Appendix A:
City of Enumclaw Shoreline Master Program
Critical Areas ~~Ordinance No. 2382~~Regulations
Enumclaw, Washington

Chapter 19.02
CRITICAL AREAS REGULATIONS

Sections:

APPENDIX E: Critical Area Identification Form

APPENDIX F: Critical Area Buffer Risk and Opportunity Rating Form

APPENDIX G: WAC 220-16-030 (Rev. 2004) – DNR Stream Types

Article I. General Provisions

19.02.005 Definitions. The definition of terms used in the Chapter are provided in Appendix D: Critical Areas Definitions.

19.2.10 Policy, Goals, Purpose, and Intent.

A. Policy: It is the policy of the City of Enumclaw (City) to require site evaluation, planning and review prior to project permitting and construction to:

(1) avoid or minimize damage to critical areas wherever possible;
(2) recognize and respond to the need for flood control and flood-resistant building practices within frequently flooded areas;
(3) identify and regulate geologically hazardous areas that either are not suited for, or would probably impose significant limitations on, building construction, road construction or disturbance and be consistent with public health and safety concerns;
(4) identify and protect aquifer recharge areas for aquifers used for potable water;
(5) require that land use activities not dependent upon the location of a critical area be located in areas outside of the identified or delineated critical area and its associated buffer;
(6) achieve no net loss of wetland function and value by requiring restoration or enhancement of degraded wetlands or creation of new wetlands to offset losses that are unavoidable;
(7) define and protect fish and wildlife habitat conservation areas; and
(8) be consistent with public health and safety concerns.

B. Goals. By regulating land use activities within critical areas and their attendant buffers, this Chapter seeks to:

1. Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, volcanic eruptions, or flooding;
2. Maintain healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats, and to conserve the biodiversity of plant and animal species;
3. Direct activities not dependent on critical areas resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;
4. Allow modification and/or obliteration of low function and value wetland, stream, and wildlife habitats in conjunction with off-site mitigation and restoration in designated areas where the addition of created and/or enhanced habitats will increase fish and wildlife production, public benefits, and economic viability in the City limits and urban growth areas; and
5. Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, and habitat conservation areas.

C. Purpose: The purpose of this Chapter is to protect the public health, safety, and welfare of the citizens of the City as well as the critical areas regulated within the City by:

1. defining, designating, and classifying ecologically sensitive and hazardous areas to be regulated in the City;
2. providing City officials with information to evaluate, approve, condition, or deny public or private development proposals based upon the regulations outlined in this Chapter;
3. enforcing the regulations outlined in this Chapter to prevent the adverse impacts of development within and adjacent to critical areas;
4. protecting the public against critical area losses due to:
a.. unnecessary maintenance and replacement of public facilities, including the dredging of ports and navigation channels;

b. publicly funded mitigation of avoidable impacts;

5. protecting the private property rights of property owners in the City by alerting appraisers, assessors, owners, and potential buyers or lessees to the development limitations of critical areas;
6. providing alternative enforcement strategies, incentives, and/or compensation to property owners whose property would be rendered partially or fully undevelopable due to the enforcement of the regulations outlined in this Chapter, and who, by cooperating with the City in implementing the regulations outlined in the Chapter rather than pursuing reasonable use alternatives, allow for a net improvement in the regulated critical area's habitat quality and wildlife/fish production;
7. protecting, enhancing, restoring, and mitigating impacts to regulated critical areas and their functions and values, while also allowing for reasonable use of private property and economic viability in the City.
8. implementing the current goals, policies, guidelines, and requirements of the City's Comprehensive Plan, the State of Washington (State) Growth Management Act, and the State Environmental Policy Act (SEPA); as well as all updated (future) versions of City environmental regulations and community (or comprehensive) plans, applicable State community development and environmental regulations, and applicable Federal regulations.

D. Intent: The regulations detailed in this Chapter are intended to provide the City a basis for protecting, restoring, enhancing, and/or obliterating (with approved mitigation) the designated and classified critical areas in accordance with the Growth Management Act and through the application of the best available science, as determined according to WAC 365-195-900 through 365-195-925, and in consultation with state and federal agencies and other qualified professionals.

In addition, it is the intent of the city that activities in or affecting wetlands not threaten public safety, cause nuisances, or destroy or degrade natural wetland functions and values by:

1. Impeding flood flows, reducing flood storage capacity, or impairing natural flood control functions, thereby resulting in increased flood heights, frequencies, or velocities on other lands;
2. Increasing water pollution through location of domestic waste disposal systems in wetlands, unauthorized application of pesticides and herbicides, disposal of solid waste at inappropriate sites, creation of unstable fills, or the destruction of wetland soils and vegetation;
3. Increasing erosion;
4. Decreasing breeding, nesting, and feeding areas for many species of waterfowl and shorebirds, including those rare and endangered;
5. Interfering with the exchange of nutrients needed by fish and other forms of wildlife;
6. Decreasing habitat for fish and other forms of wildlife;
7. Adversely altering the recharge or discharge functions of wetlands, thereby impacting ground water or surface water supplies;
8. Significantly altering wetland hydrology and thereby causing either short or long term changes in vegetative composition, soils characteristics, nutrient cycling, or water chemistry;
9. Destroying sites needed for education and scientific research, such as outdoor biophysical laboratories, living classrooms, and training areas; or
10. Destroying or damaging aesthetic and property values, including significant public view sheds.

19.2.20 Applicability, Regulated Activities, and Exempt Activities.

A. All regulated activities shall be subject to the provisions of this Chapter. The provisions of this Chapter shall apply to all lands, all land uses, and development activities, and all structures and facilities in the City, whether or not a permit or authorization is required, and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns, leases, or administers land within the City. No person, company, agency, or applicant shall alter a critical area or its associated buffer except as consistent with the purposes and requirements of this Chapter and as authorized by the Administrator.

1. **Regulated Activities:** Regulated activities include, but are not limited to, development clearing (vegetation), draining, dredging, dumping or stockpiling (native or non-native organic or inorganic materials), excavating, filling, flooding, grading, harvesting, obstructing, pile driving, or shading (with human-made structures) within critical areas and their associated buffers.
2. The City shall not approve any permit or otherwise issue any authorization to alter the condition of any land, water, or vegetation, for development within areas of special flood hazard or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first ensuring compliance with the requirements of this Chapter, including, but not limited to, the following:

   a. Building permit;
   b. Clearing and grading permit;
   c. Forest practices permit;
   d. Conditional use permit;
   e. Shoreline conditional use permit;
   f. Shoreline substantial development permit;
   g. Shoreline exemption;
   h. Shoreline variance;
   i. Short subdivision;
   j. Subdivision;
   k. Planned unit development;
   l. Binding site plan;
   m. Zoning variance;
   n. Zoning code amendment; ~~or~~
   ~~**n.**~~**o.** Flood development permit; or
   ~~**o.**~~**p.** Any other adopted permit or required approval not expressly exempted by this Chapter.
3. Approval of a permit or development proposal pursuant to the provisions of this Chapter does not discharge the obligation of the applicant to comply with the provisions of this Chapter.
4. The City shall not grant any approval or permission to conduct a regulated activity in a critical area unless the activity is in compliance with this Chapter or unless the activity is expressly exempted by this Chapter.
~~**4.**~~**5.** Many state, federal and regional regulations apply to projects conducted within critical areas. Uses and development otherwise allowed by this Chapter do not eliminate other agency regulatory requirements nor the obligation of the applicant to comply with other federal, state, and regional regulations.

~~**B.**~~ **Exempt Activities**: The ~~following exemptions~~exempt activities listed in the City's critical areas ordinance do not apply when conducted within shoreline jurisdiction as defined by city of Enumclaw shoreline master program, Chapter 15.36 EMC or if defined as "Development" within Areas of Special Flood Hazard. ~~With the approval of the Administrator (Director of Community Development), the uses listed below shall be exempt from the provisions of this Chapter and are allowed within a critical area to the extent that the uses are consistent with the provisions of other applicable local, State, and Federal laws, regulations and requirements; and are not prohibited by~~

any other chapter or law; and provided they are conducted using best management practices, except where such activities result in the conversion of a critical area to a use to which it was not previously subjected; and provided further, that forest practices and conversions shall be governed by current State regulations.

All exempted activities shall use reasonable methods to avoid potential impacts to critical areas. By finding that an activity proposed within a critical area or its associated buffer is exempt from the provisions of this Chapter the Administrator is not granting permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense.

The following are exempt activities or allowable uses:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife including activities undertaken for purposes of habitat enhancement that is part of an enhancement project which has received prior written approval from the city and any other agency with jurisdiction over such activity;
2. Outdoor recreational activities, including fishing, bird watching, hiking, boating, horseback riding, swimming, canoeing, and bicycling;
3. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, or alteration of the wetland by changing existing topography, water conditions or water sources;
4. Existing and ongoing agricultural activities including farming, horticulture, aquaculture, irrigation, ranching or grazing of animals.

a. Cessation of agricultural activities on an area that was previously farmed to allow that area to lie fallow as part of a conventional, rotational cycle (or for any other regular or normal farming practice) is considered to be part of an ongoing agricultural operation and is not to be considered as a cessation of farming or as a change in land use.

b. Cessation of farming activities in response to government programs designed to control commodity production shall not be considered a permanent cessation of farming activity or a change in land use unless the land is left fallow or unfarmed for a period of seven (7) years beyond the termination of the government program. Farming activities can resume after seven or more years, but the Administrator has the authority to impose new Critical Areas regulations on all land use activities initiated at the end of the seven year period and beyond.

c. Cessation of farming activities in response to market conditions or economic irregularities adversely impacting farming activities will not be considered a cessation of farming activities or a change in land use the land is left fallow or unframed for a period of five (5) years or longer. Farming activities can resume after five or more years, but the Administrator has the authority to impose new Critical Areas regulations on all land use activities initiated at the end of the seven year period and beyond.

d. Activities undertaken to bring an area back into agricultural use and production following a period of non-farm use may not be considered, in the judgment of the Administrator, part of an ongoing operation. As a result, such activities may not be exempt from the provisions of this Chapter.

e. An operation ceases to be ongoing when the area on which it was conducted has been converted to another use or has lain idle so long that modifications to the hydrological regime are necessary to resume operations;

5. The maintenance (but not construction) of drainage ditches;
6. Education, scientific research, and use of nature trails;
7. Navigation aids, boundary markers, and boat mooring buoys;
8. Site investigative work necessary for land use application submittals such as surveys, soil logs, percolation tests and other related activities. In every case, impacts shall be minimized and disturbed areas shall be immediately restored;
9. Emergency repair or construction activities or vegetation harvesting (mowing) that the city determines to be necessary to protect the health, safety, or welfare of area residents. Upon abatement of the

emergency situation the new construction shall be removed or any permit which would have been required, obtained;; and

10. Normal maintenance, repair, or operation of existing serviceable structures, facilities, or improved areas. Maintenance and repair does not include any modification that changes the character, scope, or size of the original structure, facility, or improved area and does not include the construction of a maintenance road.

11. Public and private pedestrian trails, except in wetlands, subject to the following:

a. The trail surface shall meet all other requirements including water quality standards set forth in the City's applicable stormwater management regulations;

b. Whenever possible the trail surface should be comprised of materials that allow the maximum amount of stormwater runoff infiltration;

c. When required by the administrator trails within non-wetland critical areas and/or their associated buffers total widths of the buffers where the trail is located shall be increased, where possible, to a width equal to the width of the trail corridor, including disturbed areas; plus the originally prescribed wetland buffer width, and

d. Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report.

e. Trails may be allowed in wetlands if the Administrator can demonstrate that the public education benefits are greater than the detrimental affects of the wetland impacts associated with the construction, maintenance, and long term operation of the trail. The impacts of Administrator approved trail installation, public or private, shall be mitigated by the project proponent. Mitigation efforts may include unconventional mitigation activities such as:

(1) Purchase and installation of educational/interpretive signage within the wetland and the adjacent buffer,

(2) Purchase of materials and construction of unobtrusive viewing platforms and/or blinds; and

(3) Purchase of materials and installation of habitat features such as duck boxes, goose platforms, large woody debris to be installed as downed logs or snags, or native animal species to augment or increase species diversity.

12. The following vegetation removal activities, provided that no vegetation shall be removed from a critical area or its buffer without approval from the Administrator, are allowed:

a. The removal of the following vegetation with hand labor and light equipment:

(1) Invasive and noxious weeds;

(2) English Ivy (*Hedera helix*);

(3) Himalayan blackberry (*Rubus discolor*, *R. procerus*); and

(4) Evergreen blackberry (*Rubus laciniatus*);

b. The removal of trees from critical areas and buffers that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property, provided that:

(1) The applicant submits a report from a certified arborist, registered landscape architect, or professional forester that documents the hazard and provides a replanting schedule for the replacement trees;

(2) Tree cutting shall be limited to pruning and crown thinning, unless otherwise justified by a qualified professional. Where pruning or crown thinning is not sufficient to address the hazard, trees should be removed or converted to wildlife snags;

(3) All vegetation cut (tree stems, branches, etc.) shall be left within the critical area or buffer unless removal is warranted due to the potential for disease or pest transmittal to other healthy vegetation;

(4) Unless otherwise directed by the Administrator, the landowner shall replace any significant trees that are removed as part of an approved land use or development project with new trees at a ratio of two replacement trees for each tree removed (2:1) within one year in accordance with an approved restoration plan.

(a) Significant trees are conifer species >6 inches diameter at breast height (dbh) and deciduous species >8 inches dbh.

(b) Replacement trees may be planted at a different, but nearby, locations than the trees that were removed if it can be determined that planting in the same location would create a new hazard or potentially damage the critical area.

(c) Unless otherwise directed by the Administrator tree species removed will be replaced with the same

~~species.~~

~~**(d)** Replacement trees shall be species that are native and indigenous to the site and a minimum of one (1) inch in diameter at breast height (dbh) for deciduous trees and a minimum of six (6) feet in height for evergreen trees as measured from the top of the root ball;~~

~~**(5)** If a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods or removal that will minimize impacts; and~~

~~**(6)** Hazard trees determined to pose an imminent threat or danger to public health or safety, to public or private property, or of serious environmental degradation may be removed or pruned by the landowner prior to receiving written approval from City provided that within fourteen (14) days following such action, the landowner shall submit a restoration plan that demonstrates compliance with the provisions of this Title.~~

~~**c.** Measures to control a fire or halt the spread of disease or damaging insects consistent with the State Forest Practices Act; Chapter 76.09 RCW and any applicable City code sections, provided that the removed vegetation shall be replaced in kind or with similar native species within one (1) year in accordance with an approved restoration plan; and~~

~~**d.** Unless otherwise provided, or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited;~~

~~**13.** The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, as approved by the Administrator, provided that their use shall be restricted in accordance with State Department of Fish and Wildlife Management Recommendations and the regulations of the State Department of Agriculture and the U.S. Environmental Protection Agency;~~

~~**14.** Utility projects which have minor or short-duration impacts to critical areas, as determined by the Administrator in accordance with the criteria below, and which do not significantly impact the function or values of a critical area(s), provided that such projects are constructed with best management practices and additional restoration measures are provided. Minor activities shall not result in the transport of sediment or increased stormwater. Such allowed minor utility projects shall meet the following criteria:~~

~~**a.** There is no practical alternative to the proposed activity with less impact on critical areas;~~

~~**b.** The activity involves the placement of a utility pole, street signs, anchor, or vault or other small component of a utility facility; and~~

~~**c.**~~**B.** ~~The activity involves disturbance of an area less than 75 square feet;~~

~~**C. Exemption Request and Review Process.** The proponent of the activity that is not specifically listed above may submit a written request for exemption to the Administrator that describes the activity and states the exemption listed in Section B above that may apply.~~

~~The Administrator shall review the exemption request to verify that it complies with this Title and approve or deny the exemption. If the exemption is approved, it shall be placed on file with the Administrator. If the exemption is denied, the proponent may continue in the review process and shall be subject to the requirements of this Chapter.~~

~~**D.**~~**C.** This Chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this Chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property that would otherwise be allowed under the current code and would be consistent with other allowable uses.

~~**E.**~~**D.** It is not the intent of this Chapter to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards (see RCW 36.70A.020(12)).

~~**F.**~~**E.** The City's enactment or enforcement of this Chapter shall not be construed for the benefit of any individual person or group of persons other than the general public.

~~G.~~F. It is not the intent of this Chapter to repeal, abrogate, or impair any existing regulations, easements, covenants, or deed restrictions. Where this chapter provides more protection to critical areas, however, the provisions of this chapter shall prevail unless specifically provided otherwise in this Chapter.

19.2.30 Exceptions.

~~A.~~ Critical area exceptions do not apply within shoreline jurisdiction. ~~**Exception – Subdivisions with Substantial Completion of Infrastructure:** A building permit application shall not be denied under this chapter if there has been substantial completion of the infrastructure of the plat within which the subject property of the permit is specifically located.; however, a floodplain development permit is required, and the completed infrastructure cannot adversely impact critical area habitat or endangered species. A determination of substantial completion shall be based on the Administrator's assessment of existing constructed infrastructure such as streets, utilities, and drainage improvements.~~

~~1.~~ Typically "substantial completion" means the amount of construction within a particular project area has impacted critical areas to the maximum extent that would be attributable to the project actions and onsite mitigation is neither economically or ecologically viable.

~~2.~~ The Administrator will confer with the City Manager, the City's Risk Management Specialist, and the City Attorney regarding the consequences of a decision to deny a building permit for a project with a valid clearing and grading permit, approved site plans, and an authorization to proceed with construction.

~~B.~~ Exception – Reasonable Use~~. **Reasonable Use exceptions do not apply within shoreline jurisdiction or within areas of special flood hazard.**~~

~~1.~~ If the application of this Chapter would deny all reasonable economic use of the subject property, the City shall determine if compensation is an appropriate action, or the property owner may apply for an exception pursuant to this Section.

~~2. **Exception Request and Review Process.** An application for a reasonable use exception shall be made to the City and shall include a critical area identification form; critical area report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW). The Administrator shall prepare a recommendation to the City Council based on review of the submitted information, a site inspection, and the proposal's ability to comply with reasonable use exception criteria in Subsection 4.~~

~~3. **City Council Review.** The City Council may elect to review an application for reasonable use and may elect to conduct a public hearing pursuant to the provisions of the applicable City code section(s). The City Council may approve, approve with conditions, or deny a reasonable use exception request based on the proposal's ability or lack of ability to comply with all of the reasonable use exception review criteria in Subsection 4.~~

~~4. **Reasonable Use Review Criteria.** Criteria for review and approval of reasonable use exceptions follow, one or more may apply:~~

~~a. the application of this Chapter would deny all reasonable economic use of the property;~~

~~b. no other reasonable economic use of the property has less impact on the critical area;~~

~~c. the proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;~~

~~d. the inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of this Chapter, or its predecessor;~~

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

~~**f.** the proposal will result in no net loss of critical area functions and values consistent with the best available science; or~~

~~**g.** the proposal is consistent with other applicable regulations and standards.~~

~~**5. Burden of Proof.** The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.~~

~~**C.** Exception – Public Agency and Utility~~

~~**1.** If the application of this Chapter would prohibit a development proposal by a public agency or public utility, the agency or utility may apply for an exception pursuant to this Section.~~

~~**2. Exception Request and Review Process.** An application for a public agency and utility exception shall be made to the City and shall include a critical area identification form; critical area report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW). The [director] shall prepare a recommendation to the City Council based on review of the submitted information, a site inspection, and the proposal's ability to comply with public agency and utility exception review criteria in Subsection 4.~~

~~**3. City Council Review.** The City Council shall review the Public Agency Exception Application and Administrator's recommendation. Following that review the City Council may elect to conduct a public hearing pursuant to the provisions of the applicable City code section. The City Council shall approve, approve with conditions, or deny the Public Agency Exception request based on the proposal's ability or lack of ability to comply with all of the public agency and utility exception criteria in Subsection 4.~~

~~**4. Public Agency and Utility Review Criteria.** The criteria for review and approval of public agency and utility exceptions follow:~~

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

~~**b.** The application of this Chapter would unreasonably restrict the ability to provide utility services to the public;~~

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

~~**d.** The proposal attempts to protect and mitigate impacts to the critical area functions and values consistent with the best available science; and~~

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

~~**A. 4. Burden of Proof.** The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.~~

19.2.40 Assessment relief.

A. Landowners who have dedicated an easement or entered into a perpetual conservation restriction with the City to permanently control some or all regulated activities may have that portion of land exempt from special assessments such as sanitary sewers, storm sewers and water mains.

Article II. Critical Areas

19.2.50 Finding of Fact.

A. The City finds that critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the City and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and values provided by critical areas include, but are not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation of flood waters, ground water recharge and discharge, erosion control, wave attenuation, protection from hazards, historical, archaeological, and aesthetic value protection, and recreation. These beneficial functions are not listed in order of priority.

B. Per RCW 36.70A.030(5) Critical Areas include:

1. Frequently Flooded Areas
2. Geologically Hazardous Areas
3. Critical Aquifer Recharge Areas
4. Wetlands
5. Fish and Wildlife Habitat Conservation Areas

19.2.60 Frequently Flooded Areas

A. Finding of Fact: The City finds that frequently flooded areas provide a variety of valuable and beneficial physical functions that benefit the City and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and values provided by frequently flooded areas include, flood storage, conveyance and attenuation of flood waters as well as channel migration zone management.

B. Technical Information.

1. **Applicability:** This section shall apply to all areas of special flood hazards and wetlands within the jurisdiction of the City, originally adopted as Chapter 19.04 and amended as a section of Chapter 19.02.
   a. **Basis for establishing the areas of special flood hazard.** The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "Flood Insurance Study Rate Map dated September 29, 1989 for the City of Enumclaw" dated September, 29, 1989, with accompanying flood insurance maps, is adopted by reference and declared to be part of this chapter. The flood insurance study is on file with the city clerk, City of Enumclaw, City Hall, Enumclaw, Washington.

C. Administrator – Duties.

1. When base flood elevation data has not been provided in accordance with the area identified by the Federal Insurance Administration, Scientific and Engineering Report, referred to above, the administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source.

~~a.~~2. Where base flood elevation data is provided through the flood insurance study, or as required as in subsection A of this section, obtain and record the actual (as-built) elevation (in relation to mean sea level) of the lowest floor, including basement, of all new or substantially improved structures, and whether or not the structure contains a basement;

~~2.~~3. For all new or substantially improved flood-proofed nonresidential structures where base flood elevation data is provided through the FIS, FIRM, or as required in EMC 19.02.060.C.1:~~; (i) verify and record actual elevation (in relation to mean sea level), and (ii) maintain the flood-proofing certifications required in Section 41(3) of the model ordinance.~~

   a. Obtain and record actual elevation (in relation to mean sea level) to which the structure was flood-proofed; and

~~a.~~**b.** Maintain the flood-proofing certifications as required in EMC 19.02.060.C.4

4. Maintain for public inspection all records pertaining to the provisions of this ordinance.

5. Interpretation of ~~Firm~~FIRM Boundaries – The administrator shall make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazards. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in EMC 17.02.170.

6. The administrator shall notify adjacent communities and Washington State Department of Ecology prior to any alteration or relocation of a watercourse, submit evidence of such notification to federal insurance administration, and require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

~~3.~~**7.** Habitat Assessment – The administrator shall require a habitat assessment for all development within areas of special flood hazard (reference "Floodplain Habitat Assessment and Mitigation. Regional Guidance for the Puget Sound Basin," FEMA Region 10, 2013 or as hereafter revised).

19.2.70 Geologically Hazardous Areas

A. Finding of Fact: Based upon the most recent information the City has determined that only three (3) of the seven (7) Geologically Hazardous Areas listed in WAC 365-190-080 are relevant to the City. Those three categories of Geologically Hazardous Areas are:

1. Erosion Hazard Areas
2. Landslide Hazard Areas
3. Seismic Hazard Areas

These are the only areas that will be addressed in this Chapter.

B. Identification. The identification of Geologically Hazardous Areas involves the collection of baseline data and the preparation of a Critical Areas Report (see Appendix B and Appendix E) by a Qualified Professional. In the case of geologic hazards the Qualified Professional is a Registered Engineering Geologist or a licensed Geotechnical Engineer. The following is a list of technical information requirements:

1. Erosion Hazard Areas – Technical Information: Erosion hazard: areas identified as having high or very high water erosion hazard by the U.S. Department of Agricultural Soil Conservation Service as supplied by the SCS area office;

2. Landslide Hazard Areas – Technical Information: Landslide hazard: areas potentially subject to landslides based upon the following combination of geologic, topographic and hydrologic factors:

a. Areas of historic failure including:
(1) Those areas delineated by the U.S. Department of Agriculture, Soil Conservation Service, as having "severe" limitations for building site development,
(2) Those areas mapped as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Department of Natural Resource Division of Geology and Earth Resources,

b. Areas with all three of the following characteristics:
(1) Slopes of 15 percent gradient or greater, and
(2) Hillsides intersecting geologic contacts with a relatively permeable sediment overlaying a relatively impermeable sediment or bedrock, and
(3) Springs or ground water seepage,

c. Areas that have shown movement during the Holocene Epoch or which are underlain or covered by mass wastage debris of the epoch,

d. Slopes that are parallel or sub-parallel to planes or weakness in subsurface materials,

e. Privately owned areas with slopes that have gradients greater than 80 percent subject to rock fall during seismic shaking,

f. Technical Information.

(1) Identify and quantify geologic, topographic and hydrologic factors that might contribute to slope instability. The rate and extent of potential hazards to development activity must be assessed and mitigation measures, if any, evaluated. The proposed development must be analyzed in light of the hazards and effects represented by the landslide exposure on proposed private and public investments. Development operational factors should be included in the analysis to account for the effects of residential landscape irrigation, storm water generation from impervious surfaces and the influence of street conveyance on slope stability.

(2) The submittal of a geotechnical report establishing the suitability of the site for construction shall be required.

(3) If found to be suitable, a professional registered engineer shall design a foundation that accommodates on-site conditions.

3. **Seismic Hazard Areas – Technical Information.**
   - **a.** Identify and quantify geologic factors that might contribute to seismic activity. The rate and extent of potential hazards to development activity must be assessed and mitigation measures, if any, evaluated.
   - **b.** The proposed development must be analyzed in light of the hazards and effects represented by the seismic exposure on proposed private and public investments.

19.2.80 Critical Aquifer Recharge Areas

A. Finding of Fact: No Category I Critical Aquifer Recharge Areas have been identified or designated within the City Limit of, or within the Urban Growth Area around, the City of Enumclaw (12/2004).

B. Critical Aquifer Recharge Areas - Categories. Critical aquifer recharge areas are categorized as follows:

1. **Category I Critical Aquifer Recharge Areas** include those mapped areas that Enumclaw has determined are highly susceptible to groundwater contamination and that are located within a sole source aquifer or a wellhead protection area;
2. **Category II Critical Aquifer Recharge Areas** include those mapped areas that Enumclaw has determined:
   - **a.** have a medium susceptibility to ground water contamination and are located in a sole source aquifer or a wellhead protection area; or
   - **b.** are highly susceptible to groundwater contamination and are not located in a sole source aquifer or wellhead protection area; and
3. **Category III Critical Aquifer Recharge Areas** include those mapped areas that Enumclaw has determined have low susceptibility to groundwater contamination.
4. **Technical Information Requirements**: Delineation of the recharge areas on a scaled development plan and detailed information on the following items:
   - **a.** Hydro-geological susceptibility to contamination and contamination loading potential;
   - **b.** Depth to ground water;
   - **c.** Hydraulic conductivity and gradient;
   - **d.** Soil permeability and contamination attenuation;
   - **e.** A vadose zone analysis including permeability and attenuation properties;
   - **f.** An analysis of the recharge area's toleration for impervious surfaces in terms of both aquifer recharge and the effect on water quality degradation;
   - **g.** A summary of the proposed development's effect on the recharge area concentrating on items "d" and "f";
   - **h.** Existing aquifer water quality analysis.

19.2.90 Wetlands – Category and Buffer Widths

A. Wetlands are described by wetland class ~~and by~~ , wetland category, and buffer width, as described under SMP 5.2.1.3, Wetland Buffers. ~~(see Appendix A).~~

~~**1. Technical Information.** The exact location of the wetland boundary or boundaries within and in close proximity to the proposed project site shall be determined by the applicant through the~~

performance of a field investigation applying the provisions detailed in EMC 19.02.140.D. Field data collection for the purposes of identifying and delineating a wetland shall be performed by a Qualified Professional Wetland Scientist (biologist or ecologist) in concert with Qualified Biological Technicians. The wetland delineation process shall be completed in accordance with current US Army Corps of Engineers and Washington Department of Ecology standards (see Section 19.02.140.D).

2. The Qualified Professional shall determine, on the basis of established criteria from the Corps and WDOE, if the identified and delineated wetland is regulated and whether said wetland is subject to Corps and/or State jurisdiction or is under the jurisdiction of both agencies.
3. Reporting requirements are detailed in Section 19.02.140, Appendix B, and Appendix E.

B. Wetland Category: In the City, Wetland Category is used to regulate activities within and adjacent to wetland and in determining the width of the wetland buffer. The wetland category is determined after a wetland has been identified and delineated. Wetland Category is determined using the Washington State Wetland Rating System for Western Washington (WDOE Publication No. 14-06-029~~04-06-025~~). Wetlands are evaluated and scored on three criteria (Water Quality Functions, Hydrologic Functions, and Habitat Functions).

The WDOE document contains the definitions and scoring methods used for determining if the wetland rating criteria outlined in Appendix A of this Chapter are met. The total score for the three functional areas determines the Wetland Category. Note that streams and lakes are not rated as wetlands, but rather are classified and rated as Fish and Wildlife Conservation Areas (EMC 19.02.100).

C. Wetland Buffers: Wetland buffers are established to protect wetland resources from adjacent land uses. The buffer width shall vary by Wetland Category with the standard buffer width being:

Table 19.02.090.C – Buffer Widths

Wetland Category	Standard Buffer Width (in feet)	Range of Buffer Widths (in feet)
I	150	100 to 300
II	95	75 to 200
III	50	25 to 100
IV	25	15 to 50

1. **Buffer Vegetation Requirements**. Wetland buffer zones shall be retained in their natural condition. Where buffer disturbance is unavoidable during adjacent construction, revegetation will be required with native plant materials preferred.
2. **Standard Width Buffers:** An Applicant can elect to use the standard buffer widths to establish those areas within the project site where regulated activities will not occur.
3. **Buffer Averaging:** Use of standard width buffers in site planning does not preclude the use of buffer averaging as a site planning tool. To be included in an approved site plan, however, a buffer averaging plan must be reviewed and approved by the Administrator. Wetland buffer width averaging shall be allowed only where the applicant demonstrates all of the following:
   - **a.** That averaging is necessary to avoid an extraordinary hardship to the Applicant caused by circumstances peculiar to the property;
     - **(1)** An extraordinary hardship can include an Administrator decision that would yield the Applicant's project un-constructible or yield the property undevelopable.
     - **(2)** An Administrator decision that would alter a proposed project from being economical feasible to not being economically feasible, particularly if the Applicant was reliant on prior City decisions in making economic and project go/no go decisions.
   - **b.** That the wetland/stream contains variations in sensitivity due to existing physical characteristics;
   - **c.** That width averaging will not adversely impact the wetland functions or values; and

d. That the total area contained within the wetland/stream buffer after averaging is no less than that contained within the standard buffer prior to averaging. If buffer averaging is allowed the buffer width shall not be reduced by more than 40 percent of the standard buffer or be less than 15 feet; and

e. The Administrator shall require enhancement of the buffer vegetation to increase buffer functions and values if, based on an on-site evaluation, it is determined that the existing buffer plant community is monotypic (has a single dominant species), is dominated by groundcover species, has an overall plant density of 50% or less, and has unobstructed pathways for various pollutants to travel between the adjacent upland (developed or undeveloped) and the protected wetland. The amount of buffer enhancement (vegetation planting, soil augmentation, and addition of woody debris) that shall be required will vary on a case-by-case basis depending upon the potential risk (high, moderate, or low) of adverse impacts stemming from adjacent land use activities.

4. **Buffer Width Reduction:** An Applicant may request the Administrator's approval of a buffer reduction plan that is based upon the condition of the vegetation in the existing buffer, the slope of the land adjacent to the buffer, the proposed land use, the risk of negative impacts to the buffer and wetland, and the opportunity for wildlife and fish species to use the buffer habitat.
   a. To evaluate an Applicant's request for buffer reduction, the Administrator will require the Applicant to submit a "Buffer Risk and Opportunity Assessment" (see Appendix F) completed by a qualified professional to evaluate the request using real data.
   b. If the assessment rating supports the Applicant's request for buffer width reduction and/or variable width buffers, the Administrator will make a decision to allow buffer reduction, with or without mitigation. The range of potential buffer widths is shown in Table 19.02.090 Buffer Widths above.

5. **Buffer Width Enlargement:** The Administrator may require increased standard buffer zone widths on a case-by-case basis when a larger buffer is necessary to protect wetlands or stream functions and values based on local conditions. Buffer widths can be increased to the upper end of the ranges shown in Table 19.02.090.C – Buffer Widths above. If the Administrator elects to impose larger (wider) buffers on a specific project, the decision to use wider buffers must be supported by Best Available Science and current local data (observations). Buffer widths shall be increased (see Appendix F) if the Administrator can demonstrate:
   a. a larger buffer is necessary to maintain viable populations of existing species; or
   b. the wetland or stream is used by species proposed or listed by the federal government or the state as endangered, threatened, rare, sensitive or monitored, critical or outstanding potential habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or
   c. the adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse wetland impacts; or
   d. the adjacent land has minimal vegetative cover or slopes greater than 15 percent or, if less than 15 percent, the project proponent is not being required to implement buffer enhancement plans.
6. **Abrogation:** Nothing in this section or chapter abrogates, compromises or otherwise subordinates the full force, effect and applicability of the Washington State Shoreline Management Act.
7. **Pre-existing Uses within a Buffer:** A use or structure established prior to the effective date of the ordinance codified in this chapter which does not conform to standards set forth herein is allowed to continue and be reasonably maintained; provided, that such activity or structure shall not be expanded or enlarged in any manner that increases the extent of its nonconformity.
8. **Repair of Buffer Areas Damaged During Construction:** Except as otherwise specified, wetland/ stream buffer zones shall be retained in their natural condition. Where buffer disturbance has occurred during construction, revegetation with native vegetation may be required.
9. **Allowable Uses in a Critical Area Buffer:** Permitted Uses in a Buffer Zone. Regulated activities shall not be allowed in a buffer zone except for the following:

~~**a.** Activities having minimal adverse impacts on buffers and no adverse impacts on regulated wetlands. These may include low intensity, passive recreational activities such as:~~

~~**(1)** construction and use of trail systems and trail support systems designed with adequate stormwater management and natural erosion control features. Trails shall be located only in the outer 25% of a wetland buffer, with barriers to intrusion on the side of the trail closer to the critical area, and should avoid damaging significant trees and other habitat elements;~~

~~**(2)** non-permanent wildlife watching blinds, short term scientific or educational activities;~~

~~**(3)** sports fishing or hunting activities; and~~

~~**(4)** stormwater discharge devices designed to spread runoff along the delineated edge of the wetland or stream.~~

~~**b.** With respect to buffers adjacent to Category II, III, and IV wetlands, stormwater management facilities may be placed in a wetland buffer if~~

~~**(1)** There is no reasonable alternative location for constructing and operating a stormwater management system,~~

~~**(2)** The Applicant can demonstrate to the Administrator that locating the runoff management (runoff collection, storage, and dispersal) system within the buffer is critical to maintaining wetland hydrology, and~~

~~**(3)** the stormwater discharge is dispersed along, not concentrated at, the delineated edge of the wetland (the interface between the wetland and the buffer); or~~

~~**c.** With respect to Category III and IV wetlands, mandatory development related land use activities having no feasible alternative location. If the Administrator allows such development activities within the standard buffer all buffer impacts shall be mitigated per a mitigation plan approved by the Administrator.~~

19.2.100 Fish and Wildlife Conservation Areas – Habitat Types and Buffer Widths

A. Finding of Fact: There are 8 types of habitat listed in WAC 365-190-080(5) to be designated as fish and wildlife habitat conservation areas. In addition, there are 6 considerations to be factored into the designation process. Within the City of Enumclaw and its urban growth areas there are only two types of habitat present that will be classified or designated as fish and wildlife habitat conservation areas. The two types are stream habitat and buffers (riparian areas) adjacent to regulated streams or water bodies.

The latter will be important in the overall effort to restore and enhance salmonid habitat as well as for creating open space corridors adjacent to the two major watercourses in, or in close proximity to, the City. Those two watercourses, Boise Creek and Newaukum Creek, and their associated buffers will be candidate areas for critical area mitigation opportunities that are consistent with goals and objectives defined in the City's Comprehensive Plan and in the watershed restoration and management plans being developed in Water Resource Inventory Area (WRIA) 9, which is the Green River watershed and in WRIA 10, which is the White River watershed.

B. Technical Information. The following is a list of technical information to be included in a Critical Areas Report (see Appendix E) prepared by a Qualified Professional for submit to the City as part of a Critical Areas Permit:

1. Using standard field data collection methods a Qualified Professional will identify and delineate stream and riparian habitats located within and immediately adjacent to a proposed project site.
2. Habitat areas suited for any life stage of any endangered, threatened, and sensitive species or priority habitats defined by the Washington State Department of Fish and Wildlife shall be identified, delineated, and reported to the City.
3. The investigation shall include relative density and species richness, breeding, habitat, seasonal range dynamics and movement corridors.
4. The analysis shall address the relative tolerance by species of human activities.
5. The development proposal shall be evaluated in terms of its influence on the above wildlife factors.

6. The location of fish-bearing streams, corresponding buffers, and the high water mark shall be identified on a site plan that shall be included in the Critical Areas Report.
7. The Administrator will review the technical information presented in the Critical Areas Report. Based upon the description of potential development related impacts and the discussion of potential risk of impacts to fish and wildlife species as well as their respective habitats the Administrator will recommend the need for preparation of a mitigation plan.
8. The Administrator shall require the Applicant to submit a Final Critical Areas Report identifying Fish and Wildlife Habitat Conservation Areas (or the lack thereof) and including a mitigation plan as necessary prior to approval of any development related permits, including a Critical Areas Permit.

C. Streams and Watercourses: Streams and watercourses are classified primarily on the basis of salmonid fish use. Formerly these habitat features were classified using the Washington State Department of Natural Resources (DNR) water typing system (WAC 222-16-030), a system designed to regulate forest practices in areas adjacent to wetlands, watercourses, and water bodies. The list below shows the original water type and the revised water type:

1. **Type 1 Water**, which has been changed to **Type S** for streams and watercourses of statewide significance;
2. **Type 2 Water**, which has been changed to **Type F** for fish bearing streams with perennial flow;

3 **Type 3 Water**, which has been changed to **Type F**; for fish bearing streams with intermittent flow;

4. **Type 4 Water**, which has been changed to **Type Np** for streams with perennial or intermittent flow, but without direct fish use;
5. **Type 5 Water**, which has been changed to **Type Ns** for intermittent and ephemeral streams or watercourses that are not used by fish, but have enough flow energy to scour a stream channel to mineral soil;
6. **Type 5 Water**, which has been changed to **Type O** for watercourses that do not have enough flow energy to scour a stream channel to mineral soil or bedrock and that do not have fish use. This latter type is sometimes referred to as a swale or drainage swale.

A buffer, consisting of natural vegetation, shall be required along all streams as classified by the DNR water typing classification system (WAC 222-16-030). The native growth buffer shall be established on both sides of the stream or watercourse and shall extend landward from the ordinary high water of the water body. The following buffer widths are the standard buffer width requirements:

DNR Water Type S	100-foot buffer
DNR Water Type F	75-foot buffer
DNR Water Type Np	50-foot buffer
DNR Water Type Ns	25-foot buffer

Water Type O is not a DNR classification, but has been adopted into this Chapter to provide regulatory guidance for vegetated swales. The City will not impose a buffer requirement on Water Type O unless the Administrator is convinced, on the basis of available field data and personal knowledge, that a buffer is needed to protect downstream critical areas from a risk of significant adverse impact due to onsite water quality degradation.

D. Buffer Width Averaging, Reduction, and Enlargement: If approved by the Administrator, buffer width averaging, buffer width reduction, and buffer width enlargement will be consistent with the provisions specified in Section 19.02.090 above.

19.2.110 Resource Lands

A. Mineral resource lands may only be developed in accordance with Chapter 19.28 EMC.

19.2.120 Critical Areas Maps and Data Bases

A. The City shall maintain inventory maps showing the general locations of critical areas as well as a data base with supporting information. Each critical area will have its own individual map or overlay. These maps shall be available for use by public and private entities.

B. There is are maps in the current comprehensive plan that show the approximate location and extent of critical areas in the City. These maps are not intended to be used for site engineering or planning and are not a substitute for Critical Areas Identification and Delineations process required in other sections of this Chapter. Additional critical areas are presumed to exist, and are protected under all the provisions of this chapter. In the event that any of the critical area designation shown on the map conflicts with the criteria set forth in this chapter, the criteria shall control.

Article III. Critical Area Permits

19.2.130 General Requirements.

A. No regulated activity shall occur within a critical area or its associated buffer, without the project proponent or Applicant having applied for and obtained a critical area permit (see Type I and II permits, (EMC Title 15), unless said regulated activity requires another Type I through V permit, in which case said other Type I through V permit shall be the vehicle by which compliance with this chapter is verified.

19.2.140 Application.

A. Who must apply: Any individual, company, agency, or other entity proposing to undertake a regulated activity in the City must apply for a Type 1 through Type V Permit (per EMC Title 15) prior to initiating any site altering activity that is not allowed under EMC 19.02.020.

B. Information Requirements. The Administrator is authorized to adopt written information requirements for critical area permits (refer to Appendix E). Unless the city waives one or more of the following information requirements, application for a critical area permit under this Chapter includes, but is not limited to, the following information:

1. Name and contact information for the project proponent or Applicant;

2. Address and/or legal description of the proposed project site;

3. A description of the site, including the size of the proposed site;

4. A description of adjacent properties, including a description of the current use(s) on those properties, a description of the vegetation and vegetation conditions on those properties, the name(s) and contact information for all adjacent property owners, and a listing of any easements that will be needed on adjacent properties or that exist on the proposed project site that grant use to entities other than the project site owner(s);

5. A description of the proposed project activity;

6. A Critical Areas Report that documents the ecological, aesthetic, economic, or other values of the critical areas, including a discussion of the methodology used to identify, delineate, and survey critical areas described in the report (refer to Appendix B for minimum report content requirements);

7. Site plan(s) or site map(s) at a scale no smaller than one inch equals 40 feet showing the entire parcel of land owned (or a under contract to purchase) by the applicant. In addition the site plan or site map must show:

- **a.** all critical area boundaries and their associated buffers identified and delineated within and in close proximity to the proposed project;
- **b.** existing and proposed site topography and drainage features (i.e. ditches, streams, culverts, pipelines, etc.);
- **c.** all significant trees, which includes all conifers with a 6-inch dbh or greater and all deciduous species with an 8-inch or greater dbh;
- **d.** all existing structures, utilities, roadways, and other site improvements; and
- **e.** the proposed stormwater management plan;

8. A description of site development alternatives and an evaluation of those alternatives vis-à-vis

any proposed critical area alterations. Include a rationale for not avoiding or minimizing impacts to critical areas identified within the project site;

9. A mitigation plan may be submitted to the Administrator at the time the Applicant submits a Critical Areas Permit application (or a Type III through Type V permit application) or the Administrator may allow the Applicant to defer submittal of the mitigation until after the preliminary project design has been reviewed by the Administrator. The Applicant will be required, however, to submit a Final Mitigation Plan (see Appendix C for Mitigation Plan Requirements) describing mitigation projects for all unavoidable critical area impacts before any project permits are approved by the Administrator. The Final Mitigation Plan shall include baseline information, environmental goals and objectives, a Financial Guarantee quantity worksheet to "bond" the proposed mitigation activities, detailed construction plans, performance standards, a 3 to 5 year monitoring program, and a contingency plan.

C. Preparation of a Critical Area Report: A Critical Area Report (see Appendix and Appendix D) must be prepared by a Qualified Professional (Critical Areas consultant), with expertise in the critical area of concern, as defined in this Chapter.

1. The Critical Areas Consultant will be retained by the Applicant to complete any of the following activities: critical area site analysis and evaluation, site restoration and/or enhancement, and site development plan or project design. The consultant will be selected from a list of Qualified Professionals (as defined in WAC 365-195-905(4) and Appendix D) that shall be maintained by and on file with the Administrator.

2. The Applicant may use the professional services of any Qualified Professional to assist with Critical Areas assessment and reporting whether they are or are not listed on the City maintained list. The Administrator may request a qualification statement from any Consultant providing professional services to an Applicant, particularly when Critical Areas assessments and reporting is part of a proposed land use action or development plan.

D. Critical Area Boundary. Critical area boundary shall be determined by the Applicant through the performance of a field investigation.

1. The Administrator, when requested by the Applicant, may waive the delineation of the boundary requirement for the Applicant and, in lieu of delineation by the Applicant, perform the delineation.

a. All wetland delineations will be completed in accordance with the methodologies defined in the U.S. Army Corps of Engineers Wetland Delineation Manual (~~Technical Report Y-87-1~~RCW 36.70A.175) and the Washington State Wetlands Identification and Delineation Manual (WDOE Publication No. 96-94); or in accordance with future revised delineation manuals required by Federal and State agencies.

2. The Administrator shall consult with qualified critical areas consultant and technical experts or other experts as needed to perform the delineation.

3. The applicant may be charged for the costs incurred in accordance with the provisions of this section.

4. Where the Administrator delineates a wetland at the request of the applicant, such delineation shall be considered a final determination.

5. Where the applicant delineates the critical area boundary, the administrator shall verify the accuracy of, and may adjust, the boundary. If the applicant contests the adjusted boundary, the administrator shall, at the applicant's expense, obtain expert services to render a final delineation.

E. Best Available Science: A Critical Area Report shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance and reference the source of science used. The critical area report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this Chapter. Recommendations for buffer width averaging, buffer width reduction, and buffer impact mitigation actions must be based in Best Available Science, which includes local expertise and site specific knowledge.

F. Additional Studies. When an Applicant submits an application for a critical area permit the application shall indicate whether any environmentally critical area is located on the site. If the Administrator determines that sufficient environmental information to evaluate a proposal is not available, the Administrator shall notify the Applicant that special environmental studies are required.

1. Special environmental studies may include a comprehensive site inventory and analysis, a wetland study, a geotechnical study, a discussion of potential impacts from the proposed development, and specific measures designed to mitigate any potential on- or off-site adverse environmental impacts of the applicant's proposal.
2. The Administrator shall develop and maintain a detailed list of required study contents.
3. All special studies shall be completed by a firm or individual selected, in concert between the City and the Applicant, from a list Qualified Professional Critical Area Consultants that is maintained by and available from the Administrator.

19.2.150 Permit Review

A. As part of the permit review process, the City shall:

1. Verify the information submitted by the applicant;
2. Evaluate the available current City Critical Areas maps and data files to determine if there are identified critical areas within or in close proximity to the proposed project site. The Administrator may require the Application to submit a Critical Area Reconnaissance Report (CARR) Form (see Appendix B) to assist in the determination regarding the presence of identified and regulated critical areas. The CARR form must be prepared by a Qualified Professional;.
3. Determine whether the proposed project is likely to impact the functions or values of critical areas; and
4. Determine if the proposed project adequately addresses the impacts and avoids impacts to the critical area associated with the project.

B. If the proposed project is within, adjacent to, or is likely to impact a critical area, the City shall:

1. Require the Applicant to complete a field study of the project site and immediate surrounding area to the Administrator. The Applicant shall be required, at a minimum, to submit a Critical Areas Report (see Appendix B) to the Administrator. The Critical Areas Report must be prepared by a Qualified Professional;
2. Review and evaluate the Critical Area Report;
3. Determine whether the development proposal conforms to the purposes and performance standards of this Chapter, including the criteria in Section 19.02.160.A. and Section 19.02.160.B.

19.2.160 Criteria for Permit Review, Approval, Denial, and Issuance

A. A permit shall only be granted if the permit, as conditioned, is consistent with the purposes and intent of this Chapter. Additionally, permits shall only be granted if:

1. A proposed action:
   - **a.** avoids significant adverse impacts to critical areas; or
   - **b.** takes affirmative and appropriate measures to minimize significant adverse impacts to critical areas; or
   - **c.** mitigates (compensates for) unavoidable significant adverse impacts to critical areas; and
   - **d.** assures no net loss of wetland function and value.
2. The proposal is compatible in design, scale, and use with other development or potential development in the area; and
3. The proposed actions implement, to the maximum extent possible, the best available construction, design, and development techniques that will result in the least adverse impact to the critical area.

B. Any alteration to a critical area, unless otherwise provided for in this Chapter, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:

1. The proposal minimizes the impact on critical areas in accordance with **Mitigation Sequencing** [Section 19.02.210];

2. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
3. The proposal is consistent with the general purposes of this Title and the public interest;
4. Any alterations permitted to the critical area are mitigated in accordance with **Mitigation Requirements** [Section 19.02.220];
5. The proposal protects the critical area functions and values consistent with the best available science and results in no net loss of critical area functions and values; and
6. The proposal is consistent with all other applicable local, State, and Federal regulations and standards.

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

D. Except as provided for by this Chapter, any project that cannot adequately mitigate its impacts to critical areas in the sequencing order of preferences in Section 19.02.210 shall be denied.

E. Favorable Determination: If the Administrator determines that the proposed activity meets the criteria in Section 19.02.160 and complies with the applicable provisions of this Chapter, the Administrator shall prepare a written notice of determination and identify any required conditions of approval. The notice of determination and conditions of approval shall be included in the project file and be considered in the next phase of the City's review of the proposed activity in accordance with any other applicable codes or regulations.

1. Any conditions of approval included in a notice of determination shall be attached to the underlying permit or approval. Any subsequent changes to the conditions of approval shall void the previous determination pending re-review of the proposal and conditions of approval by the Administrator.
2. A favorable determination should not be construed as endorsement or approval of any underlying permit or approval.

F. Unfavorable Determination: If the Administrator determines that a proposed activity does not adequately mitigate its impacts on the critical areas and/or does not comply with the criteria in Section 19.02.160.B and the provisions of this Chapter, the Administrator shall prepare written notice of the determination that includes findings of noncompliance.

1. No proposed activity or permit shall be approved or issued if it is determined that the proposed activity does not adequately mitigate its impacts on the critical areas and/or does not comply with the provisions of this Chapter.
2. Following notice of determination that the proposed activity does not meet the review criteria and/or does not comply with the applicable provisions of this Chapter, the applicant may request consideration of a revised critical area report. If the revision is found to be substantial and relevant to the critical area review, the Administrator may reopen the critical area review and make a new determination based on the revised report.

G. Completion of the Critical Area Review: The City's determination regarding critical areas pursuant to this Chapter shall be final concurrent with the final decision to approve, condition, or deny the development proposal or other activity involved.

H. Appeals: Any decision to approve, condition, or deny a development proposal or other activity based on the requirements of this Chapter may be appealed according to, and as part of, the appeal procedure for the permit or approval involved.

~~**19.2.170 Variance**~~

~~**A. Variance:** Variances from the standards of this Chapter may be authorized by the Administrator in accordance with the procedures set forth in the zoning variance section of the City code. The City council shall review the request and make a written finding that the request meets or fails to meet the~~

~~variance criteria.~~

~~**B. Variance Criteria.** A variance may be granted only if the applicant demonstrates that the requested action conforms to all of the criteria set forth as follows:~~

~~**1.** Special conditions and circumstances exist that are peculiar to the land, the lot, or something inherent in the land, and that are not applicable to other lands in the same district;~~

~~**2.** The special conditions and circumstances do not result from the actions of the Applicant;~~

~~**3.** A literal interpretation of the provisions of this Chapter would deprive the applicant of all reasonable economic uses and privileges permitted to other properties in the vicinity and zone of the subject property under the terms of this Chapter, and the variance requested is the minimum necessary to provide the applicant with such rights;~~

~~**4.** Granting the variance requested will not confer on the applicant any special privilege that is denied by this Chapter to other lands, structures, or buildings under similar circumstances;~~

~~**5.** The granting of the variance is consistent with the general purpose and intent of this Chapter, and will not further degrade the functions or values of the associated critical areas or otherwise be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity of the subject property;~~

~~**6.** The decision to grant the variance includes the best available science and gives special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish habitat; and~~

~~**7.** The granting of the variance is consistent with the general purpose and intent of the current Comprehensive Plan and adopted development regulations.~~

~~**C. Conditions May Be Required.** In granting any variance, the City may prescribe such conditions and safeguards as are necessary to secure adequate protection of critical areas from adverse impacts, and to ensure conformity with this Chapter.~~

~~D. **Time Limit.** The City shall prescribe a time limit of 5 years within which the action for which the variance is required shall have begun, be completed, or both. Failure to begin or complete such action within the established time limit shall void the variance.~~

~~**E. Burden of Proof.** The burden of proof shall be on the applicant to bring forth evidence in support of the application and upon which any decision has to be made on the application.~~

19.2.180 Permit Fees

A. Filing Fees. At the time of a critical area permit application, the Applicant shall pay a filing fee determined by the City fee resolution.

B. Financial Guarantees: At the time of a critical area permit approval the Applicant will be required to post a financial guarantee for all critical area alteration mitigation activities. The financial guarantee shall be paid prior to initiating any activities in a critical area. The financial guarantee amount will vary by project and may be determined by:

1. The Applicant securing three (3) bonafide bids from experienced landscaping contractors or qualified critical area restoration contractors to install, maintain, and monitor a mitigation plan that has been approved by the Administrator. The highest bid will determine the bond amount. The Administrator can, at the Applicant's expense, solicit an independent bid for installation, maintenance, and monitoring of the approved plan if the Administrator believes the Applicant's submittal is significantly lower than expected.
2. The Administrator can prepare, or have prepared, a standard bond quantity worksheet to determine the bond quantity.
3. The Applicant depositing a cash deposit in a joint City/Applicant interest bearing account at a local financial institution.
   a. Interest accrued while the cash deposit is held in deposit at the financial institution will be deposited in the Applicant's interest account.

b. No funds will be dispersed from the cash account or the interest account unless the Applicant fails to implement the approved mitigation plan within a reasonable time period (12 months) following approval of the mitigation plan and site plans and the initiation of construction.

c. If the Applicant fails to perform as directed in the approved mitigation plan both the interest and cash accounts will be forfeited by the Applicant to the Administrator.

4. Financial guarantees posted for mitigation projects will be posted in two parts, a construction guarantee and a maintenance/monitoring guarantee. After the Applicant has implemented the construction and planting phases of the mitigation project and the mitigation effort is approved by the Administrator the construction portion of the Financial Guarantee will be released to the Applicant. Following the end of the 5-year maintenance and monitoring period and a review by the Administrator indicating the project has been approved the Maintenance and Monitoring Financial Guarantee will be released to the Applicant.

Article IV. Development Standards for Critical Areas

19.2.190 Critical Area Development Standards.

A. ~~Special flood hazard areas~~ Area of Special Flood Hazard – ~~–~~ **Development Standards**. In all areas of special flood hazard, the following standards are required:

1. Anchoring.

a. All new construction and substantial improvement shall be anchored to prevent flotation, collapse or lateral movement of structure.

b. All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, the use of over the top or frame ties to ground anchor (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

2. Construction Materials and Methods.

a. All new construction and substantial improvement shall be constructed with materials and utility equipment resistant to flood damage.

b. All new construction and substantial improvement shall be constructed using methods and practices that minimize flood damage.

c. Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during the condition of flooding.

3. Utilities.

a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the system into floodwaters.

c. On-site waste disposal systems shall be located to avoid impairment or contamination of systems or from systems during flooding.

4. Subdivision proposals – ~~Flood Hazard Areas~~ Area of Special Flood Hazard.

a. All subdivision proposals shall be consistent with the need to minimize flood damage.

b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

d. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or five acres (whichever is less).

5. Review of building permits – ~~Flood Hazard Areas~~ Area of Special Flood Hazard. Where elevation data is not available either through the flood insurance study or from other authoritative source, applications for building permits shall be reviewed to assure that

proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment by ~~T~~the Administrator ~~may use~~ and includes the use of historical data, high water marks, photographs of past floods, etc., where available to determine flood level. Failure to elevate at least two feet above the highest adjacent grade in these zones may result in higher insurance rates. ~~The applicant is required to elevate the proposed finished floor elevation and place mechanical systems (example: HVAC ducts) that are not flood proof in crawl space at least one feet above flood level in an identified flood zone. Failure to comply with this section of the code may result in higher insurance rates.~~

6. Residential construction – ~~Flood Hazard Areas~~ Area of Special Flood Hazard.

a. New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.

b. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for entry and exit of floodwaters. Design for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

(1) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

(2). The bottom of all openings shall be no higher than one foot above grade.

(3). Openings shall be equipped with screens, louvers or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.

7. Nonresidential construction – Flood Hazard Areas. New construction or substantial improvement of any commercial, industrial or other nonresidential structure shall either have the highest floor, including basement, elevated to or above the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

a. Be flood-proofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of the buoyancy;

c. Be certified by a registered professional engineer or architect that the design methods of construction are in accordance with accepted standard of practice for meeting provisions of this subsection based upon their development and/or review of the structural design, specifications and plans. Such certification shall be provided to the official as set forth above;

d. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in subsection B of this section;

e. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based upon rates that are one foot below flood-proofed level (e.g., a building flood-proofed to one foot above the base flood level will be rated as at the base flood level).

8. Manufactured homes – ~~Flood Hazard Areas~~ Area of Special Flood Hazard. All manufactured homes to be placed or substantially improved within zones A1-30, AH and AE on the community's FIRM shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is to or above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provisions set forth in EMC 19.04.090(A).

~~8.~~9. Recreational Vehicles – Area of Special Flood Hazard. Recreational vehicles are allowed to be stored on sites within special flood hazard areas if they are fully licensed and ready for highway use, on their wheels, not connected to utilities and meet other zoning requirements.

~~9.~~10. Floodways – ~~Flood Hazard Areas~~ Area of Special Flood Hazard. ~~Located within areas of special flood hazard, as established~~ Floodways area areas as designated in the section involving basis for establishing areas of special flood hazards set forth above, ~~are areas designated as floodways.~~ Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

a. Prohibit encroachments, including fill, new construction, substantial improvement and other development unless certification by registered professional engineer or architect is provided demonstrating that the encroachment shall not result in increased flood levels during the occurrence of the base flood discharge.

b. Construction or reconstruction of residential structures is prohibited within designated floodways, except for:

(1) Repairs, construction or improvements to a structure which do not increase the ground floor area; and

(2) Repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure either:

(a) before the repair, reconstruction or improvement has started; or

(b) if the structure has been damaged, and is being restored, before damage occurred.

(3) Any improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which are the minimum necessary to assure safe living conditions as determined by the Administrator, ~~Work done on structures to comply with existing health, sanitary or safety codes~~ or to structures identified as historical places shall not be included in the 50 percent.

c. If subsection A of this section is satisfied, all new construction and substantial improvement shall comply with the applicable flood hazard reduction provisions as set forth in the provisions for flood hazard reduction.

d. The city will control the degree of alteration of natural floodplains, wetlands, stream channels and natural protective barriers to help accommodate the storage or channeling of floodwaters, through provisions in the adopted stormwater design manual regulations.

B. Geologically Hazardous Areas.

1. Erosion Hazard Areas – Development Standards.

a. Erosion hazard areas shall be avoided as locations for building construction, roads or utility systems, where mitigation is not feasible.

b. Development activities or their support infrastructure shall not be allowed that would directly or indirectly worsen the erosion hazard identified in the site analysis.

c. Land clearing, grading, and filling shall not be permitted between October 15th and April 1st.

2. Landslide Hazard Areas - Development Standards

a. Documented landslide hazard areas shall be avoided as locations for building construction, roads or utility systems where mitigation is not feasible.

b. If the degree of hazard warrants some development activity, post-construction slope stabilization and appropriately upgraded road construction specifications shall be employed to eliminate as completely as practicable any public or private exposure to landslide hazards or abnormal maintenance or repair costs.

c. Land clearing, grading, and filling shall not be permitted between October 15th and April 1st.

3. Seismic Hazard Areas – Development Standards.

a. The list below defines critical facilities that will require engineering and design elements suitable for protecting public health and safety as well as other critical areas when sited in a seismic hazard area:

(1) Hospitals and other medical facilities having surgery and emergency treatment areas;

(2) Structures housing, supporting or containing sufficient quantities of toxic or explosive substances to be dangerous to the safety of the general public if released;

(3) Covered structures whose primary occupancy is public assembly, with capacity of greater than 300 persons;

(4) Buildings for schools through secondary or day care centers, with a capacity of greater than 250 students;

(5) Buildings for colleges or adult education schools, with a capacity of 500 students or greater;

(6) Medical facilities with 50 or more resident incapacitated patients;

(7) Jails and detention facilities; and

(8) All structures with occupancy of greater than 5,000 people.

C. Critical Aquifer Recharge Areas – Development Standards.

1. The site analysis will create a water quality baseline which will serve as a minimum standard that shall not be further degraded by proposed development.

2. The creation of additional impervious surfaces shall be limited to that amount described in the site analysis that will ensure adequate aquifer recharge and water quality protection.

3. Permits shall ensure that all best management practices are employed to avoid introducing pollutants into the aquifer. This includes the complete collection and disposal of storm water outside of the aquifer recharge area for all development impervious surfaces.

D. Wetlands – Development Standards

1. Development Standards for wetland habitat and wetland buffers are defined in Section 19.02.090, Section and Sections 19.02.130 through 19.02.180.

2. The Applicant will not initiate any habitat altering activities within a regulated wetland adjacent to a stream or river prior to having obtained approval for the proposed mitigation plan and a valid Hydraulic Project Approval (HPA) from the Washington Department of Fish and Wildlife.

3. The Applicant will not initiate any work in an area that has been or has the potential to be designated as a Wetland or Fish and Wildlife Habitat Conservation Area without obtaining either a valid Section 404 Permit or a letter indicating the affected wetland is isolated issued by the US Army Corps of Engineers, Regulatory Branch.

E. Fish and Wildlife Habitat Conservation Areas – Development Standards.

1. No permit for land use activities involving the alteration of identified Fish and Wildlife Habitat Conservation Areas shall be granted by the Administrator unless mitigation of adverse effects that will ensure continuation of baseline populations for all endangered, threatened and sensitive species can be provided.

2. Development will not be allowed in Fish and Wildlife Habitat Conservation Areas without Administrator approval if listed species (those species listed on the Federal Endangered Species list and the State of Washington Priority Habitat and Species list) and their critical habitats will suffer population declines, migration route interruption, or habitat degradation , the Administrator may approve development in Fish and Wildlife Conservation Areas if it can be demonstrated that:

a. mitigation measures (Best Management Practices) intended to minimize or eliminate adverse affects on species and habitat are incorporated in the development plans; and

b. the Applicant provides valid and scientifically supportable information demonstrating that adequate regional populations will be maintained after the development activities have ceased and the site is occupied.

3. Development reviews shall include regional species occurrence and movements and will avoid creating isolated subpopulations where warranted.

4. A grading, restoration, and erosion control plan shall be approved by the City prior to initiating any work proposed adjacent to a fish-bearing stream or buffer.

5. Any disturbance in the buffer area shall be restored and rehabilitated to ensure erosion and water quality is not degraded from predevelopment conditions.

6. Any disturbance in the buffer area shall be restored and rehabilitated to ensure restoration of native vegetation (trees, shrubs, and groundcover) within the Fish and Wildlife Habitat Conservation Area.

7. The applicant will not initiate any work in a stream (below the Ordinary High Water Mark) without having a valid Hydraulic Project Approval (HPA) issued by the Washington Department of Fish and Wildlife and, if necessary, a valid Section 404 Permit issued by the US Army Corps of Engineers, Regulatory Branch.

8. In the event that a Federal or state protected species or its associated habitat de-listed or the Federal and state policies regarding listed species and habitats are modified or removed the Administrator will decide how fish and wildlife conservation areas will be managed from a permitting perspective.

19.20.200 Critical Areas Management Incentives

A. Limited density transfer.

1. For development proposals on lands containing Category II, III or IV wetlands and any category of wetland buffers, the administrator shall determine allowable dwelling units for residential development proposals based on the formulas below.

2. The following formula for density calculations is designed to provide incentives for the preservation of wetlands and wetland buffers, flexibility in design, and consistent treatment of different types of development proposals. The formula shall apply to all properties within existing residential zones on which wetlands and wetland buffers are located.

3. The maximum number of dwelling units (DU) for a lot or parcel which contains wetlands and wetland buffers shall be equal to:

(*Acres in Wetland or Buffer*) x (DU/Acre) x (*Density Credit*)

4. The density credit figure is derived from the following table:

Percentage of Site in Buffer	**Density Credit**
100%	100%
90%	90%
80%	80%
70%	70%
60%	60%
50%	50%
40%	40%
30%	30%
20%	20%
10%	10%

5. The density credit can only be transferred within the development proposal site. To the extent that application of the formula may result in lot sizes less than the minimum allowed by the underlying district, they are hereby authorized; provided, that the resultant lot is no less than 50 percent of the required size. In no event shall a reduction in lot size result in lot sizes less than 7,200 square feet or result in a change in use from that allowed in the underlying zone district. Deductions of up to 50 percent for setbacks and width at building are also authorized as long as the lots standards do not conflict with the family of International Building Code requirements.

6. The administrator shall require and approve a binding site plan, submitted by the applicant indicating lot sizes, lot configurations, building envelopes, and elevations, and structure profiles as a condition of allowing any reduction on the standards of the underlying zone. Any density credit (for wetlands only) resulting in reduction of standards for the underlying zone district shall also require a variance from the board of adjustment.

B. Non-monetary Compensation for Voluntary Increases in Critical Habitat Set-asides: This is a program by which the City would provide non-monetary compensation for Applicants or Landowner cooperation in establishing larger than the minimum required buffers adjacent to designated critical areas or riparian areas adjacent to aquatic habitats such as streams, ponds, or lakes.

1. An example of this program would be the Administrator compensating a land owner (whose active agricultural operation initiated prior to the adoption of any sensitive or critical areas regulations) for voluntarily creating buffers adjacent to a stream to protect the fish and wildlife habitat and protect water quality.

a. As an example the City could supply the materials and labor to install and maintain the fencing necessary to exclude livestock from the stream channel and its associated buffer as

compensation for the voluntary establishment of buffers; or

b. The City could supply the materials and labor needed to install off-channel livestock watering facilities; or

c. The City would supply the farmer with a quantity of hay equivalent to the amount of hay lost due to creating the buffer set-aside.

2. To fund this type of compensation program the City the City is hereby authorized to:

a. levy a conservation fee on all dairy and meat products sold at retail outlets located within the limits of the City; or

b. The City could negotiate a perpetual grant from the Salmon Recovery Fund to fund the projects and use a non-profit entity dedicated to salmon habitat restoration (i.e. Mid-sound Fisheries Enhancement Group) to implement the program.

C. Open Space, Forestry, and Agricultural Current Use Assessment Programs: Under established programs authorized by State law (RCW 83.34 and related sections) the Administrator could encourage an Applicant or Applicants as property owners to seek Property Tax Relief as compensation for establishing minimum required buffers adjacent to critical areas when the are exempt under the current EMC 19.02.

1. The Administrator is hereby authorized to develop a tax relief information packet and provide said packet to land owners in the City of Enumclaw and immediately surrounding areas.

2. The Administrator would have the authority to prepare documents indicating the designation of property currently designated as Open Space, Forestry, Agricultural to Critical Area Buffer, a designation that should lower tax liability on the dedicated lands.

3. The Administrator would also be authorized to prepare property tax relief requests for properties that an Applicant or Applicants designated as fish and wildlife habitat conservation areas or critical area buffers.

19.2.210 Critical area tracts and easements.

A. Critical Area Management Tracts. As a condition of any permit, the City may require the permit holder to create a separate critical area management tract containing the areas determined to be critical areas. Critical area management tracts are legally created tracts containing critical areas, and compensation areas that shall remain undeveloped in perpetuity, except for allowed activities pursuant to this chapter. Critical area management tracts are an integral part of the lot in which they are created, are not intended for sale, lease or transfer, and shall be included in the area of the parent lot for purposes of subdivision method and minimum lot size.

B. Protection of Critical Area Management Tracts. The City may require, as a condition of any permit, that the critical area management tracts be protected and maintained in perpetuity by a critical area management easement which must be recorded. In addition, an entity that will be responsible for the maintenance and protection of the critical area tract must be designated as part of the permit.

C. Marking during Construction. The location of the outer extent of the critical area and the areas to be disturbed pursuant to an approved permit shall be marked in the field to prevent unnecessary disturbance by individuals and equipment during the development or construction of the permitted activity. Such field markings shall be approved by the city prior to the commencement of permitted activities. Such field markings shall be maintained throughout the duration of the permit.

D. Permanent Marking. The city may require the boundary of a critical area management tract be permanently identified by signs, the location, size, and wording of which must be approved by the administrator. These signs should be worded as follows: “Protection of this natural area is in your care. Alteration or disturbance is prohibited by law. Please call the city community development department for more information.”

E. Additional Requirements. Site specific criteria shall be developed to determine if additional conditions are warranted to insure the preservation and protection of critical areas are needed. These conditions include, but are not limited to, fencing, educational signage, and other passive recreational amenities.

19.2.220 Deed restrictions and Setbacks.

A. Deed Restrictions. The permit holder shall establish and record a permanent and irrevocable deed

restriction on the property title of all lots containing critical area management tracts created as a condition of this permit. Such deed restriction(s) shall prohibit in perpetuity the development, alteration, or disturbance of vegetation within the critical area management tract except for allowed activities and regulated activities allowed by a permit issued pursuant to this chapter.

B. Setbacks. Building setbacks must be recorded on the property title for all critical areas identified and delineated on the project site and in close proximity of the project site. As it pertains to the provisions of this Chapter a building setback is an additional open area between the delineated edge of an identified critical area and a permanent structure or improvement.

1. Major structures and improvements shall be set back 25 feet from any landslide critical area tract, and 15 feet from any flood hazard zone, or erosion hazard critical area tract. Major structures and improvements shall be set back a minimum of 15 feet from the outer edge of any wetland or stream buffer
2. The Administrator may increase the setback to protect the proposal or adjacent properties from adverse impacts and may decrease the setback if the reduction does not result in significant adverse impacts to the proposal or adjacent properties. The setback can be decreased to no less than 10 feet.

Article V. Mitigation of Critical Area Impacts

19.2.230 Mitigation Sequencing – Decision Criteria.

A. Eligibility for Reasonable Use Exception Application

1. It is the City's responsibility to review all regulated land use activities and approve only those land use proposals that will not adversely impact public health and safety, public investments in infrastructure, and natural resources managed as a public trust.
2. It is the responsibility of an Applicant requesting plan approval and development permits for a proposed land use action to ensure that all reasonable and practical project alternatives have been thoroughly evaluated in an effort to avoid adversely impacting public health and safety, public investments in infrastructure, and natural resources managed as a public trust.
3. To be consistent with the goals and objectives of its current Comprehensive Plan and the provisions of this Chapter the City shall require an Applicant to clearly demonstrate that all efforts have been exhausted in the process of preparing a proposed development plan (land use activity).
4. The Applicant having exhausted all reasonable and practical efforts to avoid impacts, it is the responsibility of the Administrator to ensure that all unavoidable impacts to regulated critical areas are mitigated.

B. Compensatory Mitigation – Decision Criteria: Compensatory mitigation for alterations to critical areas, particularly wetlands and fish and wildlife habitat conservations areas, shall, in a reasonable period of time, achieve equivalent or greater biologic function within the critical area altered or in a viable alternative mitigation area. Compensatory mitigation plans shall be consistent with Best Available Science (BAS), watershed approach to mitigating siting, as well as local knowledge and expertise.

1. Mitigation of critical area impacts associated with a proposed land use activity shall be required in the following order of preference:
   a. **Impact Avoidance:** Avoiding the impact altogether by not taking a certain action or parts of an action. When it has been demonstrated, to the satisfaction of the Administrator, that impact avoidance is neither pratical nor prudent, the Administrator shall approve one of the following, in descending order of preference;
   b. **Impact Minimization:** 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. **Impact Rectification:** Rectifying the impact by repairing, rehabilitating, or restoring the affected environment. This may include off-site mitigation areas and the restoration of previously impacted habitats in other critical areas, provided that a watershed approach to

mitigating siting (see Ecology publication 09-06-032) is required; ~~in the same or adjacent watershed~~.

d. Impact Reduction over Time: Reducing or eliminating the impact over time by preservation and maintenance operations.

e. Impact Compensation: Compensating for the impact by replacing, enhancing, or providing substitute resources or environments. This may include mitigation alternatives such as wetland mitigation banking, fee-in-lieu, credit-debit method (reference Ecology Publication #10-06-011) and other creative approaches to mitigation that will result in a net increase in critical area function and value.

C. **Minimizing wetlands impacts – Decision Criteria.** After it has been determined by the City Council, based on information presented to the council by the Administrator and the Applicant, that the loss of critical areas is necessary and unavoidable or that all reasonable economic use has been denied,

1. The applicant shall implement project planning and implementation measures intended to minimize critical area impacts; and

2. Efforts to minimize critical area impacts shall include, but are not limited to:

a. Limiting the degree or magnitude of the regulated activity;

b. Limiting the implementation of the regulated activity;

c. Using appropriate and best available technology;

d. Taking affirmative steps to avoid or reduce impacts;

e. Sensitive site design and siting of facilities and construction staging areas away from regulated wetlands and their buffers;

f. Involving resource agencies early in site planning; and

g. Providing protective measures such as siltation curtains, hay bales and other siltation prevention measures, scheduling the regulated activity to avoid interference with wildlife and fisheries rearing, nesting or spawning activities.

D. **Mitigation of Unavoidable Critical Area Impacts as Part of a Reasonable Use Exception**: If the Administrator has determined that implementation of an Applicant's land use proposal results in adverse impacts to critical areas identified within, or immediately adjacent to the proposed project site and the application of the provisions of this Chapter would deny all reasonable use of the property, the Administrator may allow a proposed development that is consistent with the general purposes of this chapter and the public interest; to proceed provided, that the City Council finds that:

1. Enforcement of the provisions of this chapter would otherwise deny all reasonable use of the property;

2. There is no other reasonable use with less impact on the wetland;

3. The proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the property;

4. Any proposed alteration of the wetland is the minimum necessary to allow for reasonable use of the property;

5. There is no feasible on-site alternative, including reduction in density and site-planning considerations;

6. The inability to derive reasonable economic use from the property is not the result of actions by the applicant in segregating or dividing the property and creating the undevelopable condition after the effective date of the ordinance codified in this chapter.

19.2.240 Mitigation plans.

A. All wetland enhancement, restoration, or creation projects required pursuant to this Chapter either as a permit condition or as the result of an enforcement action shall follow a mitigation plan prepared by a Qualified Professional and approved by the Administrator.

1. Preparation of the mitigation report is an expense borne by applicant and/or violator.

2. The minimum content of a critical area mitigation plan is outlined in Appendix C of this Chapter.

3. Unless the Administrator, in consultation with a Qualified Professional, determines, based on the size and nature of the development proposal, the nature of the impacted wetland, and the degree

of cumulative impacts on the wetland from other development proposals, that the scope and specific requirements of the mitigation plan may be reduced from what is listed in Appendix B, the mitigation plan shall include information in response to every item listed.

B. The applicant or violator shall receive written approval of the mitigation plan by the city prior to commencement of any wetland restoration, creation or enhancement activity.

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

D. City personnel reviewing the mitigation plan and the Applicant's consultants or staff preparing the mitigation plan are encouraged to consult with and solicit comments of any federal, state, regional, or local agency, including tribes, having any special expertise with respect to any environmental impact prior to approving a mitigation proposal which includes wetlands compensation.

E. The mitigation plan may be reviewed by other agency personnel for compliance with other State and Federal regulations. The Applicant is encouraged to provide sufficient, clear, and concise information regarding the proposed mitigation plan design and implementation in order for such agencies to comment on the overall adequacy of the mitigation proposal in a timely manner. Approval of a proposed mitigation plan by the City does not mean that the plan has been approved by other reviewing agencies.

F. Compensatory wetland mitigation is not required for regulated activities:

1. For which a permit has been obtained for critical area impacts that will only occur in the outer 50% of a buffer, or expanded buffer, and which have no adverse impacts to regulated wetlands or no significant reduction in buffer function and value; or

2. Allowed activities pursuant to EMC 19.02.020.C provided such activities utilize best management practices to protect the functions and values of regulated wetlands. (Ord. 1960 § 3, 1998).

19.2.250 – Critical Area Impact Mitigation

A. As a condition of any permit allowing alteration of critical areas, or as an enforcement action pursuant to EMC 15.12.030, the City shall require that the applicant engage in the restoration, creation or enhancement of critical areas and their buffers in order to offset the impacts resulting from the applicant's actions.

B. The applicant shall develop a plan (see Appendix C) that provides for land acquisition (if necessary), construction, maintenance and monitoring of replacement wetlands that provides equal or greater functions and values as the original wetlands.

C. The overall goal of any critical areas mitigation project designed and implemented to compensate for wetland or fish and wildlife habitat conservation area impacts shall be no net loss of habitat (wetland, stream, riparian area, buffer, pond, etc.) functions and values and to strive for a net resource gain in habitat functions and values over present conditions. Compensation should be completed, whenever it is feasible, prior to any critical area alteration.

D. 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:

1. 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 similar protocol; or
2. Out-of-kind replacement will best meet formally identified watershed goals, such as replacement

of historically diminished wetland types.

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

1. Restoring wetlands on upland sites that were formerly wetlands.
2. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of non-native introduced species.
    a. 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.
3. 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.

F. 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:

1. On-site compensation should be provided except where the applicant can demonstrate that:
    a. The hydrology and ecosystem of the original wetland and those who benefit from the hydrology and ecosystem will not be significantly adversely impacted by the on-site loss; and
    b. On-site compensation is not scientifically feasible due to problems with hydrology, soils, waves, or other factors; or
    c. Compensation is not practical due to potentially adverse impact from surrounding land uses; or
    d. Existing functional values at the site of the proposed restoration are significantly greater than lost wetland functional values; or
    e. Local or regional goals for flood storage, flood conveyance, habitat or other wetland functions have been established and strongly justify location of compensatory measures at another site.
2. Off-site compensation shall occur within the same watershed as the wetland loss occurred; provided, that Category IV wetlands may be replaced outside of the watershed when there is no reasonable alternative and local or regional environmental goals are furthered by this action.
3. Either in-kind and on-site, or in-kind and within the same stream reach, sub-basin, or drift cell. Mitigation actions shall be conducted within the same sub-drainage basin and on the site as the alteration except when the all of the following apply:
    a. There are no reasonable on-site or in-subdrainage basin opportunities or on-site and in-subdrainage 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, 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:
        (1) 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
        (2) 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.
4. In selecting compensation sites, applicants shall pursue mitigation sites in the following order of preference:
    a. Degraded wetland sites;
    b. Upland sites which were formerly wetlands;

c. Upland sites generally having bare ground or vegetative cover consisting primarily of exotic introduced species, weeds, or emergent vegetation;

d. Other disturbed upland. (Ord. 1960 § 3, 1998).

G. Mitigation Timing. Mitigation projects shall be completed and the approved monitoring plan activated prior to initiating any ground or vegetation disturbing activities in a critical area.

1. In all other cases, mitigation shall be completed immediately following disturbance and prior to issuance of a certificate of occupancy or the use of the project site or development that was conditioned upon the completion of such compensation or mitigation projects.
2. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
3. If the Applicant submits a written request for a temporary delay in an aspect of the mitigation plan implementation, the Administrator may authorize a one-time only temporary delay, up to one-hundred-twenty (120) days, in completing minor construction and landscaping when environmental conditions present a high probability of failure or significant construction or plant installation 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.
   a.. 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/county] and include a financial guarantee.

H. Mitigation Ratios: Mitigation ratios refer to the amount of area required to mitigate a wetland impact or the mitigation effort required to mitigate wetland function and value lost in a smaller area than was impacted by a land use activity.

1. **Acreage Replacement Ratios.** The following ratios shall apply to creation or restoration that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success.

WETLAND CATEGORY	MITIGATION RATIO
I	3:1
II	2:1
III	1.5:1
IV	1:1

   a. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.
   b. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases.
   c. 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
2. **Function and Value Replacement Ratios:** The Administrator may reduce the mitigation ratios listed above if the Applicant proposes to mitigate for critical area impacts by enhancing previously impacted wetlands to increase the wetland category.
   a. For example, an Applicant may have a need to mitigate for impacts to an isolated 7,500 square foot of highly degraded pasture wetland (wet meadow) dominated by grass species and facultative emergent species. The Applicant proposes offsite mitigation through the restoration (enhancement) of a 5,000 square foot scrub-shrub/emergent adjacent to a salmonid bearing stream without a functional buffer by lowering the whole mitigation area into the floodplain, grading a small open water area fed by surface flow and groundwater, an emergent area with greater plant diversity and a lengthened hydroperiod, the addition of

snags and large woody debris, and planting the buffer with tree, shrub, and groundcover species. The Administrator would be consistent with the provisions in this Chapter by approving the Applicants proposed mitigation plan.

3. **Increased Replacement Ratio.** The Administrator may increase the ratios for wetland enhancement, restoration, or creation projects under the following circumstances:
   a. Uncertainty exists as to the probable success of the proposed restoration or creation; or
   b. A significant period of time will elapse between impact and replication of wetland functions; or
   c. Projected losses in functional value; or
   d. Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or
   e. The impact was an unauthorized impact.
4. **Decreased replacement ratio.** The Administrator may decrease these ratios if:
   a. Findings of special studies coordinated with agencies with expertise demonstrate that no net loss of critical area function or value is attained under the decreased ratio;
   b. If a compensatory mitigation project is undertaken adjacent to riverine, riparian, or wetland systems and increases the overall functions and values of these systems; or
   c. If compensatory mitigation successfully occurs in advance of the proposed wetland altering activity. (Ord. 1960 § 3, 1998).

19.2.260 Alternative Mitigation Strategies

A. Wetland Mitigation Banking and In-Lieu Fee (ILF) Mitigation Opportunities

1. Credits from a wetland mitigation bank or federally certified In-Lieu Fee (ILF) program may be approved for use as compensation for unavoidable impacts to wetlands, fish and wildlife conservation areas, and other aquatic resources when:
   a. The bank is certified by WDOE under WAC 173-700 or by the federally certified ILF program is certified by the US Army corps of Engineers per Federal regulations (33 CFR Part 332 and 40 CFR Part 230, Subpart J);
   b. The Administrator determines that the wetland mitigation bank or federally certified ILF program provides appropriate compensation for wetland, fish and wildlife conservation areas, or other aquatic resource impacts associated with the Applicants project; and
   c. The proposed use of credits is consistent with the terms and conditions of the bank~~'s~~ or ILF program's certification.

2. Replacement ratios for projects using bank or ILF program credits shall be consistent with replacement ratios specified in the bank~~'s~~ or program's certification.

3. Credits from a certified wetland mitigation bank or ILF program may be used to compensate for impacts located within the service area specified in the bank~~'s~~ or ILF program's certification. ~~In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions.~~

B. Cooperative restoration, creation or enhancement projects. The City may encourage, facilitate, and approve cooperative projects wherein a single applicant, group of applicants, or other entity with demonstrated capability may undertake a compensatory mitigation project with funding from each of the Applicants or another source under the following circumstances:

1. Restoration, creation, or enhancement at an individual location (site) may be scientifically or economically impractical, difficult, or impossible; or

2. Creation of one or several larger wetlands, riparian areas, or buffer area in an off-site location may be preferable to the mitigation of many small wetlands in their existing onsite locations, or.

3. Restoration/relocation of a previously degraded stream channel in conjunction with the creation of floodplain wetlands, riparian corridors, and enhanced buffers may have a greater benefit to fish and wildlife production in the watershed than smaller individual mitigation projects located within current or future project sites; and

4. The Applicant or Applicants proposing cooperative compensation projects shall:
   a. Submit a Cooperative Project mitigation plan prepared by a Qualified Professional that

contains the information required listed in Appendix B;

b. Demonstrate compliance with the provisions of this Chapter and all standards, rules, requirements, and regulations enforced by other resource management agencies with jurisdictional interest in the proposed project;

c. Demonstrate, in the form of contractual agreements or verifiable funding sources (i.e. an escrow account), that the organizational and fiscal capability to act cooperatively are in place and perpetual; and

d. Demonstrate that long term management capability can and will be provided through the entire life of the project; and

e. Obtain all state and federal permits and approvals necessary for the compensation project prior to making formal application to the City.

~~e.~~**f.** **NOTE:** This is an opportunity for individual land owners contemplating or anticipating future development opportunities to occur on the lands collectively to form a legal entity for the purpose of eliminating small, low function and value Category III and Category IV wetlands located on their individual properties and cooperatively mitigating the individual impacts in a larger offsite location in advance of the actual critical area impacts. The same concept can be used to restore and/or relocate stream habitat or to connect isolated areas of wildlife habitat.

~~**C. Fee-in-Lieu Mitigation Opportunities:** If the stipulations described in this code section are applied the Administrator is authorized to negotiate with a single project Applicant or with multiple project Applicants to prepare a "fee-in-lieu" mitigation plan for the mitigation of critical area impacts associated with a development project or land use action that is capitalized with private, public, or public/private partnership funds.~~

~~**1.** A "fee-in-lieu" mitigation plan differs from the conventional mitigation plan (described in EMC 19.02.250) in that:~~

~~**a.** The implementation, maintenance, and monitoring aspects of the project are to be completed by City using funds paid to the City by the Applicant or Applicants.~~

~~**(1)** In some cases the Applicant may be a City Department not reporting directly to the Administrator.~~

~~**(2)** In all cases the funds collected for "fee-in-lieu" mitigation projects will be managed by the Administrator.~~

~~**(3)** Funds collected from an Applicant or Applicants can be pooled for use on a larger natural resources management project (primarily habitat enhancement, improvement, and/or restoration) or for the acquisition of property that will be set aside in trust as fish and wildlife habitat.~~

~~**b.** In most cases the mitigation plan will not be implemented within the Applicant's (or Applicants') specific project area.~~

~~**c.** In most cases the mitigation plan will be modified to fit into a larger habitat improvement area such as a stream corridor, in an area adjacent to a larger wetland complex, or a fish and/or wildlife habitat conservation area.~~

~~**(1)** **NOTE:** The larger habitat improvement areas will be part of a landscape or watershed based restoration plan rather than a site specific mitigation area selected because a regulatory requirement dictates onsite mitigation or the site is within a proposed project area owned by the Applicant or Applicants.~~

~~**2.** A "fee-in-lieu" mitigation plan is the same as a conventional mitigation plan in that:~~

~~**a.** The Applicant (or Applicants) must complete a Critical Areas Assessment, and if necessary, a Critical Areas Report which must be submitted to the Administrator for review and approval. That submittal may occur in advance of or simultaneous to the Applicant's submittal of preliminary or conceptual project plans for a proposed land use action.~~

~~**b.** The Applicant (or Applicants) must prepare and submit a site development plan (proposal) that defines all design measures and Best Management Practices incorporated into the design that are intended to eliminate or minimize impacts to identified, designated, or delineated critical areas within, or in close proximity to, the boundaries of the proposed development~~

~~site.~~

~~**c.** The Applicant must prepare a mitigation plan that addresses mitigation of all unavoidable development related impacts to regulated critical areas. The proposed mitigation plan must include:~~

~~**(1)** A mitigation project budget or Project Manager's Estimate that details cost estimates for mobilization, equipment rental site preparation, plants material acquisition, plant installation, onsite consulting services, de-mobilization, and other necessary implementation costs.~~

~~**(2)** A budget or project manager's estimate for post-project maintenance and monitoring costs, including the cost of supplemental irrigation, native plant replacement, and invasive plant removal.~~

~~**(3)** Bids from three qualified landscaping or native plant/habitat restoration companies for the approved mitigation plan implementation, a 1-year warranty, and project area maintenance for one-year following construction (plant installation).~~

~~**3.** To approve a negotiated "fee-in-lieu" mitigation plan the Administrator must be able to demonstrate that::~~

~~**a.** The identified critical areas impacts are unavoidable and that those impacts can be successfully mitigated.~~

~~**b.** The impacts will occur in regulated, but primarily isolated, critical areas delineated within, or in close proximity, to the subject project site (or sites).~~

~~**c.** The areas of impact have low to moderate value even if the impacted functions were replaced on site (within the project area).~~

~~**d.** In the City's assessment, the size of the critical area impacts and the benefits of on-site in-kind mitigation would have to relatively small. In addition the small impact to or the collective impacts upon one or more identified critical areas must not result in a moderate to significant impact to other downstream or proximate critical areas, priority habitats, or habitat for listed species.~~

~~**e.** In the City's assessment the replacement of the critical areas in-kind and onsite will not have as great or greater value than the of the value gained through the creation, enhancement, or restoration of other critical areas more closely associated with larger fish and wildlife habitat conservation areas or larger wetland complexes.~~

~~**4.** The purpose of any negotiation authorized under this code section and that could be initiated by either the Applicant or the Administrator, would be to determine whether on-site, in-kind or on-site, out-of-kind mitigation would provide the greatest cost-benefit ratio compared to having the Applicant or Applicant's pay a calculated mitigation fee to the City.~~

~~**a.** The collected funds shall be managed by the Administrator as part of natural resources management program design to meet current comprehensive plan objectives.~~

~~**b.** The program may include passive use parks and trails with ecological and environmental education focus.~~

~~**5.** Once the Applicant or Applicants "fee-in-lieu" invoice has been paid to the City the Administrator will:~~

~~**a.** Provide the Applicant, or each individual Applicant who is part of a group of Applicants involved in one mitigation project, with a written statement indicating that all mitigation responsibilities and obligations associated with a project specific critical areas impact mitigation plan, for which a "fee-in-lieu" agreement has been negotiated and consummated, have been fulfilled, and~~

~~b. The City shall undertake implementation of the mitigation process in a manner consistent with the provisions of this Chapter.~~

19.2.270 Mitigation Area Performance Standards.

A. Compensatory mitigation shall follow an approved mitigation plan pursuant to EMC 19.02.140(B)(9) and shall meet the following minimum performance standards:

1. Given the uncertainties in scientific knowledge and the need for expertise and monitoring, critical area compensatory mitigation projects may be permitted only when the City finds that the

mitigation project is associated with an activity or development otherwise permitted and that the restored, created, or enhanced wetland will be as persistent as the wetland it replaces.

2. Additionally, Applicant shall:

a) Demonstrate sufficient scientific expertise (including current knowledge of best available science), supervisory capability, and financial resources to carry out the proposed mitigation project;

b) Demonstrate the capability to adequately monitor the site and to maintain (make corrections) the mitigation area during the monitoring period so the mitigation project does not fail to meet the environmental goals and performance standards defined in the approved mitigation plan ; and

c) Protect and manage, or provide for the protection and management, of the mitigation area to avoid future development related impacts or degradation within the mitigation area and to provide for long term persistence of the compensation area.

3. Wetland functions and values shall be calculated using the best professional judgment of a Qualified Professional using the best available techniques.

APPENDIX A: Wetland Rating Criteria

Different types of wetlands are separated from one another on the basis of Wetland Class and Wetland Category. The former is a scientific system based upon dominant plant communities, substrate conditions, hydrologic regime, and location in the "watershed". The latter is a categorization system used to regulate land uses adjacent to wetlands.

A. **Wetland Class:** Wetland class is a science based classification system based on a U.S. Fish and Wildlife Service publication titled *Classification of Wetlands and Deepwater Habitats of the United States* that was edited by Lewis M. Cowardin et al and published in December 1979. Cowardin divides wetlands into five systems (Marine, Estuarine, Riverine, Lacustrine, and Palustrine), eight subsystems (Subtidal, Intertidal, Tidal, Lower Perennial, Upper Perennial, Intermittent, Limnetic, and Littoral), ten classes, and numerous modifiers. A combination of the system name, subsystem, name, class, and a modifier forms a code that identifies the wetland class.

WDOE expanded the term wetland class by incorporating use of the HGM (Hydrogeomorphic Method) classification into the Washington State Wetland Rating System for Western Washington (WDOE Publication No. 04-06-025). The HGM is based on the "landscape" location of a wetland or portion of a wetland. The HGM classes are Depressional, Riverine, Lake-fringe, Slope, Flats, and Freshwater Tidal.

B. **Wetland Category:** In the City, Wetland Category is used to regulate activities within and adjacent to wetland and in determining the width of the wetland buffer. The wetland category is determined after a wetland has been identified and delineated. Wetland Category is determined using the Washington State Wetland Rating System for Western Washington (WDOE Publication No. ~~04-06-015~~14-06-029 or as hereafter revised and approved by Ecology). ~~Wetlands are evaluated and scored on three criteria (Water Quality Functions, Hydrologic Functions, and Habitat Functions).~~

The WDOE document contains the definitions and scoring methods used for determining if the wetland rating criteria outlined in Appendix A of this Chapter are met. ~~The total score for the three functional areas determines the Wetland Category.~~ Note that streams and lakes are not rated as wetlands, but rather are classified and rated as Fish and Wildlife Conservation Areas (EMC 19.02.100).

C. **Wetland Rating.** Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the 2014 Wetland Rating System (Ecology Publication #14-06-029), or as revised and approved by Ecology), which contains the definitions and methods for determining whether the criteria below are met.

1. Category I. Category I wetlands are: (1) relatively undisturbed estuarine wetlands larger than one acre; (2) wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR; (3) bogs; (4) mature and old-growth forested wetlands larger than one acre; (5) relatively undisturbed wetlands in coastal lagoons that are larger than 1/10 acre; (6) interdunal wetlands that score 8 or 9 habitat points and are larger than 1 acre; and (7) wetlands that perform many functions well (scoring 23 points or more). These wetlands: (1) represent unique or rare wetland types; (2) are more sensitive to disturbance than most wetlands; (3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; and (4) provide a high level of functions (23 points or more, out of 27).

2. Category II. Category II wetlands are: (1) estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre; (2) interdunal wetlands larger than 1 acre or those found in a mosaic of wetlands; (3) wetlands with a moderately high level of functions (scoring between 20 and 22 points).

3. Category III. Category III wetlands are: (1) wetlands with a moderate level of functions (scoring between 16 and 19 points); (2) can often be adequately replaced with a well-planned mitigation project; and (3) interdunal wetlands between 0.1 and 1 acre. Wetlands scoring between 16 and 19 points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

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

~~**Wetland Rating Categories (WAC 365-190-080(1)(a) and WDOE Publication No. 04-06-025)**~~

~~**NOTE:** The actual category of an individual wetland is determined by the total score for the functions which is recorded on the first page of the Wetland Rating Form included in the above referenced WDOE publication. Category I and Category II Wetlands are also rated for "special characteristics", the value of which are included in the final category rating.~~

~~1. **Category I.** Category I wetlands are those that meet one or more of the following criteria:~~
~~a. Documented habitat for federal or state listed endangered or threatened fish, animal, or plant species;~~
~~b. High quality native wetland communities, including documented category I or II quality Natural Heritage wetland sites and sites which qualify as a Category I or II quality Natural Heritage wetland (defined in the rating system documents);~~
~~c. High quality, regionally rare wetland communities with irreplaceable ecological functions, including sphagnum bogs and fens, estuarine, wetlands, or mature forested swamps (defined in the rating system documents); or wetlands of exceptional local significance.~~

~~2. **Category II.** Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Services, and National Marine Fisheries Services documented habitats for state listed sensitive plant, fish, or animal species;~~
~~a. Wetlands that contain fish or animal species listed as priority species by the Washington Department of Fish and Wildlife, or plant species listed as rare by the Washington State Department of Natural Resources (DNR).~~
~~b. Wetland types with significant ecological functions as determined by an agency approved functional evaluation methodology that may not be adequately replicated through creation or restoration;~~
~~c. Wetlands possessing significant habitat value based on a score of twenty-two (22) or more points~~

~~in the state Department of Ecology habitat rating system; or~~

~~d. Documented wetlands of local significance.~~

~~3. **Category III.** Category III wetlands are those that do not satisfy category I, II, or IV criteria, and with a habitat value rating of twenty-one (21) points or less.~~

~~4. **Category IV.** Category IV wetlands are those that meet one or more of the following criteria:~~

~~a. Hydrologically isolated wetlands, as determined by the U.S. Army Corps of Engineers Regulatory Branch that are less than or equal to one (1) acre in size, have only one wetland class, and are dominated [greater than eighty percent (80%) area cover] by a single, non-native plant species (monotypic vegetation); or~~

~~b. Hydrologically isolated wetlands that are less than or equal to two (2) acres in size, and have only one wetland class and greater than ninety percent (90%) areal cover of non-native plant species.~~

APPENDIX B: Critical Area Report Content

NOTE: The information items listed below represent the minimum information requirements to be included in a Critical Area Report (refer also to Appendix E). Further, if a critical area report is required by the Administrator in accordance with (EMC Chapter 19.02 - Section 19.02.130, Section 19.02.130, and Appendix E), the applicant shall submit a critical area report prepared by a qualified professional as defined in Appendix D.

1. A description of the vegetative cover of the critical area and adjacent area including dominant species;
2. A site plan for the proposed activity at a scale no smaller than one inch equals 40 feet showing the location, width, depth and length of all existing and proposed structures, roads, sewage treatment, and installations within and adjacent to critical areas;
3. The exact sites and specifications for all regulated activities including the amounts and methods;
4. Elevations of the site and adjacent lands within the critical areas at contour intervals of no greater than two feet;
5. Typical cross-section views of the critical area to scale;
6. The purposes of the project and an explanation why the proposed activity cannot be located at other sites including an explanation of how the proposed activity is dependent upon critical areas;
7. A study of flood, erosion, or other hazards at the site and the effect of any protective measures that might be taken to reduce such hazards;
8. A Critical Areas Report that documents the ecological, aesthetic, economic, or other values of the critical areas, including a discussion of the methodology used to identify, delineate, and survey critical areas described in the report (refer to Appendix B);
9. A description of site development alternatives and an evaluation of those alternatives vis-à-vis any proposed critical area alterations. Include a rationale for not avoiding or minimizing impacts to critical areas identified within the project site;
10. A mitigation plan may be submitted to the Administrator at the time the Applicant submits a Critical Areas Permit (or a Type III through Type V permit application) or the applicant can defer submittal of the mitigation until after the preliminary project design has been reviewed by the Administrator. The Applicant will be required, however, to submit a Final Mitigation Plan describing mitigation projects for all unavoidable critical area impacts before any project permits are approved by the Administrator. The Final Mitigation Plan shall include baseline information, environmental goals and objectives, a Financial Guarantee quantity worksheet to bond the proposed mitigation activities, detailed construction plans, performance standards, a 3 to 5 year monitoring program, and a contingency plan.

APPENDIX C: Mitigation Plan Requirements

Mitigation Plan Requirements. When mitigation is required, the applicant shall submit, for approval by the Administrator, a mitigation plan as part of the Critical Area Report (unless a deferral is granted by the Administrator per Section 19.02.140.B.9). The mitigation plan shall include:

A. Baseline Information. A written assessment and accompanying maps drawn to an appropriate scale of the:
   1 Impacted wetland including, at a minimum, wetland delineation; existing wetland acreage; vegetative, faunal, and hydrologic characteristics; soil and substrate conditions; topographic elevations; and
   2. Impacted wetland functions and values shall be described using the system approved by the Administrator;
   3. Compensation site, if different from the impacted wetland site, including at a minimum: existing acreage; vegetative, faunal and hydrologic conditions; relationship within watershed and to existing water bodies; soil and substrate conditions; topographic elevations; existing and proposed adjacent site conditions; buffers; and ownership.

B. **Environmental Goals and Objectives.** The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:
   1. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;
   2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed; and
   3. An analysis of the likelihood of success of the compensation project duplicating the original wetland shall be provided based on the experiences of comparable projects, if any.
   4. An analysis of the likelihood of persistence of the created or restored wetland shall be provided based on such factors as surface and ground water 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.** The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this Chapter have been met. 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.

D. **Detailed Construction Plans.** The mitigation plan submitted to the Administrator for review and approval shall include written specifications and descriptions of the mitigation proposed, such as:
   1. The proposed construction sequence, timing, and duration;
   2. Grading and excavation details;
   3. Erosion and sediment control features needed for wetland construction and long term survival;
   4. A planting plan specifying plant species, quantities, locations, size, spacing, and density; source of plant materials, propagules, or seeds; water and nutrient requirements for planting; planting instructions, and where appropriate, measures to protect plants from predation;
   5. Specification of substrate stockpiling techniques and soil augmentation instructions;
   6. Specifications for supplemental irrigation systems and a description of conditions that warrant supplemental irrigation;
   7. Descriptions of water control and water-level maintenance practices needed to achieve the necessary hydrocycle/hydroperiod characteristics; etc.and
   8. Measures required for protecting and maintaining plants until they are established, including staking of tree species for a period of 5 years.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps prepared by a PLS (Professional Licensed Surveyor) licensed in the State of Washington 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 which are appropriate for the desired habitat type(s).

E. **Monitoring Program.** A program outlining the approach for monitoring construction of the compensation project and for assessing a completed project shall be provided. Monitoring may include, but is not limited to, one or more of the following:
   1. Establishing vegetation plots to track changes in plant species composition and density over time;
   2. Using photo stations to evaluate vegetation community response;
   3. Sampling surface and subsurface waters to determine pollutant loading, and changes from the natural variability of background conditions (pH, nutrients, heavy metals);
   4. Measuring base flow rates and storm water runoff to model and evaluate water quality predictions, if appropriate;
   5. Measuring sedimentation rates, if applicable; and
   6. Sampling fish and wildlife populations to determine habitat utilization, species abundance and diversity.

   A protocol shall be included outlining how the monitoring data will be evaluated by agencies that are tracking the progress of the compensation project. The plan will identify the Applicant's responsibility for completing an "as-built" survey of the mitigation site after the planting has been completed. A monitoring report documenting milestones, successes, problems, maintenance activities, and contingency actions of the compensation project shall be submitted to the Administrator annually, at a minimum, no later than November 15th each year. The first years mitigation monitoring report will include a copy of the "as=built" survey.

   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 three (3) to five (5) years, with 3 to 5 years being authorized by the Administrator only when there is overwhelming evidence that the environmental goals and objectives of the mitigation site have been achieved.

F. **Contingency Plan.** The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.

G. **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.

H. **Financial Guarantees.** The mitigation plan shall include financial guarantees, as determined by the Administrator, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with Section 19.02.180.B.

APPENDIX D: Definitions

The definitions provided in this Appendix apply to the critical area regulations in Chapter EMC 19.02.

Agricultural drainage: Any stream, ditch, tile system, pipe or culvert primarily used to drain fields for

horticultural or livestock activities.

Agricultural Land: Any land used primarily used for cultivation, farming, horticultural or livestock activities, consistent with RCW 84.33.100 thru 84.33.140.

Alteration: Any human activity that results or is likely to result in an impact upon the existing condition of a critical area or its buffer. "Alteration" includes, but is not limited to, grading, filling, dredging, channelizing, applying herbicides or pesticides or any hazardous substance, discharging pollutants except stormwater, grazing domestic animals, paving, constructing, applying gravel, modifying topography for surface water management purposes, cutting, pruning, topping, trimming, relocating or removing vegetation or any other human activity that results or is likely to result in an impact to existing vegetation, hydrology, fish or wildlife or their habitats. "Alteration" does not include passive recreation such as walking, fishing or any other similar activities.

Applicant: A property owner, a public agency or a public or private utility that owns a right-of-way or other easement or has been adjudicated the right to such an easement under RCW 8.08.040, or any person or entity designated or named in writing by the property or easement owner to be the applicant, in an application for a development proposal, permit or approval.

Aquatic area: Any non-wetland water feature including all shorelines of the state, rivers, streams, marine waters, inland bodies of open water including lakes and ponds, reservoirs and conveyance systems and impoundments of these features if any portion of the feature is formed from a stream or wetland and if any stream or wetland contributing flows is not created solely as a consequence of stormwater pond construction. "Aquatic area" does not include water features that are entirely artificially collected or conveyed storm or wastewater systems or entirely artificial channels, ponds, pools or other similar constructed water features.

Bank stabilization: An action taken to minimize or avoid the erosion of materials from the banks of rivers and streams.

Base Flood: For purposes of development proposals in a flood hazard area, the 100 year flood event.

Basement: For purposes of development proposals in a flood hazard area, any area of a building where the floor subgrade is below ground level on all sides.

Best management practice: A schedule of activities, prohibitions of practices, physical structures, maintenance procedures and other management practices undertaken to reduce pollution or to provide habitat protection or maintenance.

Bioengineering: The use of vegetation and other natural materials such as soil, wood and rock to stabilize soil, typically against slides and stream flow erosion. When natural materials alone do not possess the needed strength to resist hydraulic and gravitational forces, "bioengineering" may consist of the use of natural materials integrated with human-made fabrics and connecting materials to create a complex matrix that joins with in-place native materials to provide erosion control.

Buffer: A natural, preferably undisturbed area, contiguous to a critical area; an area designated to separate and protect a critical area from potential impacts associated adjacent land use activities; an area of natural or native growth required to support the functions and stability of a critical area.

Channel: A feature that contains and was formed by periodically or continuously flowing water confined by banks.

Channel edge: The outer edge of the water's bankfull width or, where applicable, the outer edge of the associated channel migration zone.

Channel migration zone: Those areas within the lateral extent of likely stream channel movement that are

subject to risk due to stream bank destabilization, rapid stream incision, stream bank erosion and shifts in the location of stream channels, as shown on Enumclaw's Channel Migration Zone maps. "Channel migration zone" means the corridor that includes the present channel, the severe channel migration hazard area and the moderate channel migration hazard area. "Channel migration zone" does not include areas that lie behind an arterial road, a public road serving as a sole access route, a state or federal highway or a railroad. "Channel migration zone" may exclude areas that lie behind a lawfully established flood protection facility that is likely to be maintained by existing programs for public maintenance consistent with designation and classification criteria specified by public rule. When a natural geologic feature affects channel migration, the channel migration zone width will consider such natural constraints.

Clearing: Cutting, killing, grubbing or removing vegetation or other organic plant material by physical, mechanical, chemical or any other similar means. For the purpose of this definition of "clearing," "cutting" means the severing of the main trunk or stem of woody vegetation at any point.

Critical Aquifer Recharge Area: An area designated on the critical aquifer recharge area map adopted by EMC 19.02. that has a high susceptibility to ground water contamination or an area of medium susceptibility to ground water contamination that is located within a sole source aquifer or within an area approved in accordance with chapter 246-290 WAC as a wellhead protection area for a municipal or district drinking water system, or an area over a sole source aquifer for a private potable water well in compliance with Washington State Department of Ecology (WDOE) and Public Health standards. Susceptibility to ground water contamination occurs where there is a combination of permeable soils, permeable subsurface geology and ground water close to the ground surface.

Critical area: Any area that is subject to natural hazards or a land feature that supports unique, fragile or valuable natural resources including fish, wildlife or other organisms or their habitats or such resources that carry, hold or purify water in their natural state. "Critical areas" includes the following areas:

A. Frequently flooded areas,
B. Geologically hazardous (including mine hazard areas, erosion hazard areas, landslide hazard areas; steep slope hazard areas; seismic areas, and volcanic hazard areas),
C. Critical aquifer recharge areas,
D. Wetlands,
E. Fish and Wildlife Habitat Conservation Areas (including streams, rivers, ponds, lakes, estuaries, other aquatic areas, large concentrations of forested habitat within urban areas); and
F. Buffers associated with those critical areas.

Development means any man-made change to imporoved or unimproved real estate in the Special Flood Hazard Area (SFHA), including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, storage of equipment or materials.

Ditch: An artificial open channel used or constructed for the purpose of conveying water.

Drainage basin: A drainage area that drains to the Green River or White River or other drainage area that drains directly to Puget Sound.

Drainage facility: A feature, constructed or engineered for the primary purpose of providing drainage, that collects, conveys, stores or treats surface water. A drainage facility may include, but is not limited to, a stream, pipeline, channel, ditch, gutter, lake, wetland, closed depression, flow control or water quality treatment facility and erosion and sediment control facility.

Drainage subbasin: A drainage area identified as a drainage subbasin in a City approved basin plan or, if not identified, a drainage area that drains to a body of water that is named and mapped and contained within a drainage basin.

Emergency: An occurrence during which there is imminent danger to the public health, safety and welfare, or that poses an imminent risk of property damage or personal injury or death as a result of a natural or

human- made catastrophe.

Engineer, civil, geotechnical and structural: Shall mean the following:

A. Civil engineer: an engineer who is licensed as a professional engineer in the branch of civil engineering by the state of Washington;
B. Geotechnical engineer: an engineer who is licensed as a professional engineer by the state of Washington and who has at least four years of relevant professional employment; and
C. Structural engineer: an engineer who is licensed as a professional engineer in the branch of structural engineering by the state of Washington.

Enhancement: For the purposes of critical area regulation, an action that improves the processes, structure and functions of ecosystems and habitats associated with critical areas or their buffers.

Erosion: The wearing away of the ground surface as the result of the movement of wind, water or ice.

Erosion hazard area: An area underlain by soils that is subject to severe erosion when disturbed. These soils include, but are not limited to, those classified as having a severe to very severe erosion hazard according to the United States Department of Agriculture Soil Conservation Service, the 1973 King County Soils Survey or any subsequent revisions or addition by or to these sources such as any occurrence of River Wash ("Rh") and any of the following when the soils occur on slopes inclined at fifteen percent or more:

A. Alderwood gravely sandy loam ("AgD");
B. Alderwood and Kitsap soils ("AkF");
C. Beausite gravely sandy loam ("BeD" and "BeF");
D. Kitsap silt loam ("KpD");
E. Ovall gravely loam ("OvD" and "OvF");
F. Ragnar fine sandy loam ("RaD"); and
G. Ragnar-Indianola Association ("RdE").

Federal Emergency Management Agency: The independent federal agency that, among other responsibilities, oversees the administration of the National Flood Insurance Program.

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

a) *Habitats of local importance* designated as fish and wildlife habitat conservation areas include those areas found to be locally important by counties and cities.

b) *Fish and wildlife habitat conservation areas* does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

Flood fringe, ~~zero rise~~: That portion of the floodplain outside of the zero-rise floodway. ~~The zero-rise flood fringe is generally associated with standing water rather than rapidly flowing water.~~

~~**Flood hazard area:** Any area subject to inundation by the base flood or risk from channel migration including, but not limited to, an aquatic area, wetland or closed depression.~~

Area of Special Flood Hazard: the land in the flood plain within a community subject to one percent or greater chance of flooding in any given year. Designation on maps always includes the letter A or V.

Flood Insurance Rate Map (~~Firm~~FIRM): the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community. ~~The insurance and floodplain management map produced by FEMA that identifies, based on detailed or approximate analysis, the areas subject to flooding during the base flood~~.

Floodway: ~~the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.~~ The area that has been established in effective federal emergency management agency flood insurance rate maps or floodway maps. The floodway does not include lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state.

~~**Floodway, zero-rise:** The channel of a stream and that portion of the adjoining floodplain that is necessary to contain and discharge the base flood flow without any measurable increase in base flood elevation.~~

~~A. For the purpose of this definition, "measurable increase in base flood elevation" means a calculated upward rise in the base flood elevation, equal to or greater than 0.01 foot, resulting from a comparison of existing conditions and changed conditions directly attributable to alterations of the topography or any other flow obstructions in the floodplain. "Zero-rise floodway" is broader than that of the FEMA floodway but always includes the FEMA floodway.~~

~~B. "Zero-rise floodway" includes the entire floodplain unless a critical areas report demonstrates otherwise.~~

Footprint: The area encompassed by the foundation of a structure including building overhangs if the overhangs do not extend more than eighteen inches beyond the foundation and excluding uncovered decks.

Forest practice: Any forest practice as defined in RCW 79.06.020.

Geologist: See definition of “Professional, Qualified”.

Geologically hazardous areas: areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

Grade: Grade: the elevation of the ground surface. "Existing grade," "finish grade" and "rough grade" are defined as follows:

A. "Existing grade" means the grade before grading;
B. "Finish grade" means the final grade of the site that conforms to the approved plan as required under EMC 19.01.090; and
C. "Rough grade" means the grade that approximately conforms to the approved plan as required under EMC 19.01.090.

Groundcover: Competitive living plant species normally growing up to a maximum of 24 inches in height.

Habitat: The locality, site and particular type of environment occupied by an organism at any stage in its life cycle.

~~**Habitat conservation area, Fish & Wildlife:** An area for a species whose habitat the Enumclaw Comprehensive Plan requires the City to protect that includes an active breeding site and the area surrounding the breeding or lifecycle site that is necessary to protect breeding or lifecycle activity.~~

Impacts: “Impacts” means the effects or consequences of actions. Environmental impacts are effects upon the elements of the environment listed in WAC 197-11-444.

Impervious surface: A non-vertical surface artificially covered or hardened so as to prevent or impede the

percolation of water into the soil mantle at natural infiltration rates including, but not limited to, roofs, swimming pools and areas that are paved, graveled or made of packed or oiled earthen materials such as roads, walkways or parking areas. "Impervious surface" does not include landscaping and surface water flow control and water quality treatment facilities.

Infiltration Rate: The rate of transmission of water through soil, measured inches per hour, or similar measurement unit.

Instream structure: Anything placed or constructed below the ordinary high water mark, including, but not limited to, weirs, culverts, fill and natural materials and excluding dikes, levees, revetments and other bank stabilization facilities.

Invasive vegetation: A plant species listed as obnoxious or noxious weeds on a noxious weed and/or invasive plant list adopted by King County, by the State of Washington, or by the Federal Government.

Landslide hazard area: An area subject to severe risk of landslide, such as:

A. An area with a combination of:
    1. Slopes steeper than fifteen percent of inclination;
    2. Impermeable soils, such as silt and clay, frequently interbedded with granular soils, such as sand and gravel; and
    3. Springs or ground water seepage;
B. An area that has shown movement during the Holocene epoch, which is from ten thousand years ago to the present, or that is underlain by mass wastage debris from that epoch;
C. An area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by wave action;
D. An area that shows evidence of or is at risk from snow avalanches; or
E. An area located on an alluvial fan, presently or potentially subject to inundation by debris flows or deposition of stream-transported sediments.

Lowest Floor: the lowest enclosed area (including the basement). An unfinished or flood resistant enclosure, useable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building' s lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

Maintenance: The usual acts to prevent a decline, lapse or cessation from a lawfully established condition without any expansion of or significant change from that originally established condition. Activities within landscaped areas within areas subject to native vegetation retention requirements may be considered "maintenance" only if they maintain or enhance the canopy and understory cover. "Maintenance" includes repair work but does not include replacement work. When maintenance is conducted specifically in accordance with the Regional Road Maintenance Endangered Species Act Program Guidelines, the definition of "maintenance" in the glossary of those guidelines supersedes the definition of "maintenance" in this section.

Mitigation: An action taken to compensate for adverse impacts to the environment resulting from a development activity or alteration. (*see compensatory mitigation in Article V, Section 19.02.230 B)*

Mitigation bank: A property that has been protected in perpetuity and approved by appropriate county, state and federal agencies expressly for the purpose of providing compensatory mitigation in advance of authorized impacts through any combination of restoration, creation or enhancement of wetlands and, in exceptional circumstances, preservation of adjacent wetlands and wetland buffers or protection of other aquatic or wildlife resources.

Monitoring: Active management, reporting, measurement, and checking the progress of site restoration, enhancement, or rehabilitation efforts over a period of time; generally the time period is established by the code.

Mulch: Organic material used to cover ground to retain moisture and control weeds.

Native Growth Protection Area (NGPA): An area where native vegetation is preserved for the purpose of preventing harm to property and the environment, including but not limited to, controlling surface water runoff, preventing or minimizing surface soil erosion, maintaining slope stability, buffering critical areas from potential impacts associated with adjacent land use activities, and protecting/preserving wildlife habitat. Typically the term NGPA is synonymous with the term buffer or buffer zone.

Native vegetation: Plant species indigenous to the Puget Sound region that reasonably could be expected to naturally occur on the site.

Net buildable area: The "site area" less the following areas:

A. Areas within a project site that are required to be dedicated for public rights-of-way in excess of sixty feet in width;
B. Critical areas and their buffers to the extent they are required by EMC 19.02 to remain undeveloped;
C. Areas required for storm water control facilities other than facilities that are completely underground, including, but not limited to, retention or detention ponds, biofiltration swales and setbacks from such ponds and swales;
D. Areas required to be dedicated or reserved as on site recreation areas;
E. Regional utility corridors; and
F. Other areas, excluding setbacks, required to remain undeveloped.

Noxious weed: A plant species that is typically non-native, invasive, highly destructive, competitive or difficult to control by cultural or chemical practices, limited to any plant species listed on the state noxious weed list in chapter 16-750 WAC, regardless of the list's regional designation or classification of the species. Noxious weeds may also possess characteristics that gain cause distress or even death on animals that consume the plants.

Ordinary high water mark: The mark found by examining the bed and banks of a stream, lake, pond water and ascertaining where the presence and action of waters are so common and long maintained in ordinary years as to mark upon the soil a vegetative character distinct from that of the abutting upland. In an area where the ordinary high water mark cannot be found, the line of mean high water in areas adjoining freshwater is the "ordinary high water mark." In an area where neither can be found, the top of the channel bank is the "ordinary high water mark." In braided channels and alluvial fans, the ordinary high water mark or lin e of mean high water include the entire water or stream feature.

Professional, Qualified: "Qualified Professional" means a person with training and experience in the scientific discipline, and who is a qualified scientific expert with expertise in streams, wetlands or lakes subject matter in accordance with WAC 365-195-905(4). A qualified professional must have obtained a Bachelor of Science degree in hydrology, soil science, botany, ecology, or related field from an accredited college or university or who has equivalent educational training and professional experience related to the subject of habitat or species. Also includes fluvial morphologist if stream relocation is involved. Geologists are included as those professionals who hold active license from the state of Washington Geology Board.

Public road right-of-way structure: The existing, maintained, improved road right-of-way or railroad prism and the roadway drainage features including ditches and the associated surface water conveyance system, flow control and water quality treatment facilities and other structures that are ancillary to those facilities including catch-basins, access holes and culverts.

Reasonable Use Exception. Discretionary review process to determine the minimum permitted use possible of a site when the site is 65% to 100% covered by critical areas and associated buffers, and the critical area designation precludes the zoned allowable use of the parcel.

Reclamation: The final grading and restoration of a site to reestablish the vegetative cover, soil stability and

surface water conditions to accommodate and sustain all permitted uses of the site and to prevent and mitigate future environmental degradation.

Regional road maintenance guidelines: The National Marine Fisheries Service-published Regional Road Maintenance Endangered Species Act Program Guidelines.

Repair: To fix or restore to sound condition after damage. "Repair" does not include replacement of structures or systems.

Replace: To take or fill the place of a structure, fence, deck or paved surface with an equivalent or substitute structure, fence, deck or paved surface that serves the same purpose. "Replacement" may or may not involve an expansion.

Restoration: For purposes of critical areas regulation, an action that reestablishes the structure and functions of a critical area or any associated buffer that has been altered.

Roadway: The maintained areas cleared and graded within a road right-of-way or railroad prism. For a road right-of-way, "roadway" includes all maintained and traveled areas, shoulders, pathways, sidewalks, ditches and cut and fill slopes. For a railroad prism, "roadway" includes the maintained railroad bed, shoulders, and cut and fill slopes. "Roadway" is equivalent to the "existing, maintained, improved road right-of-way or railroad prism" as defined in the regional road maintenance guidelines.

Salmonid: A member of the fish family Salmonidae, including, but not limited to:

A. Chinook, coho, chum, sockeye and pink salmon;
B. rainbow, steelhead and cutthroat salmon, which are also known as trout;
C. brown trout;
D. brook, bull trout, which is also known as char, and Dolly Varden char;
E. kokanee; and
F. pygmy whitefish.

Salmonid Migration Barrier: “Salmonid Migration Barrier” means an in-stream blockage that consists of a natural gradient drop (no human influence) with an uninterrupted slope greater than 100-percent (45 degree angle and height in excess of 11 vertical feet with anadromous salmon-bearing waters or a height of 3 vertical feet within resident trout only bearing waters. Culverts and weirs meet the definition, yet are subject to the Director’s determination of whether the barrier must be removed or may remain, based on factors including impacts to existing systems and significant expense.

Setback: Required distance of separation from the edge of critical area buffer to the face of a structure free of all structures.

Shoreline: Those lands defined as shorelines of the state in the Shorelines Management Act of 1971, chapter 90.58 RCW, as amended or updated.

Shrub: Evergreen or deciduous plant species that grows to a maximum of 24 inches to 30 feet in height.

Side channel: A channel that is secondary to and carries water to or from the main channel of a stream or the main body of a lake or estuary, including a back-watered channel or area and oxbow channel that is still connected to a stream by one or more aboveground channel connections or by inundation at the base flood.

Site area: The total horizontal area of a project site.

Steep slope hazard area: An area on a slope of forty percent inclination or more within a vertical elevation change of at least twenty feet. For the purpose of this definition, a slope is delineated by establishing its toe and top and is measured by averaging the inclination over at least ten feet of vertical relief. Also for the purpose of this definition:

A. The "toe" of a slope means a distinct topographic break in slope that separates slopes inclined at less than forty percent from slopes inclined at forty percent or more. Where no distinct break exists, the "toe" of a slope is the lower most limit of the area where the ground surface drops ten feet or more vertically within a horizontal distance of twenty-five feet; and
B. The "top" of a slope is a distinct topographic break in slope that separates slopes inclined at less than forty percent from slopes inclined at forty percent or more. Where no distinct break exists, the "top" of a slope is the upper most limit of the area where the ground surface drops ten feet or more vertically within a horizontal distance of twenty-five feet.

Stream: An aquatic area where surface water produces a channel, not including a wholly artificial channel, unless it is:

A. Used by salmonids; or
B. Used to convey a stream that occurred naturally before construction of the artificial channel.

Substantial Damage: damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement: any repair, reconstruction, or improvement to a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

c) Before the improvement is started; or
d) If the structure has been damaged and is being restored, before the damage occurred.

This term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are necessary to assure safe living conditions; or
2. Any alteration of a structure listed in the National or State Register of Historic Places.

Surface water conveyance: A drainage facility designed to collect, contain and provide for the flow of surface water from the highest point on a development site to receiving water or another discharge point, connecting any required flow control and water quality treatment facilities along the way. "Surface water conveyance" includes but is not limited to, gutters, ditches, pipes, biofiltration swales and channels.

Surface water discharge: The flow of surface water into receiving water or another discharge point.

Swale: See definition of ditch (above).

Swale, vegetated: Ditch or flat terrain with sheet flow of water for periods of time that supports vegetative ground cover.

Tree, hazard: Any tree with a structural defect, combination of defects or disease resulting in structural defect that, under the normal range of environmental conditions at the site, will result in the loss of a major structural component of that tree in a manner that will:

A. Damage a residential structure or accessory structure, place of employment or public assembly or approved parking for a residential structure or accessory structure or place of employment or public assembly;
B. Damage an approved road or utility facility; or
C. Prevent emergency access in the case of medical hardship.

Utility corridor: A narrow strip of land containing underground or above-ground utilities and the area necessary to maintain those utilities. A "utility corridor" is contained within and is a portion of any utility right-of-way or dedicated easement.

Utility facility: A facility for the distribution or transmission of services, including:

A. Telephone exchanges, except for telecommunications facilities;

B. Water pipelines, pumping or treatment stations;
C. Electrical substations;
D. Water storage reservoirs or tanks;
E. Municipal groundwater well-fields;
F. Regional surface water flow control and water quality facilities;
G. Natural gas pipelines, gate stations and limiting stations;
H. Propane, compressed natural gas and liquefied natural gas storage tanks serving multiple lots or uses from which fuel is distributed directly to individual users;
I. Wastewater pipelines, lift stations, pump stations, regulator stations or odor control facilities; and
J. Communication cables, electrical wires and associated structural supports.

Wet meadow, grazed or tilled: An emergent wetland that has grasses, sedges, rushes or other herbaceous vegetation as its predominant vegetation and has been previously converted to agricultural activities.

Wetland: As per RCW 36.70A.030(20), "Wetland" or "wetlands" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands.

~~A. Wetlands generally include:~~
~~1. swamps,~~
~~2. marshes,~~
~~3. bogs,~~
~~4. fens,~~
~~5. wet meadows, and~~
~~6. any other area meeting the three wetland delineation criteria (presence of wetland plants, wetland hydrologic, and wetland or hydric soils) defined in the U.S. Army Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1) and the Washington State Wetlands Identification and Delineation Manual (WDOE Publication No. 96-94).~~
~~a. where the vegetation has been removed or substantially altered, a wetland is determined by the presence or evidence of hydric soil, by other documentation such as aerial photographs of the previous existence of wetland vegetation or by any other manner authorized in the wetland delineation manual required by RCW 36.70A.175; and~~
~~B. Except for artificial features intentionally made for the purpose of wetland impact mitigation, the term wetland does not include an artificial feature made from a nonwetland area, which may include, but is not limited to:~~
~~1. A surface water conveyance for drainage or irrigation;~~
~~2. A grass-lined swale;~~
~~3. A canal;~~
~~4. A flow control facility;~~
~~5. A wastewater treatment facility;~~
~~6. A farm pond;~~
~~7. A wet pond;~~
~~8. A landscape amenity; or~~
~~9. A wetland created after July 1, 1990, that was unintentionally made as a result of construction of a road, street or highway.~~

Wetland Biologist: A wetland biologist or ecologist is a "Qualified Professional" with a minimum of a Bachelor of Science degree from an accredited college or university in a program the includes coursework in wetland biology. Post-graduate training or certification and experience in the delineation of wetland habitats may be substituted for college or university coursework.

Wetland Category: Wetland category is determined using a regulatory classification system defined in current State and local wetlands or critical areas management regulations. The current rating system used to define wetland category within the City of Enumclaw is noted in EMC 19.02.090.B.

Wetland Class: Wetland class is determined through use of an ecological classification system found in "Classification of Wetlands and Deepwater Habitats of United States" written by Lewis M. Cowardin, Virginia Carter, Francis C. Golet, and Edward T. LaRoe and published by the U.S. Department of the Interior, Fish and Wildlife Service (Publication No. FWS/OBS 79/31, December 1979).

Wetland complex: A grouping of two or more wetlands, not including grazed wet meadows, that meet the following criteria:

A. Each wetland included in the complex is within five hundred feet of the delineated edge of at least one other wetland in the complex;
B. The complex includes at least:
    1. one wetland classified category I or II;
    2. three wetlands classified category III; or
    3. four wetlands classified category IV;
C. The area between each wetland and at least one other wetland in the complex is predominately vegetated with shrubs and trees; and
D. There are not any barriers to migration or dispersal of amphibian, reptile or mammal species that are commonly recognized to exclusively or partially use wetlands and wetland buffers during a critical life cycle stage, such as breeding, rearing or feeding.

Wetland creation: For purposes of wetland mitigation, the manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site, where a wetland did not previously exist. Activities to create a wetland typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils and support the growth of hydrophytic plant species. Wetland creation results in a gain in wetland acres.

Wetland edge: The line delineating the outer edge of a wetland, consistent with the wetland delineation manual required by RCW 36.70A.175.

Wetland enhancement: The manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify or improve specific functions or to change the growth state or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention or wildlife habitat. Wetland enhancement activities typically consist of planting vegetation, controlling nonnative or invasive species, modifying site elevations or the proportion of open water to influence hydro-periods or some combination of these. Wetland enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Wetland enhancement can result in a change of wetland class or wetland category or both.

Wetland, forested: A wetland that is dominated by mature woody vegetation or a wetland vegetation class that is characterized by woody vegetation at least twenty feet tall.

Wetland, isolated: An area that is not connected to any waters of the state under normal circumstances and weather patterns, up to the 100 year storm event.

Wetland rehabilitation: Wetland rehabilitation is very similar to wetland enhancement except that the activities generally do not result in a change of wetland class or wetland category nor is there a net increase in wetland area.. The term wetland improvement is generally synonymous with the wetland rehabilitation.

Wetland restoration: For purposes of wetland mitigation wetland restoration means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic wetland functions to a previously filled or substantially degraded wetland. Activities typically required to reestablish

a wetland include removing fill material, importing hydric soil, grading wetland area, altering human-made drainage features, and installing appropriate native plants. Wetland restoration can result in a gain in both wetland acres and wetland function. Wetland rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres.

Wetland vegetation classes: A wetland community classified under the Cowardin naming system or by its vegetation description including aquatic bed, emergent, forested and shrub-scrub. To constitute a separate wetland vegetation class, the vegetation must be at least partially rooted within the wetland and must occupy the uppermost stratum of a contiguous area or comprise at least thirty percent areal coverage of the entire wetland.

Wildlife: Birds, fish and animals, that are not domesticated and are considered to be wild.

APPENDIX E: Critical Area Identification Form

This form is to be used by a project applicant, property owner, or a property owner's agent contemplating any land use action regulated by Enumclaw Municipal Code (EMC) Chapter 19.02. The completed form can be submitted as request for site review in advance of planning or design of any contemplated land use action. This form can also be used for a pre-application review when submitted with preliminary plans or designs and a formal request for a Pre-Application Conference. The purpose of this form is to:

(1) provide the Administrator with the minimum amount of information required to evaluate a project site or a proposed land use activity and provide the project applicant or land owner with appropriate information regarding regulatory requirement and review processes necessary to acquire land use permits from the City of Enumclaw.

(2) provide an information checklist of the minimum information requirements.

Project Name:	**Checklist Date**:
Applicant Contact Information: Name: Address: Telephone Number: Fax Number: E-mail Address:	**Applicant's Agent Contact Information:** Name: Address: Telephone Number: Fax Number: E-mail Addess:

Name and Contact Information of Person Completing this Form (if different from above):
Name:
Company Name:
Address:

Telephone Number: Fax Number:
E-mail Address:

Location and Description of Proposed Land Use Action:
Property Address:

Property Legal Description: Tax Parcel Number:
Description of Proposed Land Use Action (include description of area within the property that will be impacted by the proposed land use action)::

Description of Existing Property Conditions (include site photos and map that provides directions to the site):

Property Owner Contact Information (if different from Applicant or Applicant's Agent:
Name:
Address:

Telephone Number: Fax Number:
E-mail Address:
Owner's Signature giving Applicant or Applicant's Agent Permission to Contact City re: proposed land use action:

_____Date: _____

APPENDIX F: Critical Area Buffer Risk and Opportunity Rating Form

(The rating form follows this page)

APPENDIX G: WAC 220-16-030 (Rev. 2004)

WAC 222-16-030 Water typing system. Until the fish habitat water type maps described below are adopted by the board, the Interim Water Typing System established in WAC 222-16-031 will continue to be used. The department in cooperation with the departments of fish and wildlife, and ecology, and in consultation with affected Indian tribes will classify streams, lakes and ponds. he department will prepare water type maps showing the location of Type S, F, and N (Np and Ns) Waters within the forested areas of the state. The maps will be based on a multi-parameter, field-verified geographic information system (GIS) logistic regression model. The multi-parameter model will be designed to identify fish habitat by using geomorphic parameters such as basin size, gradient, elevation and other indicators. The modeling process shall be designed to achieve a level of statistical accuracy of 95% in separating fish habitat streams and non-fish habitat streams. Furthermore, the demarcation of fish and non-fish habitat waters shall be equally likely to over and under estimate the presence of fish habitat. These maps shall be referred to as "fish habitat water typing maps" and shall, when completed, be available for public inspection at region offices of the department.

Fish habitat water type maps will be updated every five years where necessary to better reflect observed, in-field conditions. Except for these periodic revisions of the maps, on-the-ground observations of fish or habitat characteristics will generally not be used to adjust mapped water types. However, if an on-site interdisciplinary team using non-lethal methods identifies fish, or finds that habitat is not accessible due to naturally occurring conditions and no fish reside above the blockage, then the water type will be immediately changed to reflect the findings of the interdisciplinary team. The finding will be documented on a water type update form provided by the department and the fish habitat water type map will be updated as soon as practicable. If a dispute arises concerning a water type the department shall make available informal conferences, as established in WAC 222-46-020 which shall include the departments of fish and wildlife, and ecology, and affected Indian tribes and those contesting the adopted water types.

The waters will be classified using the following criteria:

*(1) **"Type S Water"** means all waters, within their bankfull width, as inventoried as "shorelines of the state" under chapter 90.58 RCW and the rules promulgated pursuant to chapter 90.58 RCW including periodically inundated areas of their associated wetlands.

*(2) **"Type F Water"** means segments of natural waters other than Type S Waters, which are within the bankfull widths of defined channels and periodically inundated areas of their associated wetlands, or within lakes, ponds, or impoundments having a surface area of 0.5 acre or greater at seasonal low water and which in any case contain fish habitat or are described by one of the following four categories:

(a) Waters, which are diverted for domestic use by more than 10 residential or camping units or by a public accommodation facility licensed to serve more than 10 persons, where such diversion is determined by the department to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type F Water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by 50 percent, whichever is less;

(b) Waters, which are diverted for use by federal, state, tribal or private fish hatcheries. Such waters shall be considered Type F Water upstream from the point of diversion for 1,500 feet, including tributaries if highly significant for protection of downstream water quality. The department may allow additional harvest beyond the requirements of Type F Water designation provided the department determines after a landowner-requested on-site assessment by the department of fish and wildlife, department of ecology, the affected tribes and interested parties that:

(i) The management practices proposed by the landowner will adequately protect water quality for the fish hatchery; and

(ii) Such additional harvest meets the requirements of the water type designation that would apply in the absence of the hatchery;

(c) Waters, which are within a federal, state, local, or private campground having more than 10 camping units: Provided, that the water shall not be considered to enter a campground until it reaches the boundary of the park lands available for public use and comes within 100 feet of a camping unit, trail or other park improvement;

(d) Riverine ponds, wall-based channels, and other channel features that are used by fish for off-channel habitat. These areas are critical to the maintenance of optimum survival of fish. This habitat shall be identified based on the following criteria:

(i) The site must be connected to a fish habitat stream and accessible during some period of the year; and

(ii) The off-channel water must be accessible to fish.

(3) **"Type Np Water"** means all segments of natural waters within the bankfull width of defined channels that are perennial non-fish habitat streams. Perennial streams are waters that do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Type Np Waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow. If the uppermost point of perennial flow cannot be identified with simple, non-technical observations (see board manual, section 23), then Type Np Waters begin at a point along the channel where the contributing basin area is:

(a) At least 13 acres in the Western Washington coastal zone (which corresponds to the Sitka spruce zone defined in Franklin and Dyrness, 1973);

(b) At least 52 acres in other locations in Western Washington;

(c) At least 300 acres in Eastern Washington.

(4) **"Type Ns Water"** means all segments of natural waters within the bankfull width of the defined channels that are not Type S, F, or Np Waters. These are seasonal, non-fish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np Water. Ns Waters must be physically connected by an above-ground channel system to Type S, F, or Np Waters.

*(5) For purposes of this section:

(a) "Residential unit" means a home, apartment, residential condominium unit or mobile home, serving as the principal place of residence.

(b)) "Camping unit" means an area intended and used for:

(i) Overnight camping or picnicking by the public containing at least a fireplace, picnic table and access to water and sanitary facilities; or

(ii) A permanent home or condominium unit or mobile home not qualifying as a "residential unit" because of part time occupancy.

(c) "Public accommodation facility" means a business establishment open to and licensed to serve the public, such as a restaurant, tavern, motel or hotel.

(d) "Natural waters" only excludes water conveyance systems which are artificially constructed and actively maintained for irrigation.

(e) "Seasonal low flow" and "seasonal low water" mean the conditions of the 7-day, 2-year low water situation, as measured or estimated by accepted hydrologic techniques recognized by the department.

(f) "Channel width and gradient" means a measurement over a representative section of at least 500 linear feet with at least 10 evenly spaced measurement points along the normal stream channel but excluding unusually wide areas of negligible gradient such as marshy or swampy areas, beaver ponds and impoundments. Channel gradient may be determined utilizing stream profiles plotted from United States geological survey topographic maps (see board manual section 23).

(g)) "Intermittent streams" means those segments of streams that normally go dry.

(h) "Fish habitat" means habitat which is used by any fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management and includes off-channel habitat.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040,[76.09.]050 , [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-16-030, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-16-030, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-030, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-16-030, filed 11/16/87, effective 1/1/88; Order 263, § 222-16-030, filed 6/16/76.]