to a MS4 that is not composed entirely of stormwater or of non-stormwater discharges allowed as specified in MVMC 13.30.080.
23. “Impervious surface” means (a) a non-vegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development (b) a non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof-tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam, or other surfaces that similarly impede the natural infiltration of storm water. Open, uncovered retention/detention facilities shall not be considered as impervious surfaces for the purposes of determining whether the thresholds for application of minimum requirements are exceeded. Open, uncovered retention/detention facilities shall be considered impervious surfaces for purposes of runoff modeling and calculation.
24. “Land-disturbing activities” means any activity that results in a change in the existing soil and/or land cover (both vegetative and nonvegetative) and/or the existing soil topography. Land-disturbing activities include, but are not limited to, clearing, grading, filling, and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered a land-disturbing activity. Vegetation maintenance practices, including landscape maintenance and gardening, are not considered a land-disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures
25. “Low impact development (LID)” means a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.
26. “Municipal separate storm sewer system” (MS4) means a conveyance, or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains:
- a. Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the Clean Water Act that discharges to waters of Washington State;
 - b. Designed or used for collecting or conveying storm water;
 - c. Which is not a combined sewer;
 - d. Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR 122.2; and
 - e. Which is defined as “large” or “medium” or “small” or otherwise designated by the WA State Department of Ecology pursuant to 40 CFR 122.26.
27. “Native vegetation” means 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 occur naturally on the site. Examples include trees such as 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.

28. “Natural location” of drainage systems refers to the location of those channels, swales, and other natural conveyance systems as defined by the first documented topographic contours existing for the subject property, either from maps or photographs or such other means as appropriate.

29. “New development” means land-disturbing activities, including land clearing and forest practices regulated by MVMC Chapter 15.18; structural development, including construction or installation of a building or other structure; creation of hard surfaces; and subdivision, short subdivision, and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.

30. “Permit” means the most current version of the city’s Western Washington Phase II Municipal Stormwater Permit, effective 2013, including modifications issued through the expiration date of the Permit. Appendix 1 of this permit contains the minimum technical requirements for new development and redevelopment.

31. “Planner” means city of Mount Vernon community and economic development director or his/her designee.

32. “Permanent storm water quality control plan (PSQCP)” means a plan that includes permanent BMPs for the control of pollution from storm water runoff after construction and/or land-disturbing activity has been completed.

33. “Pollutant” shall mean any substance which, when added to water, would cause contamination or other alteration of the physical, chemical, or biological properties of waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state, as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety, or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life.

34. “Predeveloped” means the native vegetation and soils that existed at a site prior to the influence of Euro-American settlement. The pre-developed condition shall be assumed to be forested land cover unless reasonable, historic information is provided that indicates that the site was prairie prior to settlement.

35. “Private drainage system” means drainage systems located on private property and designed to discharge directly as through pipes, channels, etc., or indirectly as sheet flow, subsurface flow, etc. into the city’s drainage system.

36. “Public drainage system” means that portion of the drainage system of the city located on public right-of-way, easement or dedicated tract, or other property owned by the city and those portions of private drainage systems assumed by the city.

37. “Receiving bodies of water” means bodies of water or surface water systems to which surface runoff is discharged via a point source of storm water or via sheet flow. Receiving water may also be groundwater to which surface runoff is directed by infiltration.

38. “Redevelopment” means that on a site that is already substantially developed (i.e., has 35 percent or more of existing hard surface coverage), the creation or addition of hard surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation, or expansion of a building or other structure; replacement of hard surface that is not part of a routine maintenance activity; and land disturbing activities.

39. “Retention/detention facilities” means a type of drainage facility designed either to hold water for a considerable length of time and then release it by evaporation, plant transpiration, and/or infiltration into the ground; or to hold surface water and storm water runoff for a short period of time and then release it to the surface and/or storm water management system.

40. “Storm water plan” means a plan approved by the city of Mount Vernon that includes a small parcel or large parcel storm water plan and/or a permanent storm water quality control plan.

41. “Stormwater Management Manual for Western Washington” means the five-volume technical manual (Publication No. 14-10-055) prepared and published by the Washington State Department of Ecology in 2012, including any subsequent updates or amendments.

42. “Subject property” means the tract of land which is the subject of the permit and/or approval action as defined by the full legal description of all parcels involved in the proposed development.

43. “Uncontaminated” means water that has not come into contact with illicit discharges or other pollutants. (Ord. 3453 § 3, 2009).

44. “Washington State Department of Transportation Highway Runoff Manual” Means the Highway Runoff Manual prepared and published by the Washington State Department of Transportation in 2014 and amended in 2016 (publication M 31-16.04) and any subsequent updates approved by Ecology as equivalent to the Department of Ecology’s Stormwater Management Manual for Western Washington. The Highway Runoff Manual provides guidance to direct the planning and design of stormwater management facilities for existing and new Washington State highways, rest areas, park-and-ride lots, ferry terminals, and highway maintenance facilities throughout the state.

SECTION FIVE. That section 13.33.030, Regulated Activities, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

13.33.030 Regulated activities.

All new development, redevelopment and other activities listed below shall comply with the conditions of this chapter.

A. Creation or alteration of new or additional hard surfaces;

B. New development;

C. Redevelopment;

D. Activities that require a fill and grade permit;

E. Activities that require a building permit;

F. Subdivision approval;

G. Short subdivision approval;

H. Activities that require a commercial, industrial, or multifamily site plan approval;

I. Planned unit development approval;

J. Development or redevelopment within or adjacent to critical areas per Chapter 15.40 MVMC;

K. Activities that require a conditional use permit;

L. Activities that require a substantial development permit pursuant to Chapter 90.58 RCW (Shoreline Management Act);

M. Activities that require a permit pursuant to MVMC Chapter 15.18;

N. Any activity that may fall within and be subject to regulation by the most current version of the city’s Permit and the Stormwater Management Manual for Western Washington.

SECTION SIX. That section 13.33.040, Exemptions, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

13.33.040 Exemptions.

The public works director may determine whether or not a proposed project is exempt from the provisions of this chapter. Exemptions shall be consistent with all city, state, and federal requirements and may include those set forth in the thresholds, definitions, minimum requirements and exceptions, adjustment and variance criteria found in Appendix I of the Permit. The following activities shall be exempt:

- A. Development undertaken by the Washington State Department of Transportation in state highway rights-of-way that is regulated and meets the requirements of Chapter 173-270 WAC, the Puget Sound Highway Runoff Program, is exempt from the requirements of this chapter.
- B. Commercial agriculture, including only those activities conducted on lands defined in RCW 84.34.020(2), and production of crops or livestock for wholesale trade.
- C. Forest practices regulated under WAC Title 222, except for Class IV general forest practices, as defined in WAC 222-16-050, that are conversions from timber land to other uses.
- D. Road maintenance practices identified as exempt in Appendix 1 of the NPDES Permit.
- E. Underground utility projects that replace the ground surface with in-kind material or materials with similar runoff characteristics are only subject to Minimum Requirement #2, Construction Stormwater Pollution Prevention, as defined in Appendix 1 of the NPDES Permit.
- F. Requests for exemption shall be filed in writing with the public works director, and shall adequately detail the basis for granting an exemption.
- E. The decision of the public works director may be appealed to the city council by filing written notice of appeal with the city finance director within 10 days of service of the public works director's written decision. The cost of the appeal shall be \$100.00. (Ord. 3453 § 5, 2009).

SECTION SEVEN. That section 13.33.050, General Provisions, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

13.33.050 General provisions.

Storm water management measures shall be designed, constructed, and maintained in accordance with the standards and specifications as set forth in the thresholds, definitions, minimum requirements and exceptions, adjustment, and variance criteria found in Appendix I of the Permit, the Stormwater Management Manual for Western Washington, and the most current version of the City's Engineering Standards.

- A. All stormwater management measures shall be analyzed consistent with the requirements of the Stormwater Management Manual, using the continuous modeling program: the Western Washington Hydrology Model, hereinafter referred to as WWHM, or an alternative continuous modeling program allowed by the manual, or as otherwise approved by the public works director.
- B. The public works director may determine whether or not a proposed public roadway project may be designed constructed, and maintained in accordance with the standards and specifications as set forth in the most recent version of the Washington State Department of Transportation Highway Runoff Manual approved as equivalent to the Stormwater Management Manual for Western Washington.

SECTION EIGHT. That section 13.33.060, General Storm Water Requirements, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

13.33.060 General storm water requirements.

A. Minimum requirements for storm water management include the following items as further described in the Permit, Appendix I:

1. Preparation of storm water site plans;
2. Construction storm water pollution prevention plan (SWPPP);
3. Source control of pollution;
4. Preservation of natural drainage systems and outfalls;
5. On-site storm water management;
6. Runoff treatment;
7. Flow control;
8. Wetland protection;
9. Operations and maintenance.

Requirement 2 applies to all new development and redevelopment projects. The applicability of minimum requirements of the Permit varies depending on the type and size of the project. Appendix 1 of the Permit identifies thresholds that determine the applicability of the minimum requirements to different new development and redevelopment projects.

B. New Development.

1. All new development shall be required to comply with subsection (A)(2) of this section. In addition, the following two conditions will comply with subsections (A)(1) through (5) of this section:
 - a. Project creates or adds 2,000 square feet, or greater, of new, replaced, or new plus replaced hard surface area.
 - b. Project has land-disturbing activity of 7,000 square feet or greater.
2. The following three new development projects shall comply with subsections (A)(1) through (9) of this section:
 - a. Project creates or adds 5,000 square feet, or more, of new plus replaced hard surface area.
 - b. Project converts three-quarters acre, or more, of native vegetation to lawn or landscaped areas.
 - c. Project converts two and one-half acres, or more, of native vegetation to pasture.

C. Redevelopment.

1. The following redevelopment shall comply with subsections (A)(1) through (5) of this section for the new and replaced impervious surfaces and the land disturbed:
 - a. The new, replaced, or total of new plus replaced impervious surfaces is 2,000 square feet or more.
 - b. Seven thousand square feet or more of land-disturbing activities.

2. The following redevelopment shall comply with subsections (A)(1) through (9) of this section for the new impervious surfaces and converted pervious areas:

- a. Adds 5,000 square feet or more of new impervious surfaces.
- b. Converts three-quarters acre, or more, of native vegetation to lawn or landscaped areas.
- c. Converts two and one-half acres, or more, of native vegetation to pasture.

D. Additional Storm Water Requirements for Development and Redevelopment.

1. Retention, detention, infiltration or LID facilities serving private property shall not be located within dedicated public road right-of-way.
2. All drainage easements granted to the city within a subject property shall be at least 20 feet in width for operation and maintenance of open channel or closed system installation.
3. As-built plans and pond performance reports shall be submitted to the city prior to final approval/acceptance of said project.
4. Private Ownership of Storm Water Facilities. Owners of private storm water systems and facilities that collect, convey, treat and/or infiltrate runoff are responsible for the operation and maintenance of those facilities.
5. City Ownership of Storm Water Facilities. Storm water systems and facilities that are public improvements and that are to be owned and maintained by the city shall, after satisfactory completion of the storm water facilities, post and maintain a maintenance bond as required for a final plat for subdivisions under MVMC 16.12.020 regardless if such public improvement is a condition to subdivision or other land use activity. (Ord. 3453 § 7, 2009).

SECTION NINE. That section 13.33.070, Low Impact Development, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

13.33.070 Low impact development.

The city of Mount Vernon requires the use of low impact development best management practices (BMPs) in the control of storm water where feasible. LID measures shall be implemented for development and redevelopment projects in accordance with Appendix 1 of the Permit and the Stormwater Management Manual for Western Washington.

LID system designs shall be prepared by a registered professional engineer licensed in the state of Washington and experienced in LID design and be certified by the preparing engineer as feasible and safe for the intended application and meeting all state and federal requirements for such LID facilities.

A registered professional engineer licensed in the state of Washington and experienced in LID design is also required to certify that the facility has been constructed as shown on the “as-built” plans and meets approved plans and specifications.

SECTION TEN. That section 13.33.080, Illicit Discharges, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

13.33.080 Illicit discharges.

A. Storm Water Discharges to Sanitary and Combined Sewers. The public works director may approve discharges of storm water to a public combined sewer or sanitary sewer if other methods of controlling pollutants in the discharge are not adequate and the discharge will not harm the environment. The public works director may condition approval of such a discharge on compliance with requirements to control, reduce, or treat discharges prior to their entry into the public combined sewer or sanitary sewer.

B. Discharges Prohibited to Public Drainage Control Systems. All illicit discharges, as defined in MVMC 13.33.020 and subsection C of this section, made either directly or indirectly to a public drainage control system are prohibited and constitute a violation of this chapter. Enforcement actions and penalties are described in MVMC Title 19.

C. Illicit Discharges Defined. Except as provided in subsection D of this section, all discharges that are not composed of storm water are illicit discharges.

The following is a partial list, provided for informational purposes only, of common substances that are illicit discharges when allowed to enter a public drainage control system: solid waste; human and animal waste; antifreeze, oil, gasoline, grease and other automotive and petroleum products; flammable or explosive materials; metals in excess of naturally occurring amounts, whether in liquid or solid form; chemicals not normally found in uncontaminated water; solvents and degreasers; painting products; drain cleaners; commercial and household cleaning materials; pesticides; herbicides; fertilizers; acids; alkalis; ink; steam-cleaning waste; laundry waste; soap; detergent; ammonia; chlorine; chlorinated swimming pool or hot tub water (unless dechlorinated to a total residual chlorine concentration of 0.1 ppm or less and pH-adjusted and reoxygenized as necessary); volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4 and thermally controlled to prevent an increase in temperature of the receiving water; swimming pool cleaning wastewater and filter backwash; domestic or sanitary sewage; animal carcasses; food and food waste; yard waste; dirt; sand; and gravel (except for traction grit).

D. Permissible Discharges. Discharges from the sources listed below shall only be illicit discharges if the public works director determines that the type of discharge, whether singly or in combination with others, is causing or contributing to a water quality violation, or is causing or contributing to a water quality problem, such as those which contain more contamination than is acceptable in the city, or which contain a type of contamination that is more toxic or is otherwise a more serious problem than typical discharges in the city: potable water sources; natural uncontaminated surface water; natural uncontaminated groundwater; air conditioning condensation; natural springs; uncontaminated water from crawl space pumps; uncontaminated agricultural runoff that is commingled with urban storm water; flows from riparian habitats and wetlands; and discharges from footing drains and other subsurface drains approved by the public works director or where approval is not required.

E. Exemptions. Discharges resulting from emergency firefighting activities. Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water are only permissible if dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted, if necessary, and volumetrically and velocity-controlled to prevent resuspension of sediments in the MS4. Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents.

F. Testing for Illicit Discharges. When the public works director has reason to believe that any discharge is an illicit discharge, the public works director may require a responsible party to sample and analyze the discharge at the responsible party's expense, and to provide an analysis of the data to the public works director. The public works director may conduct such sampling and analysis and recover the costs from a responsible party in an enforcement proceeding. When the discharge is likely to contain illicit discharges on a recurring basis, the public works director may conduct, or may require the responsible party to conduct, ongoing monitoring at the responsible party's expense. (Ord. 3453 § 9, 2009).

SECTION ELEVEN. That section 13.33.180 of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

13.33.180 Deviations.

A. Deviations from the requirements of this chapter, shall be processed as Type II permits consistent with MVMC 14.05, and may be granted for good cause by the public works director, considering the following criteria.

1. Sufficient capacity of downstream facilities under design conditions;
2. Maintenance of the integrity of the receiving waters;
3. Possibility of adverse effects of retention/detention;

4. Utility of regional retention/detention facilities;
5. Capability of maintenance of the system;
6. Structural integrity of abutting foundations and structures;
7. Requirements of the city's surface water management plan; and,
8. The health, safety and welfare of the city is not adversely affected.
9. The deviation provides equivalent environmental protection and is in the overriding public interest; and that the objectives of safety, function, environmental protection, and facility maintenance, based upon sound engineering, are fully met.
10. Special physical circumstances or conditions affecting the property such that the strict application of these provisions would deprive the applicant of all reasonable use of the site in question, and every effort to find creative ways to meet the intent of the minimum standards has been made.
11. The granting of the deviation will not be detrimental to the public health, welfare, and safety, nor injurious to other properties in the vicinity and/or downstream, and to the quality of receiving waters.
12. The deviation is the least possible exception that could be granted to comply with the intent of the minimum requirements.
13. The deviation is fully compliant with all state and federal requirements.

B. Requests for deviations shall be filed in writing with the public works director and shall adequately detail the basis for granting a deviation.

SECTION TWELVE. That section 13.35.030, System of Rates and Charges, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

13.35.030 System of rates and charges.

A. There is hereby imposed a system of rates and charges on each parcel of real property within the city served by or to which service is available by the utility established by this chapter. The charges are found to be reasonable and necessary as a means for regulation of surface water within the city. This regulatory program will fund the administration, planning, design, construction, water quality programming, operation, maintenance and repair of surface water system, facilities, conveyances and program. The charges per equivalent service unit (ESU) required to support the program identified in the Comprehensive Surface Water Management Plan are \$3.95 per month in 1994 through 1996, \$5.35 per month in 1997 and 1998, and \$6.05 per month in 1999 through 2003; provided, however, that the city reserves the right to fix, alter, regulate, revise and control the rates and charges.

B. The following utility charges are hereby established for all parcels of real property in the city:

1. Single-Family Residential Parcel. The single-family residential charge shall be equal to the charge for one ESU per month as set forth in this section for each parcel having one residential dwelling. This uniform rate is based on each single-family parcel being equal to one ESU.
2. Duplex. The charge for duplex properties shall be equal to the charge for one ESU per month as set forth in this section.
3. Undeveloped Parcels. Undeveloped parcels shall not be charged under this system and structure of rates.
4. Other Parcels. The charge for all other parcels shall be based upon the total amount of measured impervious surface divided by one ESU, and rounded to the nearest whole number. The actual total monthly service charge shall be computed by multiplying the measured ESUs for a parcel by the monthly rate per ESU as set forth in this section.

5. Certain Properties Exempted. By virtue of their design for collection and conveyance of surface water runoff, city owned streets shall not be charged under this system and structure of rates.

6. Senior Citizen and Low Income Discount. The charge for any single-family residential unit owned and occupied by a low income elderly person shall be 75 percent of the rate otherwise applicable. For the purposes of this section, "low income elderly person" means a person who has applied for classification as a low income elderly person and has certified he or she qualifies for exemption from all excess property taxes pursuant to the terms of RCW 84.36.381. Proof of entitlement may consist of documents or copies of documents from the county assessor's office showing that the applicant meets the necessary qualifications as set forth in RCW 84.36.381.

7. Drainage Districts. All properties within the city and also located within and paying charges to a drainage district shall receive a discount in the utility charge to the property in an amount equal to the drainage district charge; provided, however, the amount of the discount shall not exceed the amount of the utility charge assessed pursuant to this chapter.

8. On-Site Treatment and Detention Facility Discount. The charge for any parcel, other than single-family residential or duplex properties, meeting the minimum requirements of the latest edition of the Stormwater Management Manual for Western Washington that has been adopted by the City in MVMC Chapter 13.33 shall be reduced by 20 percent upon application to the office of Community & Economic Development. It shall be the duty of the property owner to submit an application, with evidence of compliance with the latest edition of the Storm Water Management Manual according to the requirements of the city engineer, to the office of Community & Economic Development.

9. On-Site Direct Discharge Discount. By virtue of their design for collection and conveyance of surface water runoff, the charge for any parcel containing an on-site surface water system not connected to the city's drainage system that discharges surface water runoff directly into a water body of statewide significance and the surface water runoff meets or exceeds the water quality requirements of the latest edition of the Stormwater Management Manual for Western Washington that has been adopted by the City in MVMC Chapter 13.33 for the Puget Sound Basin shall be reduced by 60 percent upon application to the office of Community & Economic Development.

SECTION THIRTEEN. That section 15.40.030, Administration and Interpretation, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

15.40.030 Administration and interpretation.

A. Duties of Director. The community and economic development director (director), or his/her duly authorized representative, shall have the power and authority to enforce the provisions of this chapter.

B. Interpretation.

1. Director Interprets Chapter. The director is authorized to make interpretations of this chapter and to adopt and enforce rules and regulations supplemental to this chapter as he/she may deem necessary in order to clarify the application of the provisions of this chapter. Such interpretations, rules, and regulations shall be in conformity with the intent and purpose of this chapter.

2. Abrogation and Greater Restrictions. It is not intended that this chapter repeal, abrogate, or impair any existing city, state, or federal regulations. However, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail.

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

4. 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 or permitting an alteration of or impact to the critical area, the director shall:

- a. Take a “precautionary” or a “no-risk approach” that appropriately limits development and land use activities until the uncertainty is sufficiently resolved, or determine that protection can be ensured by using an approach different from that derived from the best available science (BAS); provided, that the applicant demonstrates on the record how the alternative approach will protect the functions and values of the critical area; and
- b. 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:
 - i. Address funding for the research component of the adaptive management program;
 - ii. Change course based on the results and interpretation of new information that resolves uncertainties;
 - iii. Commit to the appropriate time frame and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting protection of critical areas and anadromous fisheries; and
 - iv. The technical report supporting the alternative approach must identify triggers and benchmarks consistent with BAS principles, which may be used to measure progress and provide for restoration or replacement if necessary to achieve the adaptive management goals.

C. Compliance. The city shall not grant any approval or permit any regulated development activity in a critical area or associated buffer prior to fulfilling the requirements of this chapter, Chapter 15.07 MVMC, Shoreline Master Program, or Chapter 15.36 MVMC, Floodplain Management Standards.

D. Reviewing Official. Wherever referenced in this section, reviewing official refers to the decision-making official or body authorized to grant permit approval for an activity.

E. Project Review and Approval Criteria. The city critical area program adopts a standard (see MVMC 15.40.080 and 15.40.090) and a managed ecosystem alternative optional approach (see MVMC 15.40.110) to the use of buffers and mitigation in the protection of functions and values of wetlands and fish and wildlife habitat stream and riparian areas. As such, the city manages impacts and improvements on a landscape scale citywide and within basins consistent with approved best available science principles as determined through a functional assessment model (subsection (F)(1) of this section). Projects requiring review and approval shall require a written finding that the project complies with the requirements of this chapter. Such finding and approval shall be determinative on the issue of compliance with critical area mitigation and protection of functions and values for all project purposes.

F. Site Evaluation Model.

1. The city adopts the hydrogeomorphic (HGM) functional assessment approach recommended by the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Natural Resources Conservation Service, and other agencies. HGM assessment allows users to assess changes in ecosystem functions (hydrology, bio/geochemistry, plant community, and faunal support/habitat) when compared to local and/or regional referenced ecosystems. Mount Vernon has developed an HGM system of models that is specific to the pertinent waters/wetland subclasses within the city and/or urban growth area. Mount Vernon will use their HGM system rather than the Washington State Department of Ecology (DOE) wetland rating model for purposes of measuring both impacts to and benefits from activities in critical areas and buffers. The city’s HGM system is titled “Operational Guidebook to Assessment of Riverine, Slope, and Depressional Waters/Wetlands Functions in the City of Mount Vernon, Washington; March 2008,” and any subsequent updates; hereinafter referred to as the HGM manual.

2. The city adopts the Washington State Department of Ecology's "Stormwater Management Manual for Western Washington" (the entire five-volume technical manual, Publication No. 14-10-055) prepared and published in 2012, including any subsequent updates or amendments adopted by the City in Chapter 13.33 of the Mount Vernon Municipal Code, as the best management practices guideline for stormwater/erosion control in all developments subject to review under this chapter. A requirement of the optional managed ecosystem alternative provided for in MVMC 15.40.110 is that all stormwater on or crossing a property proposed for development shall be captured and treated as required by such manual before discharge to any wetland or waters regulated under this chapter.

3. Best available science adopted for the Mount Vernon waters/wetlands reserve program shall be consistent with principles enunciated in:

a. Knudsen and Neff, Washington Department of Fish and Wildlife's "Management Recommendations for Washington's Priority Habitat: Riparian";

b. Committee on Wetland Mitigation, National Research Council, 2001, "Compensating for Wetland Loss under the Clean Water Act," National Academy Press, Washington, D.C.;

c. Brinson, M.M., F.R. Haner, L.C. Lee, W.L. Nutter, R.D. Rheinhardt, R.D. Smith, and D. Whigham, 1995, "A Guidebook for Application of Hydrogeomorphic Assessment to Riverine Wetlands," U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS, USA, Technical Report WRP-DE-11;

d. "Wetlands in Washington Volume I," Hruby, T., T. Granger, K. Brunner, S. Cooke, K. Dublonica, R. Gersib, T. Granger, L. Reinelt, K. Richter, D. Sheldon, E. Teachout, A. Wald, and F. Weinmann, 1999, "Methods for Assessing Wetland Functions, Volume 1: Riverine and Depressional Wetlands in the Lowlands of Western Washington, Part 1: Assessment Methods," Washington State Department of Ecology Publication No. 99-115;

e. Environmental Laboratory. (1987). "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss;

f. U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center;

g. Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10. March 2006. Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance (Version 1). Washington State Department of Ecology Publication #06-06-011a. Olympia, WA; and

h. Hruby, T. (2014). Washington State Wetland Rating System for Western Washington: 2014 Update. (Publication #14-06-029). Olympia, WA: Washington Department of Ecology.

4. The city has developed a set of recommended critical area and buffer development standards for restoration and enhancement activities required for mitigation pursuant to this chapter. They are compiled under the title of "Critical Areas Ordinance Restoration Guidebook: Guidelines, Recommended Techniques and Details for Restoration of Waters/Wetlands and their Buffers"; hereinafter referred to as the CAO guidebook. The CAO guidebook is available on the city's website or a paper copy is kept at the community and economic development department.

G. Peer Review. The director may require peer review of any critical area reports or work that is submitted to the city. The director has the discretion to choose the consultant who will complete the peer review. If peer review is required, then the applicant shall be responsible for paying the entire costs of the peer review. (Ord. 3509 § 3 (Exh. A), 2010).

SECTION FOURTEEN. That section 15.40.070, Geologic Hazard Area and Hillside Development Standards, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

15.40.070 Geologic hazard area and hillside development standards.

A. Purpose. The purposes of the geologic hazard and hillside development regulations are to:

1. Minimize damage due to landslide, erosion, subsidence, and alluvial fans through the control of development; and
2. Reduce the risks to the city and its citizens from development occurring on unstable slopes; and
3. Control erosion and sediment runoff from development.

B. Classification. Geologic hazards are classified into the following areas:

1. Erosion Hazard Areas. An area that contains one or more of the following characteristics:
 - a. Those areas containing soils that, according to the U.S. Natural Resource Conservation Service Survey, have severe to very severe erosion hazard potential; and/or
 - b. Those project areas that fall within any soil sloping greater than or equal to 30 percent; and/or
 - c. Those areas that may be considered to have an erosion hazard as a result of rapid stream incision or stream bank erosion.
2. Landslide Hazard Areas. An area that exhibits one or more of the following characteristics:
 - a. Contains or lies within 200 feet from slopes having the following characteristics: Gradients of 15 percent or greater intersecting geologic contacts with permeable sediments overlying low permeability sediment or bedrock and springs or groundwater seepage are present; and/or
 - b. Contains or lies within 200 feet from any area having a 40 percent slope or steeper and with a vertical relief of 10 feet or more; and/or
 - c. Contains or lies within 200 feet from areas of historic failure such as areas designated as quaternary earth slumps, earthflows, mudflows, lahars, debris flows, rock slides, landslides or other slope failures on maps or technical reports published by the U.S. Geological Survey such as topographic or geologic maps, or the Geology and Earth Resources Division of the Washington Department of Natural Resources, or other documents authorized by government agencies; and/or
 - d. Contains or lies within 200 feet from areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action. Such area shall be addressed as a flood hazard consistent with this chapter; and/or
 - e. Areas that have shown movement (e.g., slides, rotational or mass failures, subsidence) during the Holocene epoch (i.e., the last 8,000 through 10,000 years) or that are underlain or covered by wastage debris of that epoch; and/or
 - f. Contains or lies within 200 feet from slopes that are parallel or sub-parallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials; and/or
 - g. Contains or lies within 200 feet from slopes with a gradient greater than 80 percent and subject to rock fall during seismic shaking.
3. Seismic Hazard Areas. Seismic hazard areas shall include areas that are subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction or surface faulting as follows:

a. Areas that have a potential for soil liquefaction and soil strength loss during ground shaking as identified on the city of Mount Vernon Soil Liquefaction Potential Map derived from Washington State Department of Natural Resources data or as identified by investigative maps or studies by the United States Geologic Survey.

b. Areas located on a Holocene fault line as indicated on investigative maps or described in studies by the United States Geologic Survey, Geology and Earth Resources Division of the Washington Department of Natural Resources, or other documents authorized by government agencies, or as identified in the field.

4. Volcanic Hazard Areas. Volcanic hazard areas include those lands identified as a volcanic hazard zone for Glacier Peak, Washington (USGS Open-File Report 95-499); or in a volcanic hazard area of Mount Baker, Washington (USGS Open-File Report 95-498).

5. Alluvial Fan Hazard Areas. Areas within or 200 feet from an alluvial fan as designated on the Skagit County Alluvial Fan Study Orthophoto Maps. An alluvial fan is an accumulation of sediment deposited by a stream where it issues from steep, confined hill slopes onto a floodplain or valley floor. The sediment mass includes rock, mud, woody debris, and other accumulations. The depositional mechanism is the decrease in gradient that causes the material to stop its downhill course. Repeated debris flows tend to obstruct the channel, forcing the material to find a new path of least resistance.

C. Geologic Hazard Areas Performance Standards.

1. General. Whenever a proposed development activity requires a development permit and a geologic hazard is present on the site of the proposed development or on abutting or adjacent sites within 200 feet of the subject site, a geotechnical study/geologic hazard report shall be required consistent with the detailed report requirements in MVMC 15.40.120(B).

a. Geologic hazard reports shall demonstrate all of the following criteria are met:

i. The proposal will not increase the threat of the geological hazard to adjacent properties beyond predevelopment conditions; and

ii. The proposal will not adversely impact other critical areas; and

iii. The development can be safely accommodated on the site.

b. The geologic hazard report shall be prepared in accordance with generally accepted geotechnical practices and stamped by a professional engineer licensed in the state of Washington. If the study involves geologic evaluations or interpretations, the report shall be reviewed and approved by a geologist. Further recommendations, additions or exceptions to the original report based on the plans, site conditions, or other supporting data shall be signed and sealed by the geotechnical engineer. If the geotechnical engineer who reviews the plans and specifications is not the same engineer who prepared the geotechnical report, the new engineer shall, in a letter to the city accompanying the plans and specifications, express his or her agreement or disagreement with the recommendations in the geotechnical report and state that the plans and specifications conform to his or her recommendations.

c. Upon review of geotechnical studies, the director may apply conditions of approval to mitigate adverse environmental impacts and to meet the criteria in this chapter. Such conditions may include, but are not limited to, construction techniques, design, drainage, project size/configuration, or seasonal constraints on development. Additional possible conditions may be listed under the performance standards for each hazard type.

d. Slopes Between 15 and 40 Percent. A geotechnical study shall address the hillside development standards for properties containing slopes between 15 and 40 percent.

e. Mitigation Plan Required. A mitigation plan shall be required by the director if alteration of the geologic hazard area is proposed and mitigation measures need to be established for the regulated activity. A

mitigation plan is only required for slopes between 15 and 40 percent if the geotechnical report identifies a need for requirements beyond the hillside development standards.

f. Geotechnical Study or Mitigation Plan Waiver. May only be waived by the director when the applicant provides satisfactory evidence that:

i. The geologic hazard or slope between 15 and 40 percent does not intrude on the applicant's lot, and based on evidence submitted, the proposal will not result in significant adverse impacts to nearby geologic hazard areas or other slopes between 15 and 40 percent; or

ii. Applicable data and analysis appropriate to the project proposed exists and an additional study is not necessary.

g. Peer Review. Peer review of the applicant's geotechnical report may be required by the city at the applicant's expense.

2. Erosion and Landslide Hazard Areas. Regulated development activities shall be subject to the following:

a. A temporary erosion and sedimentation control plan prepared in accordance with the best management practices (BMPs) set forth in the applicable section(s) of the Washington State Department of Ecology's Stormwater Manual adopted within this Chapter under 15.40.030(F)(2).

b. A drainage plan for the collection, transport, treatment, discharge and/or recycle of water in accordance with the requirements of the Mount Vernon stormwater regulations in accordance with the BMPs set forth in the applicable section(s) of the Washington State Department of Ecology's Stormwater Manual adopted within this Chapter under 15.40.030(F)(2).

c. All proposals involving excavations and placement of fills shall be subject to structural review under the appropriate provisions as found in the currently adopted building code of Mount Vernon.

d. All infiltration systems, such as stormwater detention and retention facilities, and curtain drains utilizing buried pipe or French drains, are prohibited in erosion and landslide hazard areas and their buffers unless a site assessment report indicates such facilities or systems will not affect slope stability and the systems are designed by a licensed civil engineer. The engineer shall also certify that the system and/or facilities are installed as designed.

e. Vegetation Removal and Replanting. Removal of vegetation shall be minimal in erosion and landslide hazard areas. Any replanting that occurs shall consist of trees, shrubs, and ground cover that meets the objectives of erosion prevention and site stabilization, does not require permanent irrigation for long-term survival, and, if the removal and replanting are occurring inside a stream or wetland buffer, the plantings are suitable for that critical area and buffer function.

f. Additional Requirements – Landslide Hazard Areas.

i. Surface drainage shall not be directed across the face of a landslide hazard (including bluffs or ravines). If drainage must be discharged from the hazard area into adjacent waters, it shall be collected above the hazard and directed to the water by tight line drain and provided with an energy dissipating device at the point of discharge.

ii. A minimum buffer with a width of 50 feet shall be established from the top, toe and all edges of all landslide hazardous areas. Existing native vegetation shall be maintained in accordance with mitigation recommendations within the buffer area. The buffer may be reduced to a minimum of 10 feet when an applicant demonstrates to the director that the reduction will adequately protect the proposed development, adjacent developments and uses and the subject critical area. The buffer may be increased by the director when determined necessary to prevent risk of damage to proposed and existing development. Normal nondestructive pruning and trimming of vegetation for maintenance purposes, or thinning of limbs of individual trees to provide a view corridor, shall not be subject to these buffer requirements.

3. Seismic Hazard Areas. Structural development proposals shall meet all applicable provisions of the building code as adopted by the city. The director shall evaluate the geologic hazard area report and condition permit approvals to minimize the risk on both the subject property and affected adjacent properties.

4. Volcanic Hazard Areas.

a. Critical Facilities. Critical facilities on sites containing areas susceptible to inundation due to volcanic hazards shall require an evacuation and emergency management plan. The applicant for critical facilities shall evaluate the risk of inundation or flooding resulting from mudflows originating on Mount Baker in a geotechnical report, and identify any engineering or other mitigation measures as appropriate. Mitigation plans may be required. The geologic hazard report shall be subject to third party review.

b. Other. Meet the requirements of the city's flood hazard regulations in Chapter 15.36 MVMC.

5. Alluvial Fan Hazard Areas. Based upon the results of the geologic hazard report and third party review, the director shall require conditions of approval for developments on sites that include or are affected by alluvial fan hazards. Conditions may include, but are not limited to, vegetation enhancement, slope stabilization, buffer zones, or other requirements.

D. Hillside Development Standards. While slopes of less than 40 percent are not defined by this chapter as environmentally sensitive, improper development or construction on such slopes may cause erosion, flooding, property damage, and damage to environmentally sensitive areas regulated by this chapter. Development on hillsides with slopes of 15 percent or greater shall comply with the following requirements, unless specifically exempted by another provision of this chapter.

1. Submittal Requirements. Proposals that include clearing, grading, filling, excavation, construction, paving, or removal of vegetation, on slopes between 15 percent and 39.99 percent, are subject to the following:

a. Preparation of a geotechnical report prepared by a licensed professional engineer that contains a description of how the proposed development and its associated grading plan will or will not impact each of the following on the subject property and adjoining properties:

i. Slope stability, erosion, and landslide hazards;

ii. Drainage, surface and subsurface hydrology, and water quality; and

iii. Existing vegetation as it relates to wetlands, steep slopes, soil stability, and natural habitat value.

b. Recommended methods for mitigating identified impacts and a description of how these mitigation measures may impact adjacent properties.

2. Conditions. Based upon the results of the geotechnical report, the director may require conditions of approval including, but not limited to, vegetation enhancement, slope stabilization, restriction on clearing area or time of year, and/or other requirements. (Ord. 3509 § 3 (Exh. A), 2010).

SECTION FIFTEEN. That section 15.40.090, Wetlands, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

15.40.090 Wetlands.

A. Description.

1. Wetlands are those areas, designated in accordance with the “Washington State Wetland Identification and Delineation Manual” as required by RCW 36.70A.175, that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. All areas within the city meeting the wetland designation criteria in the identification and delineation manual, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this title.
2. Wetlands help to maintain water quality; store and convey stormwater and floodwater; recharge groundwater; provide important fish and wildlife habitat; and serve as areas for recreation, education, scientific study and aesthetic appreciation.
3. The city’s overall goal shall be to achieve no net loss of wetlands. This goal shall be implemented through retention of the function and value 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.

B. Purpose. The purposes of the wetland regulations are to:

1. Ensure that development activities in or affecting wetlands do not threaten public safety, cause nuisances, or destroy or degrade natural wetland functions and values; and
2. Protect wetlands by regulating development activities within and around them; and
3. Protect the public from costs associated with repair of downstream properties resulting from erosion and flooding due to the loss of water storage capacity provided by wetlands; and
4. Prevent the net loss of wetland acreage and functions.

C. Classification and Designation.

1. Wetland Ratings. Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system found in the “Washington State Wetland Rating System for Western Washington” (Department of Ecology Publication No. 14-06-029, effective January 2015) or as amended hereafter. These documents contain the definitions and methods for determining if the criteria below are met.

a. Wetland Rating Categories.

i. Category I. Category I wetlands are those that meet any of the following criteria:

- (A) Represent a unique or rare wetland type; or
- (B) Are more sensitive to disturbance than most wetlands; or
- (C) Are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or
- (D) Are providing a high level of functions, scoring 23 points or more out of 27 (DOE Wetlands Rating System, 2014); or
- (E) Are characterized as a national heritage wetland; or

(F) Are characterized as a bog; or

(G) Are over one acre and characterized as a mature and old-growth forested wetland.

ii. Category II. Category II wetlands are those wetlands that are not Category I wetlands and that meet any of the following criteria:

(A) Provide high levels of some functions, being difficult, though not impossible, to replace; or

(B) Perform most functions relatively well, scoring 20 to 22 points out of 27 (DOE Wetlands Rating System, 2014); or

iii. Category III. Category III wetlands are those wetlands that are not Category I or II wetlands, and that meet the following criterion:

(A) Provide moderate levels of functions, scoring 16 to 19 points out of 27 (DOE Wetlands Rating System, 2014)

iv. Category IV. Category IV wetlands are those that meet the following criterion:

(A) Provide low levels of functions, scoring less than 15 or fewer points out of 27 (DOE Wetlands Rating System, 2014).

b. Date of Wetland Rating. Wetland rating categories shall be applied as the wetland exists on the date a wetland delineation is submitted and accepted as a technically complete part of a permit application by the City consistent with MVMC 14.05; or as the wetland naturally changes thereafter; or as the wetland changes in accordance with permitted activities. Wetland rating categories shall not change due to illegal modifications.

D. Wetlands Reports.

1. When Report Is Required. Subject to the provisions of subsection (D)(3) of this section, a wetland report pursuant to the guidelines in MVMC 15.40.120(G) addressing a wetland's classification and delineation shall be prepared by an applicant as follows:

a. Wetland Report Identifying Classification. An applicant shall be required to conduct a study to determine the classification of the wetland if the subject property or project area is within 150 feet of a wetland even if the wetland is not located on the subject property, but it is determined that alterations of the subject property are likely to impact the wetland in question or its buffer. Wetland classification shall be performed as described in subsection C of this section, and the report shall include a completed wetland rating form. If there is a potential Category I or II wetland within 300 feet of a proposal, the city may require an applicant to conduct a study even if the wetland is not located on the subject property, but it is determined that alterations of the subject property are likely to impact the wetland in question or its buffer. A wetland report shall be prepared by a certified professional at the applicant's expense.

b. Wetland Report Identifying Delineation. A wetland delineation is required for any portion of a wetland on the subject property that will be impacted by the permitted activities. For the purpose of regulation, the exact location of the wetland edge shall be determined by the wetlands specialist hired at the expense of the applicant through the performance of a field investigation using the procedures provided in the HGM manual.

2. When a Wetland Mitigation Plan Is Required. The applicant shall be required to prepare a wetland mitigation plan per MVMC 15.40.120(H) if impacts are identified within a wetland classification or delineation report or if a wetland buffer alteration is proposed. The approval of the wetland mitigation plan by the director shall be based on the criteria located in MVMC 15.40.040, 15.40.080, 15.40.110 and 15.40.120(H).

3. Reports Waived.

- a. Wetland Classification or Delineation Report. May only be waived by the director when the applicant provides satisfactory evidence that:
 - i. A public road, building or other physical barrier exists between the wetland and the proposed activity; or
 - ii. The wetland or buffer does not intrude on the applicant's lot, and based on evidence submitted, the proposal will not result in significant adverse impacts to nearby wetlands regulated under this section; or
 - iii. Applicable data and analysis appropriate to the project proposed exists and an additional study is not necessary, consistent with the current rating system and mitigation standards.
- b. Wetland Mitigation Plan. May only be waived by the director when applicable data and analysis appropriate to the project proposed exists and an additional report is not necessary, consistent with the current rating system and mitigation standards.
- c. Period of Validity for Wetland Reports. Reports submitted and reviewed are valid for up to five years from date of study completion as approved by the city unless the director determines that conditions have changed significantly and a new or amended study is required.
- d. Independent Secondary Review. Peer review of the applicant's report may be required by the city at the applicant's expense.

E. Development Standards – Wetlands.

- 1. Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and functional performance of the wetland and other critical areas.
- 2. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this title.
- 3. Category I Wetlands. Activities and uses shall be prohibited from Category I, except as provided for in the public agency and utility exception, reasonable use exception, and variance sections of this title.
- 4. Category II and III Wetlands. With respect to activities proposed in Category II and III wetlands, the following standards shall apply:
 - a. Water-dependent activities may be allowed where there are no feasible alternatives that would have a less adverse impact on the wetland, its buffers and other critical areas.
 - b. Where nonwater-dependent activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited, unless the applicant demonstrates that:
 - i. The basic project purpose cannot reasonably be accomplished by successfully avoiding the wetland, or result in less adverse impact on a wetland on another site or sites in the general region;
 - ii. All alternative designs of the project as proposed that would avoid or result in less of an adverse impact on a wetland or its buffer, such as a reduction in the size, scope, configuration, or density of the project, are not feasible; and
 - iii. Full compensation for the acreage and loss functions will be provided under the terms established under subsections (G)(6) and (7) of this section.
- 5. Category IV Wetlands. Activities and uses that result in unavoidable and necessary impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved wetland report and mitigation plan, if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the acreage and loss functions will be provided under the terms established under subsections (G)(6) and (7) of this section.

F. Standard Wetland Buffers.

1. Standard Buffer Widths. The standard buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation is inadequate, then the buffer width shall be increased or the buffer should be planted to maintain the standard width. Required standard wetland buffers, based on wetland category, are as follows:

Table 15.40.090(A), Wetland Categories and Standard Buffers

Wetland Category	Standard Buffer
I	200 ft.
II	100 ft.
III	75 ft.
IV	50 ft.

2. Measurement of Wetland Buffers. All buffers shall be measured horizontally from a perpendicular line established at the wetland edge as surveyed in the field. The width of the wetland buffer shall be determined according to the wetland category. 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.

3. Increased Wetland Buffer Widths. The director shall require increased buffer widths in accordance with the recommendations of an experienced, certified professional wetland scientist, and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:

- a. A larger buffer is needed to protect other critical areas;
- b. The buffer or adjacent uplands has a slope greater than 15 percent or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the wetland;
- c. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, implementation of a buffer planting plan may substitute. Where a buffer planting plan is proposed, it shall include plant densities that are in conformance with the recommendations of the CAO guidebook and require monitoring and maintenance to ensure success. Existing buffer vegetation is considered “inadequate” and will need to be enhanced through additional native plantings and (if appropriate) removal of nonnative plants when: (i) nonnative or invasive plant species provide the dominant cover, (ii) vegetation is lacking due to disturbance and wetland resources could be adversely affected, or (iii) enhancement plantings in the buffer could significantly improve buffer functions;
- d. An increase in buffer width on site or restoration of existing buffer required under this section shall be directed to modifications reasonably necessary to mitigate impacts created by the proposed development and roughly proportional to the scope and scale of the impacts created by the proposed development.

4. Wetland Buffer Width Averaging. The director may allow modification of the standard wetland buffer width in accordance with an approved wetland report and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where the applicant and a certified professional wetland scientist demonstrates that:

- a. No feasible site design exists without buffer averaging;

- b. It will not reduce wetland functions or functional performance;
- c. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
- 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 width is not reduced to less than 75 percent of the standard buffer width, applicable to the wetland category, or 35 feet for Category IV wetlands.

5. Buffer Consistency. All mitigation sites shall have buffers consistent with the buffer requirements of this chapter.

6. Buffer Maintenance. Except as otherwise specified or allowed in accordance with this title, wetland buffers shall be retained in an undisturbed or enhanced condition. Removal of invasive nonnative weeds is required for the duration of the mitigation bond.

G. Standard Mitigation Requirements – Wetlands. Compensatory mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with the State Department of Ecology publication “Wetland Mitigation in Washington State,” 2006 (Publication Nos. 06-06-011a and 06-06-011b), or as revised.

1. Mitigation includes the following alternatives. The priority shall be as follows, but may be modified where functions and values are retained, restored, or enhanced by alternate systems:

- a. Avoiding the impact altogether by not taking a certain action or parts of an action.
- b. Minimizing 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.
- c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- d. Reducing or eliminating the impact over time by preservation and maintenance operations.
- e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.

2. Mitigation for Lost or Affected Functions. Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide similar wetland functions as those lost, except when:

- a. The lost wetland provides minimal functions as determined by a site-specific function assessment, 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
- b. Out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.

3. Preference of Mitigation Actions. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:

- a. Restoring wetlands on upland sites that were formerly wetlands.
- b. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative introduced species. This should only be attempted when there is a consistent source of

hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.

c. Enhancing significantly degraded wetlands in combination with restoration or creation. Such enhancement should be part of a mitigation package that includes replacing the impacted area, meeting appropriate ratio requirements.

4. Type and Location of Mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternate approach, compensatory mitigation for ecological functions shall be either in-kind and on site, or in-kind and within the same stream reach, or sub-basin. Mitigation actions shall be conducted within the same sub-drainage basin and on the site as the alteration except when all of the following apply:

a. There are no reasonable on-site or in-sub-drainage basin opportunities or on-site and in-sub-drainage basin opportunities do not have a high likelihood of success, after a determination of the natural capacity of the site to mitigate for the impacts. Consideration should include: anticipated wetland mitigation replacement ratios, buffer conditions and proposed widths, hydrogeomorphic classes of on-site wetlands when restored, proposed flood storage capacity, proposed water quality improvements, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);

b. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and

c. Off-site locations shall be in the same sub-drainage basin unless:

i. Established watershed goals for water quality, flood or conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation at another site; or

ii. Credits from a state-certified wetland mitigation bank are used as mitigation and the use of credits is consistent with the terms of the bank's certification.

5. Mitigation Timing. Mitigation projects shall be completed with an approved monitoring plan prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

a. The director may authorize a one-time temporary delay, up to 120 days, in completing minor construction and landscaping when environmental conditions could produce a high probability of failure or significant construction difficulties. 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, and 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 mitigation plan. The justification must be verified and approved by the city and include a financial guarantee.

6. Mitigation Ratios.

a. Acreage Replacement Ratios. The following ratios shall apply to creation or restoration that is in-kind, within the same drainage basin, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a state-certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

Table 15.40.090(B), Wetland Categories and Mitigation Ratios

Category I	6-to-1
Category II	3-to-1
Category III	2-to-1
Category IV	1.5-to-1

b. Increased Replacement Ratio. The director may increase the ratios under the following circumstances:

- i. Uncertainty exists as to the probable success of the proposed restoration or creation;
- ii. A significant period of time will elapse between impact and replication of wetland functions;
- iii. Proposed mitigation, without increase, will result in a lower category wetland or reduced functions relative to the wetland being impacted; or
- iv. The impact was an unauthorized impact.

7. Wetlands Enhancement as Mitigation.

a. Impacts to wetland functions may be mitigated by enhancement of existing significantly degraded wetlands, but must be used in conjunction with restoration and/or creation. Applicants proposing to enhance wetlands must produce a wetland report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site.

b. At a minimum, enhancement acreage shall be double the acreage required for creation or restoration under subsection (G)(6) of this section. The ratios shall be greater than double the required acreage where the enhancement proposal would result in minimal gain in the performance of wetland functions and/or result in the reduction of other wetland functions currently being provided in the wetland.

c. Mitigation ratios for enhancement in combination with other forms of mitigation shall range from 6:1 to 3:1 and be limited to Class III and Class IV wetlands.

d. Any approval under subsections (G)(7)(b) and (c) of this section shall be consistent with Table 1a of Wetland Mitigation in Washington State, Part I (Ecology, et al., 2006).

8. Wetland Mitigation Banks.

- a. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:
 - i. The bank is certified under Chapter 173-700 WAC; and
 - ii. The director determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and
 - iii. The proposed use of credits is consistent with the terms and conditions of the bank's certification.
- b. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.
- c. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions. (Ord. 3509 § 3 (Exh. A), 2010).

SECTION SIXTEEN. That section 15.40.110, Managed Ecosystem Alternative, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

15.40.110 Managed ecosystem alternative.

A. Purpose. The purpose of this section is to provide an optional alternative to the standard wetlands (MVMC 15.40.090) and fish and wildlife habitat conservation area (MVMC 15.40.080) buffer and mitigation regulations for waters and wetland ecosystems in Mount Vernon and considering the associated urban growth area (UGA). The managed ecosystem alternative requires identification and permitting of a water/wetlands management system which addresses the city's waters and wetlands ecosystem as a whole, and is designed to:

1. Optimize efficient use of lands within the urban areas.
2. Encourage restoration and enhancement of existing degraded waters and wetland ecosystems, including their buffers.
3. Provide options and alternatives in urban areas to achieve some required functions and protections on site, including hydrology and water quality, and other functions off site, such as habitat, where increased long-term benefits may be achieved.
4. Avoid the creation of narrow linear patchwork buffers, which maximize negative edge effects, and to optimize the ability to restore meaningful patches where available to achieve long-term benefit to the ecosystem functions and values within the city.
5. Avoid the creation of widespread nonconforming uses which lock in current degraded conditions and create pressure for expansion of UGAs into neighboring rural lands.
6. Provide a system of implementation, management, and enforcement that assures no net loss of waters/wetlands system function, while recognizing that not all functions will be achieved in all locations, and some functions may be compromised in one location to enable compact urban development, and compensated for elsewhere in the system where better long-term benefit can be achieved and maintained.
7. This section is applicable to new development and any redevelopment within a defined management zone, and applies to any combination of streams alone, wetlands alone, or wetlands and streams in combination.

B. Approach.

1. The city is divided into seven sub-basins, each of which together with their connection to and along with the Skagit River system, provide an appropriate waters/wetland ecosystem for regulatory purposes to provide identification and protection of ecosystem functions which include:
 - a. Hydrology (water quantity);
 - b. Bio/geochemistry (water quantity);
 - c. Plant community; and
 - d. Faunal support.
2. The approach is based on detailed review of the basins and critical area habitat and wetland recommendations appropriate to the functions and values provided to the Mount Vernon geographic setting and the competing needs of assuring long-term protection and maintenance of functions and values with an objective of creating long-term gain within the community, and the need to accommodate compact urban growth to meet the residential, commercial and industrial needs of the community. The system is also designed to provide special attention to the needs of anadromous fish.
3. Minimum standards are defined by sub-basin, based upon existing conditions and demand for future development and the pressure that development may impose on the waters/wetlands ecosystems. The city has a significant resource of publicly owned lands and other lands available for restoration and enhancement which provides the base resource necessary to achieve the goals of this program.
4. Direct Critical Area Impact. Direct critical area impact (construction which is located within the critical area edge), including any construction in wetlands and/or streams, shall be governed by the same guidelines in the managed ecosystem alternative as set out in the standard system. See MVMC 15.40.040, 15.40.080, and 15.40.090; provided, that with respect to mitigation buffers, mitigation may be pursuant to the managed ecosystem alternative program provisions contained in this section.

C. Applicability and Use of This Section.

1. Relationship to Other Sections in Chapter 15.40 MVMC.
 - a. The provisions contained in this section are specific to the use of buffers and are offered as an alternative to only the following sections within this chapter:
 - i. MVMC 15.40.080(D), Table 15.40.080(B), Water Type Standard Buffer Widths.
 - ii. MVMC 15.40.080(D)(4), Buffer Conditions.
 - iii. MVMC 15.40.080(D)(5), Buffer Averaging.
 - iv. MVMC 15.40.080(D)(6), Buffer Reduction.
 - v. MVMC 15.40.090(F)(1), Standard Buffer Widths (wetlands).
 - vi. MVMC 15.40.090(F)(3), Increased Wetland Buffer Widths.
 - vii. MVMC 15.40.090(F)(4), Wetland Buffer Width Averaging.
 - b. Use of this alternative buffer program does not replace other permitting, reporting or direct critical area impact mitigation requirements found elsewhere in this chapter. Except as noted above in subsection (C)(1)(a) of this section, all other applicable city, state and federal regulations shall continue to apply.
2. Optional Program.

a. The provisions contained in this managed ecosystem alternative are optional. An applicant may choose to use either the buffer provisions contained within this section, or those found in MVMC 15.40.080 and 15.40.090.

b. The two sets of buffer regulations are mutually exclusive and may not be combined or used together on a single site or project.

3. Applicable Stream Basins.

a. The optional buffer program provided in this section is applicable to properties located within the following stream basins or stream reach:

i. Kulshan Creek;

ii. Trumpeter Creek;

iii. Maddox Creek;

iv. West Mount Vernon;

v. Britt Slough; and

vi. Golf course reach of Nookachamps Creek.

b. Carpenter Creek and Nookachamps Creek are excluded from the provisions of this section and must utilize the buffer and mitigation requirements found in MVMC 15.40.080 and 15.40.090; except as may be allowed for in subsections (C)(3)(a)(vi) and (4) of this section.

4. Applicability to Variances.

a. If strict use of the waters/wetland buffer requirements found in MVMC 15.40.080 and 15.40.090 create a need for a variance, and the use of the optional buffer provisions in this section would eliminate the need for a variance request, then use of the buffer provisions within this section shall be required. This subsection also applies to the Carpenter Creek and Nookachamps Creek stream basins.

D. Glossary. For this managed ecosystem alternative program, the following terms shall have the meanings set forth below:

1. Critical Area.

a. Streams as defined in MVMC 15.40.080(B).

b. Wetlands as defined in MVMC 15.40.090(A).

c. Combined System. Any combination of streams and wetlands in direct association (the distance between the functioning streams and wetlands is less than the minimum buffers set forth below) shall be considered and regulated as a combined system.

2. Critical Area Edge.

a. Streams and Water Bodies. The line of ordinary high water, as determined in the field.

b. Wetlands. The outer limit of the delineated wetlands in accordance with delineation criteria pursuant to manuals adopted under RCW 36.70A.137.

c. Combined System Edge. The greater of subsection (D)(2)(a) or (b) of this section when a system is treated as a combined system as provided in subsection (D)(1)(c) of this section.

d. Where the wetland, stream or combined system is in a geologic area subject to geologic area guidelines under this chapter, the critical area setback shall be measured from the greater of the critical area in subsection (D)(2)(a), (b), or (c) of this section, or the top of the bank under geologic regulations, whichever is greater.

3. Management Zone. The area between the critical area edge and the nearest paved public street or 200 feet, whichever is less; provided, however, where the paved street merely bisects a critical area, the management zone shall be 200 feet from the critical area edge.

4. Impervious Surface. Surfaces which shed rather than contain and filter stormwater, including but not limited to paved, graveled or lawn surfaces, and other surfaces with similar runoff characteristics as determined by the director, and surfaces covered by structures.

5. Setbacks. The shortest physical distance a new structure or impervious surface may be constructed in a management zone as measured from the critical area edge.

6. Management Zone Buffers. The area of existing or restored vegetation within a management zone between the critical area edge and the nearest allowed impervious surface.

a. Maximum Managed Buffer. The maximum buffer width identified in Tables 15.40.110(A) and (B), which along with the management zone boundary is used to calculate a project's contribution to the critical area management fund (see subsection (D)(9) of this section).

b. Minimum Managed Buffer. The minimum buffer width allowed in the managed ecosystem alternative as identified in Tables 15.40.110(A) and (B); except in those cases where the buffer is in a degraded condition as defined in subsection (E)(2)(b) of this section.

7. Gradients. Gradients are applicable to stream reaches and combined stream/wetland systems only, and are used as one of the variables in Table 15.40.110(A) in determining maximum and minimum managed buffer widths; and are categorized as follows:

a. Low gradient: less than one percent.

b. Medium gradient: one to two percent.

c. High gradient: greater than two percent.

8. Waters/wetland systems are typed by the prevailing adjacent upland condition and used as one of the variables for determining maximum and minimum managed buffer widths in Tables 15.40.110(A) and (B); and are described as follows:

a. Natural Systems. Waters/wetland systems abutted by intact natural area buffer vegetation of 50 feet or more in width from critical area edge.

b. Maintained Systems. Waters/wetland systems abutted by upland areas that do not fit the natural or closed definitions. Maintained systems are those that are routinely manipulated as in mowing or pruning, and characterized by features such as, but not limited to, gardens, ornamental landscaping, turf, partially hardened or compacted surfaces areas, and introduction of rock or fill.

c. Closed Systems. Applicable to streams only and refers to stream reaches that are in pipes or other completely confined structures.

9. Critical Area Management Fund. A dedicated fund in the city of Mount Vernon managed through the stormwater management program, which shall collect fees as identified below and expend such fees in accordance with a mitigation plan developed for the city and implemented to achieve the objectives of this program.

10. Subbasin Management Area. One of seven geographic areas identified below and mapped on city zoning maps which include both streams and wetland systems within the defined basin which are functionally related, whether or not hydraulically connected through surface flow.

E. Subbasins Conditions, Recommendations and Management Requirements.

1. Current Conditions and Recommendations.

a. Kulshan Creek.

- i. Consists of batture reaches, piped reaches, maintained reaches, and natural reaches.
- ii. Flows through densely developed areas.
- iii. Highly altered and channeled in maintained systems.
- iv. City owns the batture, park, and upstream area suitable for meaningful restoration.

b. Trumpeter Creek.

- i. Consists of long maintained reaches with close proximity to development, piped, and natural reaches.
- ii. Flows through developed areas, but also has natural systems in good condition in all gradient reaches.
- iii. City owns Baker View Park and Logan Creek areas surrounding the stream and upstream areas suitable for meaningful restoration.

c. Maddox Creek.

- i. High value salmon stream, with no fish barriers to Skagit River.
- ii. Flows through heavily developed areas in middle and lower reaches.
- iii. Important to protect longitudinal connections and terrestrial/water interface in upper reaches, and water quality in all reaches.

d. Nookachamps Basin. Except where the waters/wetland system borders or is incorporated in the Eaglemont Golf Course (golf course), the Nookachamps basin would follow the standard buffer/mitigation rules only; except in cases where a variance can be avoided through use of the managed ecosystem alternative rules in this section.

- i. Upper reaches encompassed in an existing development.
- ii. Headwaters/high gradient reaches principally surrounded by golf facilities.
- iii. In the upper high gradient reaches, limited new development potential without redevelopment of the golf course.
- iv. Mitigation Recommendations for the Golf Course. Any permit would require upgrade to Audubon Golf Course standards or equivalent professional standard for water and nutrient treatment (hole-by-hole standard).

e. Carpenter Creek. The Carpenter Creek basin would follow the standard buffer/mitigation rules only; except in cases where a variance can be avoided through use of the managed ecosystem alternative rules in this section.

- i. High value relatively intact waters/wetlands ecosystem.

- ii. In upper reaches within the UGA, little impact from current development.
 - iii. Steep slopes.
 - iv. On-site, in-kind protection for water quality, quantity and habitat is the preferred option.
- f. West Mount Vernon.
- i. Flat, very little contour.
 - ii. No separate stream or river system.
 - iii. Urbanizing – no significant habitat patches.
- g. Britt Slough.
- i. Degraded flood plain.
 - ii. Undeveloped.

2. Management Requirements and Performance Standards.

a. Subbasins Maximum and Minimum Buffer Widths.

- i. Stream buffers are established by subbasin in Table 15.40.110(A) and are a function of the combination of stream type, system type, and gradient.
- ii. Wetland buffer widths are established by subbasin in Table 15.40.110(B) and are a function of wetland category and system type.
- iii. Maximum managed buffer width is indicated by the numbers shown in Tables 15.40.110(A) and (B) and is measured from the critical area edge.
- iv. Minimum managed buffer width is equal to the allowed percentage reduction of the maximum managed buffer as indicated by sub-basin in Tables 15.40.110(A) and (B).

Table 15.40.110(A), Streams – Maximum and Minimum Managed Buffer Widths

STREAM TYPE	F		Np		Ns	
	Natural System	Maintained System	Natural System	Maintained System	Natural System	Maintained System
Kulshan Creek: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
Low Gradient	75	50	75	50	50	25
Med/High Gradient	50	25	75	50		
Trumpeter Creek: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
Low Gradient	75	50	75	50	50	25
Med/High Gradient	50	25	50	25		
Maddox Creek: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
Low Gradient	75	50	75	50	50	25
Med/High Gradient	50	25	50	25		

STREAM TYPE	F		Np		Ns	
SUBBASIN	Natural System	Maintained System	Natural System	Maintained System	Natural System	Maintained System
Nookachamps Creek: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
Low Gradient	75	50	75	50	50	25
Med/High Gradient	50	25	50	25		
Carpenter Creek: Minimum Managed buffer = 25% of Max Managed buffer; no less than 25 feet.						
Low Gradient	100	50	100	50	50	25
Med/High Gradient	100	50	100	50		
West Mount Vernon: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
	100	50	100	50	50	25
Britt Slough: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
	100	50	100	50	50	25

Table 15.40.110(B), Wetlands – Maximum and Minimum Managed Buffer Widths

Wetland Category –	II		III		IV	
SUBBASIN –	Natural System	Maintained System	Natural System	Maintained System	Natural System	Maintained System
Kulshan Creek: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
	75	50	75	50	50	25
Trumpeter Creek: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
	75	50	75	50	50	25
Maddox Creek: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
	75	50	75	50	50	25
Nookachamps Creek: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
	75	50	75	50	50	25
Carpenter Creek: Minimum Managed buffer = 25% of Max Managed buffer; no less than 25 feet.						
	100	50	100	50	50	25
West Mount Vernon: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
	100	50	100	50	50	25
Britt Slough: Minimum Managed buffer = 50% of Max Managed buffer; no less than 25 feet.						
	100	50	100	50	50	25

b. Degraded Buffer Condition Restoration. The following conditions apply:

- i. Degraded buffer condition is defined as follows: where the buffer area has been irrevocably developed below the minimum managed buffer width noted above in Tables 15.40.110(A) and (B).

ii. Under the degraded buffer condition defined above, the minimum setback for any impervious surface shall be to the greater of the following as measured from the critical area edge:

- (A) The edge of the existing/remaining undeveloped buffer area; or
- (B) The distance equal to a 7:1 slope measured from the ordinary high water mark for a pond or lake; from the bottom elevation of a stream channel; from a delineated wetland edge; or
- (C) No less than 15 feet from ordinary high water or a delineated wetland edge.

iii. The degraded buffer area setback shall be shown on the approved site plan and if found to be in a degraded condition under the city functional assessment model, such degraded condition shall be subject to upgrade and restoration as follows:

- (A) Manage and treat all stormwater from the developed site and treat such water pursuant to the adopted stormwater manual prior to discharge into the degraded buffer area;
- (B) Removal of invasive weeds, debris and trash, and any blockage to longitudinal and/or lateral flow in the on-site stream section; and
- (C) Restoration planting of natural vegetation appropriate to the site condition according to city guidelines.

c. Upgraded Stormwater Management Required.

i. Utilization of the managed ecosystem alternative provided for in this section assumes effective on-site stormwater management.

ii. Any project that involves the development of impervious surfaces will be required to upgrade on-site stormwater facilities pursuant to the applicable section(s) of the Washington State Department of Ecology’s Stormwater Manual adopted within this Chapter under 15.40.030(F)(2).

3. Critical Area Management Fund Schedule. Development of impervious surfaces anywhere within the defined management zone, which includes the managed buffer areas, will require a monetary contribution to the city’s critical areas management fund in accordance with the management fund schedule shown below in Table 15.40.110(C). This calculation shall quantify the proposed impervious surface for the subject development regardless of whether or not there may be existing impervious surfaces within the defined management zone (which includes the managed buffer areas).

Table 15.40.110(C), Subbasin Critical Area Management Fund Contribution Schedule SUBBASIN	Area Between Management Zone Boundary and Maximum Managed Buffer		Area Between Max. Managed Buffer and Critical Area Edge
	Proposed ¹ Impervious Surface Only	Proposed ¹ Impervious Surface w/ Canopy Removal	Proposed ¹ Impervious Surface
Kulshan Creek	\$1.00/sq. ft.	\$2.00/sq. ft.	\$4.00/sq. ft.
Trumpeter Creek	\$1.50/sq. ft.	\$4.00/sq. ft.	\$4.00/sq. ft.
Maddox Creek	\$1.50/sq. ft.	\$4.00/sq. ft.	\$4.00/sq. ft.
Nookachamps Creek	\$1.50/sq. ft.	\$4.00/sq. ft.	\$4.00/sq. ft.
Carpenter Creek	\$1.50/sq. ft.	\$4.00/sq. ft.	\$4.00/sq. ft.
West Mount Vernon	\$1.00/sq. ft.	\$2.00/sq. ft.	\$4.00/sq. ft.
Britt Slough	\$1.00/sq. ft.	\$2.00/sq. ft.	\$4.00/sq. ft.

¹ Proposed impervious surface is defined as the impervious surfaces that are constructed/placed/created/developed/alterd as part of a project regardless of whether or not there is existing impervious surface(s) on the site.

SECTION SEVENTEEN. That section 15.40.120, Submittal Requirements, Reports, Studies and Plans, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

15.40.120 Submittal requirements, reports, studies and plans.

A. General Requirements. When a regulated critical area or associated buffer is identified, the following procedures apply.

1. Preapplication Consultation. Any person seeking a permit from the city to develop properties known or suspected to have critical areas present shall schedule a preapplication conference with the city pursuant to adopted scheduling procedures. Preapplication consultation and planning will help applicants identify regulatory requirements under this section and assure integration of critical area planning into overall project design.
2. Submittal Requirements.
 - a. Plans. When an application is submitted for any regulated activity, the location of the critical areas and buffers on the site shall be indicated on the plans submitted based upon an inventory provided by a certified professional, as identified in subsections B through G of this section.
 - b. Waivers. The director may waive any of the requirements of this subsection if the size and complexity of the project does not warrant a step in the proceeding, as identified in subsections B through G of this section.
 - c. Independent Secondary Review. When appropriate due to the type of critical area present, or project area conditions, the director has the authority to require the applicant to prepare and/or fund additional analyses or activities, including, but not limited to:
 - i. An evaluation by an independent certified professional regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate. This shall be paid at the applicant's expense, and the director shall select the third party review professional. Independent review shall be required for activities that are altering a critical area or buffer and are required to prepare supplemental studies and/or mitigation plans. Independent review for standard studies is discretionary and may be required by the director; and/or
 - ii. A request for consultation with the State of Washington Department of Fish and Wildlife, Washington State Department of Ecology, State Department of Natural Resources, Skagit System Cooperative, the Upper Skagit Tribe, or other appropriate agency.
3. Fees. See Chapter 14.15 MVMC.
4. Combined Systems. Where streams, ponds, and wetlands function jointly on a property and/or adjoining properties, such systems shall be addressed as a single system for purposes of all required reports and approvals.

B. Geotechnical Study/Geologic Hazard Report. A study that includes soils and slope stability analysis, boring and test pit logs, and recommendations on slope setbacks, foundation design, retaining wall design, material selection, and all other pertinent elements. The preparation and content requirements in the table below shall also apply.

Table 15.40.120(A), Geotechnical Report – Detailed Requirements

Report Preparation/Content Requirements	Erosion	Landslide	Seismic	Volcanic Hazards	Alluvial Fan
1. Characterize soils, geology and drainage.	X	X	X	X	X
2. Describe and depict all natural and man-made features within 200 feet of the site boundary.	X	X	X	X	X
3. Identify any areas that have previously been disturbed or degraded by human activity or natural processes.	X	X	X	X	X
4. Characterize groundwater conditions including the presence of any public or private wells within 1,000 feet of the site.	X	X	X		X
5. Provide a site evaluation review of available information regarding the site.	X	X	X	X	X
6. Conduct a surface reconnaissance of the site and adjacent areas.	X	X	X		X
7. Conduct a subsurface exploration of soils and hydrologic conditions.	X	X	X		X
8. Provide a slope stability analysis.	X	X			X
9. Address principles of erosion control in proposal design including: Plan the development to fit the topography, drainage patterns, soils and natural vegetation on site; Minimize the extent of the area exposed at one time and the duration of the exposure; Stabilize and protect disturbed areas as soon as possible; Keep runoff velocities low; Protect disturbed areas from stormwater runoff; Retain the sediment within the site area; Design a thorough maintenance and follow-up inspection program to ensure erosion control practices are effective.	X	X			X
10. Provide an evaluation of site response and liquefaction potential relative to the proposed development.			X		
11. Conduct sufficient subsurface exploration to provide a site coefficient (S) for use in the adopted building code to the satisfaction of the building official.			X		
12. Provide an analysis of proposed clearing, grading and construction activities including construction scheduling. Analyze potential direct and indirect on-site and off-site impacts from development.	X	X	X		X
13. Propose mitigation measures, such as any special construction techniques, monitoring or inspection programs, erosion or sedimentation programs during and after construction, surface water management controls, buffers, remediation, stabilization, etc.	X	X	X	X	X
14. Critical facilities on sites containing areas susceptible to inundation due to volcanic hazards shall require an evacuation and emergency management plan. The applicant for critical facilities shall evaluate the risk of inundation or flooding resulting from mudflows originating on Mount Baker in a geotechnical report, and identify any engineering or other mitigation measures as appropriate.				X	

Note: An “X” indicates that the requirement applies in the identified critical area.

C. Hydrogeologic Assessment. The assessment shall address the impact the proposed land use will have on both the quality and quantity of the water transmitted to the aquifer.

1. The assessment shall be submitted to the department and shall address, at a minimum, the following criteria:

- a. Surficial soil type and geologic setting;
- b. Location and identification of wells within 1,000 feet of the site;

- c. Location and identification of surface water bodies and springs within 1,000 feet of the site with recharge potential, unless geologic features in the basin make it clear that a larger area is hydraulically connected to any fish bearing stream in the affected basin;
 - d. Description of underlying aquifers and aquitards, including water level, gradients, and flow direction;
 - e. Available surface water and groundwater quality data;
 - f. Effects of the proposed development on water quality;
 - g. Sampling schedules required to assure water quality;
 - h. Discussion of the effects of the proposed development on the groundwater resource;
 - i. Recommendations on appropriate best management practices (BMPs), based on the applicable section(s) of the Washington State Department of Ecology’s Stormwater Manual adopted within this Chapter under 15.40.030(F)(2), or mitigation to assure no significant degradation of groundwater quality;
 - j. Other information as required by the Skagit County health district; and
 - k. The assessment shall also address the types of pesticides, herbicides, and fertilizers that can safely be used for the care of landscaping proposed by the applicant.
2. The hydrogeologic assessment shall be prepared by a professional geologist/hydrologist or by a soil scientist with a strong background in geology (see definition of “Certified professional” in MVMC 15.40.170(B)).
 3. Applications for development or operations with underground storage of petroleum products will be processed using the appropriate procedure as specified in existing Mount Vernon ordinances.
 4. Analysis for a specific parcel(s), using the criteria outlined below, will be employed to confirm if the soils present require a recharge area designation. Data collection will include, at a minimum, six soil logs to a depth of 10 feet (or to a depth of four feet below the lowest proposed excavation point, whichever is greater) for each acre in the parcel(s) being evaluated. At least one well, 200 feet or greater in depth with an adequate drilling report, must be available within one mile. The associated data shall be analyzed and included in the hydrogeologic assessment to determine the presence of highly permeable soils with the recharge area designation.

D. Habitat Management Plan. A habitat management plan (HMP) is a site investigation to evaluate the potential presence or absence of a regulated fish or wildlife species or habitat affecting a subject property and proposed development.

1. The assessment of habitats for the site and project shall at a minimum include the following information:
 - a. A map prepared at an easily readable scale, showing:
 - i. The location of the proposed development site;
 - ii. Property boundaries;
 - iii. The relationship of the site to surrounding topographic, water, and cultural features;
 - iv. Proposed building locations and arrangements; and
 - v. A legend which includes a complete legal description, acreage of the parcel, scale, north arrow, and date of map revision;
 - b. Detailed description of vegetation on and adjacent to the project area and its associated buffer;

- c. 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;
- d. 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;
- e. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;
- f. Enhancement of existing degraded buffer area and replanting of the disturbed buffer area with native vegetation;
- g. The use of alternative on-site wastewater systems in order to minimize site clearing;
- h. Retention of existing native vegetation on other portions of the site in order to offset habitat loss from buffer reduction;
- i. The need for fencing and signage along the buffer edge;
- j. 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 the mitigation sequencing required by this chapter; and
- k. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring, maintenance, and enforcement programs.

2. When appropriate due to the type of habitat or species present or the project conditions, the director may also require the habitat management plan to include:

- a. An evaluation by an independent certified professional regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate;
- b. A request for consultation with the Washington Department of Fish and Wildlife or the local Native American Indian tribe or other appropriate agency; and
- c. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

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

- a. Establishment of buffer zones;
- b. Preservation of critically important plants and trees;
- c. Limitation of access to habitat areas;
- d. Seasonal restriction of construction activities;
- e. Establishing phased development requirements; and
- f. Monitoring plan for a period necessary to establish that performance standards have been met. Generally this will be for a period of seven to 10 years.

4. HMP Adequacy. The HMP shall demonstrate to the satisfaction of the city that the habitat functions and values are improved by implementation of the HMP. If there is a disagreement between the city and the applicant as to the adequacy of the HMP, the issue of plan adequacy shall be resolved by consulting with the appropriate federal or state agency. If the federal or state agencies are not available in a timely manner, the applicant may choose to have the city refer the HMPs to a third-party consultant at the expense of the applicant. After consultation with such state departments or third-party consultant, the director shall make a final decision on the adequacy of the HMP.

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

6. Any project that requires an HMP shall not be considered SEPA exempt and the HMP shall be processed along with appropriate SEPA review and agency comment as required by Chapter 197-11 WAC.

E. Stream Study, Standard. A report shall be prepared by a qualified professional, unless otherwise determined by the director, and include the following information:

1. Site Map. Site map(s) indicating, at a scale no smaller than one inch equals 20 feet (unless otherwise approved by the director):

a. The entire parcel of land owned by the applicant, including 100 feet of the abutting parcels through which the water body(ies) flow(s);

b. The ordinary high water mark (OHWM) determined in the field by a certified professional (the OHWM must also be flagged in the field);

c. Stream classification, as recorded in city inventories (if unclassified, see subsection (F)(1) of this section);

d. Topography of the site and abutting lands in relation to the stream(s) and its/their management zone(s) at contour intervals of two feet where slopes are less than 10 percent, and of five feet where slopes are 10 percent or greater;

e. One-hundred-year floodplain and floodway boundaries, including 100 feet of the abutting parcels through which the water body(ies) flow(s);

f. Site drainage patterns, using arrows to indicate the direction of major drainage flow;

g. Top view and typical cross-section views of the stream, banks, and management zones to scale;

h. The vegetative cover of the entire site, including the stream or lake, banks, riparian area, and/or abutting wetland areas, extending 100 feet upstream and downstream from the property line. Include position, species, and size of all trees at least four inches dbh that are within the inner and outer riparian management zone;

i. The location, width, depth, and length of all existing and proposed structures, roads, stormwater management facilities, wastewater treatment and installations in relation to the stream/lake and its/their management zones; and

j. Location of site access, ingress and egress.

2. Grading Plan. A grading plan prepared in accordance with MVMC and Mount Vernon engineering standards and as required by staff through the preapplication review process, and showing contour intervals of two feet where slopes are less than 10 percent, and of five feet where slopes are 10 percent or greater.

3. Stream Assessment Narrative. A narrative report shall be prepared to accompany the site plan that describes:

- a. The stream classification as recorded in city inventories;
- b. The vegetative cover of the site, including the stream or lake, banks, riparian area, wetland areas, and flood hazard areas extending 100 feet upstream and downstream from the property line;
- c. The ecological functions currently provided by the stream/lake and existing riparian area;
- d. Observed or reported fish and wildlife that make use of the area including, but not limited to, salmonids, mammals, and bird nesting, breeding, and feeding/foraging areas; and
- e. Measures to protect trees and vegetation.

F. Stream Study, Supplemental. The application shall include the following information:

1. **Unclassified Stream Assessment.** If the site contains an unclassified stream, a certified professional shall provide a proposed classification of the stream(s) based on the city's adopted rating system in MVMC 15.40.090(C)(1) and a rationale for the proposed rating.
2. **Alterations to Stream and/or Management Zones.** A supplemental report prepared by a certified professional shall evaluate alternative methods of developing the property using the following criteria for justification:
 - a. Avoid any disturbances to the stream or management zone;
 - b. Minimize any stream or management zone impacts;
 - c. Compensate for any stream or management zone impacts;
 - d. Restore any stream or management zone area impacted or lost temporarily; and
 - e. Enhance degraded stream habitat to compensate for lost functions and values.
3. **Impact Evaluation.**
 - a. An impact evaluation for any unavoidable impacts prepared by a certified professional, to include:
 - i. Identification, by characteristics and quantity, of the resources (stream, lake) and corresponding functional values found on the site;
 - ii. Evaluation of alternative locations, design modifications, or alternative methods of development to determine which option(s) reduce(s) the impacts on the identified resource(s) and functional values of the site;
 - iii. Determination of the alternative that best meets the applicable approval criteria and identify significant detrimental impacts that are unavoidable; and
 - iv. To the extent that the site resources and functional values are part of a larger natural system such as a watershed, the evaluation must also consider the cumulative impacts on that system.
 - b. For a violation, the impact evaluation must also include:
 - i. Description, by characteristics and quantity, of the resource(s) and functional values, on the site prior to the violations, including, but not limited to: shade/temperature regulation, input of organic material and nutrients, contribution of large woody debris (LWD), improvements to water quality, bank stabilization, wildlife habitat, microclimate, and groundwater; and
 - ii. Determination of the impact of the violation on the resource(s) and functional values.

G. Wetland Assessment. A wetland assessment includes the following:

1. A description of the project and maps at a scale no smaller than one inch equals 200 feet showing the entire parcel of land owned by the applicant and the wetland boundary delineated by a qualified wetlands ecologist, and pursuant to MVMC 15.40.040;
2. A description of the vegetative cover of the wetland and adjacent area including identification of the dominant plant and animal species, consistent with published delineation standards (Corps of Engineers delineation manual, 1987; Corps of Engineers Regional Supplement, 2010. Copies of the wetland delineation data sheets and rating forms should be included as an appendix to the wetland assessment;
3. A site plan for the proposed activity at a scale no smaller than one inch equals 200 feet showing the location, width, depth and length of all existing and proposed structures, roads, stormwater management facilities, sewage treatment and installations within the wetland and its buffer;
4. The exact locations and specifications for all activities associated with site development including the type, extent, and method of operations;
5. Elevations of the site and adjacent lands within the wetland and its buffer at contour intervals of no greater than five feet or at a contour interval appropriate to the site topography and acceptable to the city;
6. Top view and typical cross-section views of the wetland and its buffer to scale;
7. The purposes of the project and, if a variance is being requested, an explanation of why the proposed activity cannot be located at another site;
8. If wetland mitigation is proposed, a mitigation plan that includes baseline information, an identification of direct and indirect impacts of the project to the wetland area and wetland functions, environmental goals and objectives, performance standards, construction plans, maintenance and monitoring programs, and a contingency plan; and
9. Alternative Methods of Development. If wetland changes are proposed, the applicant shall evaluate alternative methods of developing the property using the following criteria in this order:
 - a. Avoid any disturbance to the wetland or buffer;
 - b. Minimize any wetland or buffer impacts;
 - c. Compensate for any wetland or buffer impacts;
 - d. Restore any wetlands or buffer impacted or lost temporarily;
 - e. Create new wetlands and buffers for those lost; and
 - f. In addition to restoring a wetland or creating a wetland, enhance an existing degraded wetland to compensate for lost functions and values.

This evaluation shall be submitted to the director. Any proposed alteration of wetlands shall be evaluated by the director using the above hierarchy.

10. Such other information as may be needed by the city, including but not limited to an assessment of wetland functional characteristics, including a discussion of the methodology used; a study of hazards if present on site, the effect of any protective measures that might be taken to reduce such hazards; and any other information deemed necessary to verify compliance with the provisions of this section.

H. Mitigation and Monitoring Plans.

1. Baseline Information.

a. A written assessment and accompanying maps of the impacted critical area including, at a minimum, a critical area delineation by a qualified specialist; existing critical area acreage; vegetative, faunal, and hydrologic characteristics; an identification of direct and indirect impacts of the project on the critical area; associated buffers and their functions; soil and substrata conditions; topographic elevations; and proposed restoration area.

b. If the mitigation site is different from the impacted critical area site, the assessment should include at a minimum: existing acreage; vegetative, faunal, and hydrologic conditions; relationship within the watershed and to existing water bodies; soil and substrata conditions; topographic elevations; existing and proposed adjacent site conditions; buffers; and site ownership.

2. Environmental Goals and Objectives. A written report by a qualified specialist shall be provided identifying goals and objectives of the mitigation plan and describing:

a. The purposes of the restoration measures, including a description of site selection criteria; identification of restoration goals; identification of target evaluation species and ecological functions; dates for beginning and completion; and a complete description of the structure and functions sought in the restoration area or site. The goals and objectives shall be related to the functions and values of the impacted critical area and associated buffer, or if off-site and/or out-of-kind, the type of critical area to be emulated; and

b. A review of the best available science and author's experience to date in restoring or creating the type of critical area functions proposed shall be provided. An analysis of the likelihood of success of the restoration project shall be provided based on the experiences of comparable projects, preferably those in the same drainage basin, if any. An analysis of the likelihood of persistence of the created or restored critical area and buffer functions shall be provided based on such factors as surface and groundwater supply and flow patterns, dynamics of the critical area ecosystem, sediment or pollutant influx and/or erosion, periodic flooding and drought, etc., presence of invasive flora or fauna, potential human or animal disturbance, and previous comparable projects, if any.

3. Performance Standards. Specific criteria shall be provided for evaluating whether or not the goals and objectives of the project are achieved and for beginning remedial action or contingency measures. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance and diversity targets, habitat diversity indices, or other ecological, geological or hydrological criteria. These criteria will be evaluated and reported pursuant to subsection (H)(5) of this section, Monitoring Program. An assessment of the project's likelihood of success in achieving the goals and objectives of the mitigation plan should be included.

4. Detailed Techniques and Plans. Written specifications and descriptions of restoration techniques shall be provided including the proposed construction sequence; grading and excavation details; erosion and sediment control features needed for construction and long-term survival; a planting plan specifying plant species, quantities, locations, size, spacing, and density; source of plant materials, propagates, or seeds; water and nutrient requirements for planting; where appropriate, measures to protect plants from predation; specification of substrata stockpiling techniques, if necessary, and planting instructions; and any other techniques or details appropriate to restoration construction. These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, and topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques and/or anticipated final outcome. The city may request such other information as needed to determine the adequacy of a mitigation plan.

5. Monitoring Program. A program outlining the approach for monitoring construction and development of the restoration project and for assessing a completed project shall be provided in the mitigation plan. Monitoring and its associated reports of the critical area mitigation areas shall be completed by an agency or consultant selected by the city. Any maintenance required as a result of the monitoring, per performance standards set by the city, can be completed by the applicant and approved by the entity that completes the monitoring for the city; or the entity completing the monitoring can also complete any required work at the sole expense of the applicant. A protocol shall be included outlining the schedule for site monitoring (for example, monitoring shall occur in years one, three, five, and seven after site construction). Monitoring shall be on a yearly basis, with the

first year's worth of monitoring/reporting paid for before any work commences on the site, and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the restoration project. The restoration project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five years, or 10 years in special circumstances such as scrub shrub or forested wetlands. The cost of all required years of monitoring shall be the responsibility of the applicant. Monitoring may include, but is not limited to:

- a. Establishing vegetation plots to track changes in plant species composition and density over time;
- b. Using photo reference points to evaluate vegetation community response;
- c. Sampling surface and subsurface waters to determine pollutant loading, and changes from the natural variability of background conditions (i.e., pH, nutrients, heavy metals);
- d. Measuring base flow rates and stormwater runoff to model and evaluate hydrologic and water quality predictions;
- e. Measuring sedimentation rates; and
- f. Sampling fish and wildlife populations to determine habitat utilization, species abundance, and diversity.

6. Contingency Plan. Should include an evaluation of the potential need for remedial action or contingency measures and an identification of potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.

7. Permit Conditions. Any restoration project prepared for mitigation and approved by the city shall become part of the application for the underlying project permit approval.

8. Demonstration of Competence. A demonstration of financial resources, administrative, supervisory, and technical competence and scientific expertise of sufficient standing to successfully execute the restoration project shall be provided.

9. Performance Surety. The cost of planting, labor, earthwork, etc., necessary for mitigation shall be estimated by the project proponent and reviewed by the city. The cost of monitoring and maintenance shall be established by the city based upon a cost estimate provided by the agency or consultant the city selects to perform monitoring and maintenance work. All mitigation and buffer enhancement shall be completed prior to final plat approval and/or building occupancy depending on the type of application. However, when improvements cannot be completed prior to final acceptance due to weather conditions that could negatively affect the success of the project, a performance surety may be used. The performance surety shall equal 150 percent of the cost of the mitigation project, and the required improvements shall be installed in a satisfactory manner within six months or less. To ensure that monitoring/reporting and maintenance work is paid for and/or completed, two separate financial securities in the form of bonds or cash deposits shall be provided to the city prior to any work commencing on the site. They are:

a. Maintenance Surety.

- i. A maintenance surety shall be required on all mitigation and buffer enhancement projects to ensure that the improvement successfully survives the monitoring periods set above.
- ii. The amount of the maintenance surety shall be calculated by taking the annual cost of the maintenance (determined by the city based upon an estimate provided by the agency or consultant that will be performing this work) and adding to it the cost of the plants, earthwork, and labor to install the mitigation project (provided by the applicant's critical area consultant) multiplied by the number of years of the required maintenance minus one (because the applicant will be required to pay for the first year of maintenance in advance) and then multiplied by 0.60 (60 percent).

b. Monitoring Surety.

i. A monitoring surety shall be required on all mitigation and buffer enhancement projects to ensure that these projects are adequately monitored.

ii. The amount of the monitoring surety shall be calculated by taking the annual monitoring cost (determined by the city based upon an estimate provided by the agency or consultant that will be performing this work) multiplied by the number of years of the required monitoring minus one (because the applicant will be required to pay for the first year of maintenance upfront) multiplied by one and one-half (or 150 percent).

c. Upfront Monitoring and Maintenance Costs. The applicant shall pay for the first year of monitoring and maintenance of the project, as determined by the city based upon an estimate provided by the agency or consultant that will be performing this work, prior to project approval.

10. Long-Term Maintenance. To ensure the long-term success of the mitigation plan, the applicant or their successors shall be responsible for the long-term maintenance of the habitat area and its associated buffer. The habitat and buffer shall be kept clear of weeds, invasive plant material, lawn clippings, junk, debris, intrusions or similar. (Ord. 3509 § 3 (Exh. A), 2010).

SECTION EIGHTEEN. That section 15.40.170, Definitions, of the Mount Vernon Municipal Code is hereby repealed and reenacted, with the new section to read as follows:

15.40.170 Definitions.

A. Land Cover Definitions.

“Aquatic areas” means areas classified as regulated streams and regulated wetlands.

“Impervious surfaces” means:

1. For the purposes of the stream and wetland regulations: a hard surface area that either prevents or retards the infiltration of water into the soil and movement of water through soil media. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, lawns, and oiled, macadam or other surfaces which impede the natural infiltration and movement of water. When such surfaces supported a permitted use on or before January 1, 2007, they shall be considered impervious surfaces. Earthwork (e.g., grading, filling, clearing preparatory to new development) does not create impervious surface.

2. For the purposes of aquifer protection regulations:

a. Impervious surfaces include those that have a lesser permeability than the undisturbed native soil, as indicated in Table 14 of the Soil Survey of Skagit County Area, Washington (USDA Soil Conservation Service, 1989).

b. Effective impervious surfaces are those impervious surfaces that are connected via sheet flow or discrete conveyance to a drainage system. Impervious surfaces on residential development sites are considered ineffective if the runoff is dispersed in accordance with “Full Dispersion” measures as described in the applicable sections of the Washington State Department of Ecology’s Stormwater Manual adopted within this Chapter under 15.40.030(F)(2), or an equivalent manual as determined by the director.

“Pervious surfaces” means vegetated areas that do not meet the definition of tree cover.

“Tree cover” means the area of cover provided by conifer or hardwood tree(s) greater than four inches dbh (diameter at breast height). Tree cover excludes the portion of the canopy that overlies impervious surface areas.

B. General Definitions.

“Activities, development” means the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure; any mining, excavation, landfill or land disturbance; division of a parcel of land into two or more parcels; and any use or extension of the use of land.

“Alteration” means any human induced change in an existing condition of a critical area or its management zone or buffer. Alterations include, but are not limited to, grading, filling, channelizing, dredging, clearing (vegetation), construction, compaction, excavation, drainage or dewatering, or any other activity that changes the character of the critical area.

“Alluvial fan hazard” means flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flow paths.

“Aquifer” means 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.

“Artificial channel” means a stream channel that is entirely constructed, but does not include relocated natural channels. Except where fish bearing, an artificial channel is not a critical area.

“Best management practices (BMPs)” means conservation practices or systems of practices and management measures that:

1. Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics, and sediment;
2. Minimize adverse impacts to surface water and groundwater flow and circulation patterns and to the chemical, physical, and biological characteristics of wetlands;
3. Protect trees and vegetation designated to be retained during and following site construction and use native plant species appropriate to the site for revegetation of disturbed areas; and
4. Provide standards for proper use of chemical herbicides within critical areas.

“Buffer” means an area that is contiguous to and protects a critical area that is required for the continued maintenance, functioning, and/or structural stability of a critical area.

“Certified professional” means any person with the education, experience, and/or professional certification or licenses in a specialized field of study appropriate to the studies and analysis required, such as a wildlife biologist, hydrologist, hydrogeologist, wetland biologist, geotechnical engineer, or specialists in other disciplines.

“Critical areas” means wetlands, aquifer protection areas, fish and wildlife habitat, and frequently flooded and geologically hazardous areas as defined by the Growth Management Act.

“Critical facility” means a facility for which even a slight chance of flooding, inundation, or impact from a hazard event might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, and installations that produce, use, or store hazardous materials or hazardous waste.

“DBH” means diameter breast height, which means the outside bark diameter at breast height. Breast height is defined as 4.5 feet (1.37 m) above the ground on the uphill side of the tree.

“Development permit” means written permission, after appropriate review for type of application, from the appropriate decision-maker authorizing the division of a parcel of land, the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure, utility, or any use or extension of the use of the land.

“Director” means the director of community and economic development for the city of Mount Vernon, or his/her designee.

“Drainage collection system” means a system for conveying, treating and detaining stormwater runoff swales, ponds, and outfalls.

“Emergency” means an action that must be undertaken immediately or within a time frame too short to allow full compliance with this chapter, to avoid an immediate threat to public health or safety, to prevent an imminent danger to public or private property, or to prevent an imminent threat of serious environmental degradation.

“Forested area” means a treed area that functions, or which over time will be restored to function, as a mature forest characterized by an undisturbed understory.

“Geologically hazardous areas” means areas that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only be at risk, but may also increase the hazard to surrounding development and use. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

1. Erosion hazard;
2. Liquefaction;
3. Landslide hazard;
4. Seismic hazard;
5. Volcanic hazard; and
6. Alluvial fan hazard.

“Innovative site design” means development techniques using creative approaches to site design, habitat and tree retention, significant reduction of impervious surfaces, and changes in traditional site features such as roads and structures in favor of natural habitat features that result in zero or near-zero drainage discharge from the site after development.

“Intermittent” means water is not present in the channel year round during years of normal or above normal rainfall.

“Ordinary high water mark” means on lakes and streams, a mark found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists as of the effective date of regulations, as it may naturally change thereafter, or as it may change in accordance with permits issued by the city or state. Where the ordinary high water mark cannot be found, it shall be the stage of the 50 percent exceedance flow, according to the period of record of a measured or synthetic hydrograph. For braided streams, the ordinary high water mark is found on the banks forming the outer limits of the depression within which the braiding occurs.

“Normal rainfall” means rainfall that is at the mean or within one standard deviation of the mean of the accumulated annual rainfall record, based upon the water year for Skagit County as recorded at the Burlington/Mount Vernon, Skagit Regional Airport, Washington, United States.

“Perennial” means water that flows continuously.

“Primary association area” means the area used on a regular basis by, is in close association with, or is necessary for the proper functioning of the habitat of a critical species. “Regular basis” means that the habitat area normally contains or is usually known to contain a critical species or, based on known habitat requirements of the species, the area is likely to contain the critical species. Regular basis is species and population dependent. Species that exist in low numbers may be present infrequently yet rely on certain habitat types.

“Priority habitat” means 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.

“Reasonable use” means the minimum use to which a property owner is entitled under the applicable state and federal constitutional provisions, including takings and substantive due process. Reasonable use shall be liberally construed to protect the constitutional rights of the property owner.

“Regulated activity” means all activities located within a regulated critical area or critical area buffer/management zone.

“Riparian area” means the upland area immediately adjacent to and paralleling a body of water, usually composed of trees, shrubs and other plants. Riparian functions include bank and channel stability, sustained water supply, flood storage, recruitment of woody debris, leaf litter, nutrients, sediment and pollutant filtering, shade, shelter, and other functions that are important to both fish and wildlife.

“Salmonid migration barrier” means an in-stream blockage that consists of a natural drop (no human influence) with an uninterrupted slope greater than 100 percent (45-degree angle) and a height in excess of 11 vertical feet within anadromous salmon-bearing waters or a height in excess of three vertical feet within resident trout-only bearing waters. Constructed barriers to salmonid migration (e.g., culverts, weirs, etc.) shall be considered barriers to salmonid migration by this definition only if they were lawfully installed, present a complete barrier to salmonid passage based on hydraulic drop, water velocity, water depth, or any other feature that would prevent all salmonid from passing upstream; and in the opinion of the city reviewing official cannot be modified to provide salmonid passage without resulting in any of the following conditions:

1. Significant impacts to other environmental resources;
2. Significant impacts to major transportation and utility systems, or to the public health and safety;
3. Significant expense. For the purposes of this definition significant expense means a cost equal to or greater than 50 percent of the combined value of the proposed site buildings, structures, and/or site improvements, and existing buildings, structures, and/or site improvements to be retained.

“Species, priority” means any fish or wildlife species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels as classified by the Washington Department of Fish and Wildlife, including endangered, threatened, sensitive, candidate, and monitor species, and those of recreational, commercial, or tribal importance.

“Steep slopes” means slopes greater than 40 percent.

“Stream” means an area where surface waters flow sufficiently to produce a defined channel or bed. A defined channel or bed is an area that demonstrates clear evidence of the passage of water and includes, but is not limited to, bedrock channels, gravel beds, sand and silt beds, and defined channel swales. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses unless they are used by salmonids or used to convey streams that were naturally occurring prior to construction of such watercourses.

“Utilities” means utility lines and facilities related to the provision, distribution, collection, transmission or disposal of water, storm and sanitary sewage, oil, gas, power, telephone, and cable.

“Wetlands” means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation 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 do include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands.

C. Report Content Requirements.

1. **Geotechnical Study.** A study prepared in accordance with generally accepted geotechnical practices and stamped by a professional engineer licensed in the state of Washington that includes soils and slope stability analysis, boring and test pit logs, and recommendations on slope setbacks, foundation design, retaining wall design, material selection, and all other pertinent elements. If the evaluation involves geologic evaluations or interpretations, the report shall be reviewed and approved by a geologist. Further recommendations, additions or exceptions to the original report based on the plans, site conditions, or other supporting data shall be signed and sealed by the geotechnical engineer. If the geotechnical engineer who reviews the plans and specifications is not the same engineer who prepared the geotechnical report, the new engineer shall, in a letter to the city accompanying the plans and specifications, express his or her agreement or disagreement with the recommendations in the geotechnical report and state that the plans and specifications conform to his or her recommendations. The preparation and content requirements in Table 15.40.120(A), Geotechnical Report – Detailed Requirements, shall also apply.

2. **Habitat/Wildlife Assessment.** A report prepared by a qualified fish and wildlife biologist with experience assessing the relevant species and habitats and including at a minimum, the following requirements:

a. Site plan prepared in accordance with the requirements of the community and economic development department indicating all habitat conservation areas falling within 200 feet of the subject property;

b. Project narrative describing the proposal including, but not limited to, associated grading and filling, structures, utilities, adjacent land uses, description of vegetation both within and adjacent to the habitat conservation area, and when deemed necessary by the director, surface and subsurface hydrologic analysis;

c. Impact analysis identifying and documenting the presence of all habitat conservation areas and discussing the project's effects on the habitat conservation areas;

d. Regulatory analysis including a discussion of any federal, state, tribal, and/or local requirements or special management recommendations that have been developed for species and/or habitats located on the site;

e. Mitigation report including a discussion of proposed measures for mitigating adverse impacts of the project and an evaluation of their potential effectiveness. Measures may include, but are not limited to, establishment of buffer zones, preservation of critically important plants and trees, limitation of access to habitat areas, seasonal restrictions of construction activities, establishment of a timetable for periodic review of the plan and/or establishment of performance or maintenance bonds;

f. Management and maintenance practices including a discussion of ongoing maintenance practices that will assure protection of all fish and wildlife habitat conservation areas on site after the project has been completed. This section should include a discussion of proposed monitoring criteria, methods and schedule.

3. **Hydrogeologic Study.** A report shall be prepared as follows:

a. The study shall be prepared by, or under the direction of, and signed by a licensed hydrogeologist pursuant to Chapter 308-15 WAC.

b. **Phase I Report Requirements.** A Phase I reconnaissance level hydrogeologic report shall summarize existing information about the basic site hydrogeologic conditions such as soil types, land cover, likely groundwater flow directions and receiving waters, and which low impact development management practices will be implemented consistent with the Low Impact Development Technical Guidance Manual for Puget Sound, January 2005, or an equivalent manual as determined by the director.

c. **Phase II Report Requirements.** This report shall include:

i. A description of the geology and groundwater in the proposed permit area and adjacent areas down to and including the lowest aquifer that may be affected by the facility, including the following:

(A) The results of a sufficient number of test borings and core borings to accurately characterize geology, soils, groundwater flow, groundwater chemistry and flow systems of the proposed permit area and adjacent area, which shall be at least three test borings. The applicant shall include the actual surface elevations of the drill holes.

(B) The stratigraphy, lithologic, and physical characteristics and thickness of each stratum, including the location and depth of aquifers.

(C) The hydrologic characteristics of each aquifer described in subsection (C)(3)(c)(i)(B) of this section, including field test data for hydraulic conductivity, storage coefficient and transmissivity, groundwater hydraulic gradient and velocity. The description of these characteristics shall be based on multiple well aquifer tests if required by the city. The application shall include the procedures and calculations used to determine these characteristics.

(D) The geologic structure within the proposed permit area and adjacent area, and its relation to the regional geological structure.

(E) The aquifer characteristics necessary to accurately describe three-dimensional groundwater flow through the proposed permit area and adjacent area, including storage and discharge characteristics.

4. Stream Study, Standard. A report shall be prepared by a qualified professional, unless otherwise determined by the director, and include the following information:

a. Site Map. Site map(s) indicating, at a scale no smaller than one inch equals 20 feet (unless otherwise approved by the director):

i. The entire parcel of land owned by the applicant, including 100 feet of the abutting parcels through which the water body(ies) flow(s);

ii. The ordinary high water mark (OHWM) determined in the field by a certified professional (the OHWM must also be flagged in the field);

iii. Stream classification, as recorded in city inventories (if unclassified, see subsection (C)(5)(a) of this section);

iv. Topography of the site and abutting lands in relation to the stream(s) and its/their management zone(s) at contour intervals of two feet where slopes are less than 10 percent, and of five feet where slopes are 10 percent or greater;

v. One-hundred-year floodplain and floodway boundaries, including 100 feet of the abutting parcels through which the water body(ies) flow(s);

vi. Site drainage patterns, using arrows to indicate the direction of major drainage flow;

vii. Top view and typical cross-section views of the stream, banks, and management zones to scale;

viii. The vegetative cover of the entire site, including the stream or lake, banks, riparian area, and/or abutting wetland areas, extending 100 feet upstream and downstream from the property line. Include position, species, and size of all trees at least four inches dbh that are within the inner and outer riparian management zone;

ix. The location, width, depth, and length of all existing and proposed structures, roads, stormwater management facilities, wastewater treatment and installations in relation to the stream/lake and its/their management zones; and

x. Location of site access, ingress, and egress.

b. Grading Plan. A grading plan prepared in accordance with MVMC and Mount Vernon engineering standards and as required by staff through the preapplication review process, and showing contour intervals of two feet where slopes are less than 10 percent, and of five feet where slopes are 10 percent or greater.

c. Stream Assessment Narrative. A narrative report shall be prepared to accompany the site plan that describes:

i. The stream classification as recorded in city inventories;

ii. The vegetative cover of the site, including the stream or lake, banks, riparian area, wetland areas, and flood hazard areas extending 100 feet upstream and downstream from the property line;

iii. The ecological functions currently provided by the stream/lake and existing riparian area;

iv. Observed or reported fish and wildlife that make use of the area including, but not limited to, salmonids, mammals, and bird nesting, breeding, and feeding/foraging areas; and

v. Measures to protect trees and vegetation.

5. Stream Study, Supplemental. The application shall include the following information:

a. Unclassified Stream Assessment. If the site contains an unclassified stream, a certified professional shall provide a proposed classification of the stream(s) based on the city's adopted rating system in MVMC 15.40.090(C)(1) and a rationale for the proposed rating.

b. Alterations to Stream and/or Management Zones. A supplemental report prepared by a certified professional shall evaluate alternative methods of developing the property using the following criteria for justification:

i. Avoid any disturbances to the stream or management zone;

ii. Minimize any stream or management zone impacts;

iii. Compensate for any stream or management zone impacts;

iv. Restore any stream or management zone area impacted or lost temporarily;

v. Enhance degraded stream habitat to compensate for lost functions and values.

c. Impact Evaluation.

i. An impact evaluation for any unavoidable impacts prepared by a certified professional, to include:

(A) Identification, by characteristics and quantity, of the resources (stream, lake) and corresponding functional values found on the site;

(B) Evaluation of alternative locations, design modifications, or alternative methods of development to determine which option(s) reduce(s) the impacts on the identified resource(s) and functional values of the site;

(C) Determination of the alternative that best meets the applicable approval criteria and identify significant detrimental impacts that are unavoidable; and

(D) To the extent that the site resources and functional values are part of a larger natural system such as a watershed, the evaluation must also consider the cumulative impacts on that system.

ii. For a violation, the impact evaluation must also include:

(A) Description, by characteristics and quantity, of the resource(s) and functional values, on the site prior to the violations, including, but not limited to: shade/temperature regulation, input of organic material and nutrients, contribution of large woody debris (LWD), improvements to water quality, bank stabilization, wildlife habitat, microclimate, and groundwater; and

(B) Determination of the impact of the violation on the resource(s) and functional values.

6. Stream Mitigation Plan. The mitigation plan must ensure compensation for unavoidable significant adverse impacts that result from the chosen development alternative or from a violation as identified in the impact evaluation. A mitigation plan must include:

a. Site Map. Site map(s) indicating, at a scale no smaller than one inch equals 20 feet (unless otherwise approved by the director):

- i. The entire parcel of land owned by the applicant, including 100 feet of the abutting parcels through which the water body(ies) flow(s);
- ii. The ordinary high water mark (OHWM) determined in the field by a certified professional (the OHWM must also be flagged in the field);
- iii. Stream classification, as recorded in city inventories or as determined through a supplemental stream study approved by the director;
- iv. Topography of the site and abutting lands in relation to the stream(s) and its/their management zones at contour intervals of two feet where slopes are less than 10 percent, and of five feet where slopes are 10 percent or greater;
- v. One-hundred-year floodplain and floodway boundaries, including 100 feet of the abutting parcels through which the water body(ies) flow(s);
- vi. Site drainage patterns, using arrows to indicate the direction of major drainage flow;
- vii. Top view and typical cross-section views of the stream, banks, and management zones to scale;
- viii. The vegetative cover of the entire site, including the stream or lake, banks, riparian area, and/or abutting wetland areas, extending 100 feet upstream and downstream from the property line. Include position, species, and size of all trees at least four inches dbh that are within the inner and outer riparian management zones;
- ix. The location, width, depth, and length of all existing and proposed structures, roads, stormwater management facilities, wastewater treatment and installations in relation to the stream/lake and its/their management zones;
- x. Location of site access, ingress and egress;
- xi. Indication of where proposed mitigation or remediation measures will take place on the site;
- xii. Separate indication of areas where revegetation is to take place and areas where vegetation is anticipated to be removed; and
- xiii. Any other areas of impact with clear indication of type and extent of impact indicated on site plan.

b. Mitigation narrative that includes the following elements:

- i. Description of existing conditions on the site and associated water resource (baseline information);
- ii. Resource(s) and functional values to be restored, created, or enhanced on the mitigation site(s);
- iii. Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies;
- iv. Construction schedule;
- v. Operations and maintenance practices for protection and maintenance of the site;
- vi. Environmental goals, objectives, and performance standards to be achieved by mitigation;
- vii. Monitoring and evaluation procedures for a three-year period minimum, including minimum monitoring standards and timelines (i.e., annual, semi-annual, quarterly);
- viii. Contingency plan with remedial actions for unsuccessful mitigation;
- ix. Cost estimates for implementation of mitigation plan for purposes of calculating surety device;

x. Discussion of compliance with approval criteria; and

xi. A review of the best available science supporting the proposed request for a reduced standard and/or the method of impact mitigation; a description of the report author's experience to date in restoring or creating the type of critical area proposed; and an analysis of the likelihood of success of the compensation project.

7. Wetland Assessment. A wetland assessment includes the following:

a. A description of the project and maps at a scale no smaller than one inch equals 200 feet showing the entire parcel of land owned by the applicant and the wetland boundary delineated by a qualified wetlands ecologist, and pursuant to MVMC 15.40.040;

b. A description of the vegetative cover of the wetland and adjacent area including identification of the dominant plant and animal species, consistent with published delineation standards (Corps of Engineers delineation manual, 1987; Corps of Engineers Regional Supplement, 2010. Copies of the wetland delineation data sheets and rating forms should be included as an appendix to the wetland assessment;

c. A site plan for the proposed activity at a scale no smaller than one inch equals 200 feet showing the location, width, depth and length of all existing and proposed structures, roads, stormwater management facilities, sewage treatment and installations within the wetland and its buffer;

d. The exact locations and specifications for all activities associated with site development including the type, extent and method of operations;

e. Elevations of the site and adjacent lands within the wetland and its buffer at contour intervals of no greater than five feet or at a contour interval appropriate to the site topography and acceptable to the city;

f. Top view and typical cross-section views of the wetland and its buffer to scale;

g. The purposes of the project and, if a variance is being requested, an explanation of why the proposed activity cannot be located at another site; and

h. If wetland mitigation is proposed, a mitigation plan that includes baseline information, an identification of direct and indirect impacts of the project to the wetland area and wetland functions, environmental goals and objectives, performance standards, construction plans, a monitoring program, and a contingency plan.

i. Alternative Methods of Development. If wetland changes are proposed, the applicant shall evaluate alternative methods of developing the property using the following criteria in this order:

i. Avoid any disturbances to the wetland or buffer;

ii. Minimize any wetland or buffer impacts;

iii. Compensate for any wetland or buffer impacts;

iv. Restore any wetlands or buffer impacted or lost temporarily;

v. Create new wetlands and buffers for those lost; and

vi. In addition to restoring a wetland or creating a wetland, enhance an existing degraded wetland to compensate for lost functions and values.

This evaluation shall be submitted to the director. Any proposed alteration of wetlands shall be evaluated by the director using the above hierarchy.

j. Such other information as may be needed by the city, including but not limited to an assessment of wetland functional characteristics, including a discussion of the methodology used; a study of hazards if present on site, the

effect of any protective measures that might be taken to reduce such hazards; and any other information deemed necessary to verify compliance with the provisions of this section.

8. Wetland Mitigation Plan – Preliminary. A preliminary wetland mitigation plan shall include the following:

- a. A conceptual site plan demonstrating sufficient area for replacement ratios;
- b. Proposed planting scheme for created, restored, and enhanced wetlands; and
- c. Written report consistent with final wetland mitigation plan requirements regarding baseline information, environmental goals and objectives, and performance standards.

9. Wetland Mitigation Plan – Final. A final wetland mitigation plan shall include:

a. **Baseline Information.** A written assessment and accompanying maps of the impacted wetland including, at a minimum, a wetland delineation by a qualified wetland specialist; existing wetland acreage; vegetative, faunal, and hydrologic characteristics; an identification of direct and indirect impacts of the project to the wetland area and wetland functions; soil and substrata conditions; topographic elevations and compensation site. If the mitigation site is different from the impacted wetland site, the assessment should include at a minimum: existing acreage; vegetative, faunal, and hydrologic conditions; relationship within the watershed and to existing water bodies; soil and substrata conditions, topographic elevations; existing and proposed adjacent site conditions; buffers; and ownership.

b. **Environmental Goals and Objectives.** A written report by a qualified wetland specialist shall be provided identifying goals and objectives of the mitigation plan and describing:

i. The purposes of the compensation measures including a description of site selection criteria, identification of compensation goals, identification of target evaluation species and resource functions, dates for beginning and completion, and a complete description of the structure and functional relationships sought in the new wetland. The goals and objectives shall be related to the functions and values of the original wetland or, if out-of-kind, the type of wetland to be emulated; and

ii. A review of the best available science and report author's experience to date in restoring or creating the type of wetland proposed shall be provided. An analysis of the likelihood of success of the compensation project at duplicating the original wetland shall be provided based on the experiences of comparable projects, preferably those in the same drainage basins, if any. An analysis of the likelihood of persistence of the created or restored wetland shall be provided based on such factors as surface and groundwater supply and flow patterns, dynamics of the wetland ecosystem, sediment or pollutant influx and/or erosion, periodic flooding and drought, etc., presence of invasive flora or fauna, potential human or animal disturbance, and previous comparable projects, if any.

c. **Performance Standards.** Specific criteria shall be provided for evaluating whether or not the goals and objectives of the project are achieved and for beginning remedial action or contingency measures. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance and diversity targets, habitat diversity indices, or other ecological, geological or hydrological criteria. These criteria will be evaluated and reported pursuant to subsection (C)(9)(e) of this section, Monitoring Program. An assessment of the project's success in achieving the goals and objectives of the mitigation plan should be included along with an evaluation of the need for remedial action or contingency measures.

d. **Detailed Techniques and Plans.** Written specifications and descriptions of compensation techniques shall be provided including the proposed construction sequence; grading and excavation details; erosion and sediment control features needed for wetland construction and long-term survival; a planting plan specifying plant species, quantities, locations, size, spacing, and density; source of plant materials, propagates, or seeds; water and nutrient requirements for planting; where appropriate, measures to protect plants from predation; specification of substrata stockpiling techniques and planting instructions; descriptions of water control structures and water level maintenance practices needed to achieve the necessary hydroperiod characteristics, etc. These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, and topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or

anticipated final outcome. The plan shall provide for elevations that are appropriate for the desired habitat type(s) and that provide sufficient hydrologic data. The city may request such other information as needed to determine the adequacy of a mitigation plan.

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

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

ii. Using photo stations to evaluate vegetation community response;

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

iv. Measuring base flow rates and stormwater runoff to model and evaluate hydrologic and water quality predictions;

v. Measuring sedimentation rates;

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

vii. A description shall be included outlining how the monitoring data will be evaluated by agencies that are tracking the progress of the compensation project. A monitoring report shall be submitted consistent with the periods identified in MVMC 15.40.120(H). The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five years.

f. **Contingency Plan.** Identification of potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.

g. **Permit Conditions.** Any compensation project prepared for mitigation pursuant to MVMC 15.40.110, and approved by the city shall become part of the application for project approval.

h. **Demonstration of Competence.** A demonstration of financial resources, administrative, supervisory, and technical competence and scientific expertise of sufficient standing to successfully execute the compensation project shall be provided. A compensation project manager shall be named and the qualifications of each team member involved in preparing the mitigation plan and implementing and supervising the project shall be provided, including educational background and areas of expertise, training, and experience with comparable projects. (Ord. 3509 § 3 (Exh. A), 2010).

SECTION NINETEEN. EFFECTIVE DATE

A. With the exception of Subsection B below, this ordinance shall be in full force and effect five days after its passage, approval and publication as provided by law.

B. Exception- the proposed amendments to Mount Vernon Municipal Code Chapters 13.33 and 13.35 shall be in full force on **December 31, 2016**.

SECTION TWENTY. Severability. If any section, subsection, paragraph, sentence, clause, or phrase of this ordinance is declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining parts of this ordinance.

SECTION TWENTY-ONE. City staff are hereby directed to complete preparation of the final ordinance, including correction of any typographical or editorial edits.

PASSED AND ADOPTED this 9th day of November, 2016.

SIGNED AND APPROVED this ____ day of November, 2016.

Alicia D. Huschka, Finance Director

Jill Boudreau, Mayor

Approved as to form:

Kevin Rogerson, City Attorney

Published _____