

Shoreline Master Program

City of Arlington

Appendix –B

Shoreline Environmentally Critical Areas 4.2.1

Shoreline Master Program Appendix B ENVIRONMENTALLY CRITICAL AREAS

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Part I. Purpose and Intent

SMP.010 Purpose and Intent.

This Appendix establishes regulations for the protection of environmentally critical areas (ECAs) within the City's shoreline jurisdiction, including critical areas, natural resource lands, and protective buffers. While it is intended that this Appendix fulfill the mandates of the Washington State Shoreline Management Act, that is not its sole purpose: Its primary purpose is to fulfill the legislative intent of the City of Arlington, which is to protect the public health, safety, and welfare of the citizens of Arlington by providing for the long-term preservation of natural systems and their functions. This is to be accomplished by establishing prohibitions, mitigation requirements, and minimum standards for the use and development of properties that contain or adjoin environmentally critical areas. Additionally, this Appendix is intended to:

(a) If at all possible, avoid impacts to environmentally critical areas. If this is not practicable, then:

1. Minimize or limit the degree or magnitude of actions and their implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts.
2. Mitigate any impacts by repairing, rehabilitating, or restoring the affected environment.
3. Reduce or eliminate any impacts over time by preservation and maintenance operations during the life of the action.
4. Compensate for unavoidable impacts by replacing, enhancing or providing substitute resources or environments through monitoring of specific and cumulative impacts.

(b) Protect the public from personal injury, loss of life, or property damage due to flooding, erosion, landslides, seismic events, or soil subsidence. (c) Protect against publicly financed expenditures due to the misuse of environmentally critical areas that cause:

1. Unnecessary maintenance and replacement of public facilities;
2. Publicly funded mitigation of avoidable impacts;
3. Cost for public emergency rescue and relief operations where the causes are avoidable;

4. Degradation of the natural environment.

(d) Protect aquatic resources.

(e) Protect unique, fragile, and valuable elements of the environment, including wildlife and its habitat.

(f) Alert appraisers, assessors, owners, potential buyers, or lessees to the development limitations of environmentally critical areas;

(g) Provide City officials with sufficient information to adequately protect environmentally critical areas when approving, conditioning, or denying applications for public or private development proposals.

(h) Give guidance to the development of Comprehensive Plan policies in regard to the natural systems and environment of the Arlington Watershed(s);

(i) Provide property owners and developers with succinct information regarding the City's requirements for property development, thus rationalizing and accelerating the development permit application process.

Part II. Definitions

SMP.100 Definitions.

For the purposes of this Appendix, the following definitions shall apply:

Alteration(s). A change or rearrangement of the structural parts of existing facilities or an enlargement by extending the side or increasing the height or depth or the moving from one location to another.

AMC. The Arlington Municipal Code.

Applicant. A person who applies for any permit or approval to do anything governed by this code and who is either the owner of the subject property, the authorized agent of the owner, or the City.

Classes. Taxonomic classification system of the United States Fish and Wildlife Service (Cowardin, et al 1978).

Commercial. Activity with goods, merchandise, or services for sale or rent.

Compensation. In-kind replacement of damaged wetlands with substitute wetlands whose characteristics closely approximate those destroyed or degraded by a regulated activity. It does not mean replacement -in-category.

When compensatory measures are appropriate pursuant to the mitigation priority sequence above, preferential consideration shall be given to measures that replace the impacted functions directly and in the immediate vicinity of the impact. However, alternative compensatory mitigation within the watershed sub-basin that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans applicable to the area of impact may be authorized. If there are no previously identified mitigation opportunities in the impacted sub-basin identified in local watershed or comprehensive plans the applicant will use a watershed approach in selecting mitigation sites utilizing *Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington)* (Publication #09-06-32)

Critical Areas. Fish and wildlife habitat conservation areas, Streams, Wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas; and geologically hazardous areas.

Dedication. Deliberate appropriation of land by an owner for public use or purpose, reserving no other rights than those that are compatible with the full exercise and enjoyment of the public use or purpose to which the property has been devoted.

Degraded Wetland. A wetland in which the vegetation, soils, and/or hydrology have been adversely altered, resulting in lost or reduced functions and values.

Developable Area. Land outside of critical areas and environmentally critical area setbacks and buffers.

Development Permit. Any permit or approval under this code or the AMC that must be issued before initiating a use or development activity.

Ditch. A long narrow excavation dug in the earth for drainage with its top width less than 10 feet at design flow and that does not meet the definition of a stream. A ditch may be regulated if it conveys stream flow.

Easement. Land which has specific air, surface or subsurface rights conveyed for us by an entity other than the owner of the subject property or to benefit some property other than the subject property.

Edge. The boundary of a wetland as delineated based on the criteria contained in this Appendix.

Emergent Wetland. A wetland with at least thirty percent of its surface covered by erect, rooted, herbaceous vegetation at the uppermost vegetative strata.

Enhancement. Alteration of an existing resource to improve or increase its characteristics and processes without degrading other existing functions. Enhancements are to be distinguished from resource creation or restoration projects.

Erosion Hazard Area. A landform or soil type subject to being worn away by the action of water, wind, freeze-thaw or ice.

Exotic Species. Plants or animals that are not native to the Puget Sound Lowlands region.

Extraordinary Hardship. Prevention of all reasonable economic use of the parcel due to strict application of this Appendix and/or programs adopted to implement this Appendix.

Fish and Wildlife Habitat Conservation Areas. s (of Local Importance). ~~A seasonal range or habitat element with which a given species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. These might include areas of relative density or species richness, breeding habitat, seasonal range, and movement corridors. These also include habitats of limited availability or high vulnerability to alteration, such as cliffs and wetlands. Areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness.~~ Counties and cities may also designate locally important habitats and species. "Fish and wildlife 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.

Forested Wetland. Wetlands with at least thirty percent of the surface area covered by woody vegetation greater than twenty feet in height or ∴ 3-inch diameter at breast height.

Forest Land. Land used for growing trees, not including Christmas trees, for commercial purposes (as shown by record of any income) that has long-term (six years or more) commercial significance.

Frequently Flooded Areas. Lands indicated on the most current FEMA map to be within the 100-year flood plain. These areas include, but are not limited to, streams, lakes, coastal areas, and wetlands. Local areas not identified on FEMA maps that experience frequent periods of inundation.

Functions. The beneficial roles served by critical areas including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, wave attenuation, and aesthetic value protection, and recreation. These roles are not listed in order of priority.

Geologically Hazardous Areas. Includes areas susceptible to erosion, sliding, seismic activity, or other geological events. They pose a threat to the health and safety of citizens when used as sites for incompatible commercial, residential or industrial development.

Grading. The physical manipulation of the earth's surface and/or drainage pattern in preparation of an intended use or activity.

High Quality Native Wetlands will be classified by the Washington State Wetland Rating System for Western Washington, Ecology Publication #14-06-029 or as revised by Ecology. state-

~~wetland rating system for Western Washington.~~ However, the following elements may be considered when identifying locally important functions of a wetland.

1. No, or isolated, human alteration of the wetland topography;
2. No human-caused alteration of the hydrology or else the wetland appears to have recovered from the alteration;
3. Low cover and frequency of exotic plant species;

4. Relatively little human-related disturbance of the native vegetation, or recovery from past disturbance;

5. If the wetland system is degraded, it still contains a viable and high quality example of a native wetland community; and

6. No known major water quality problems.

Hydric Soil. Soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods as defined by the National Technical Committee for Hydric Soils. The presence of hydric soil shall be determined following the methods described in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region.

Hydrophyte or Hydrophytic Vegetation. Plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The presence of hydrophytic vegetation shall be determined following the methods described in the Washington State Wetland Delineation Manual, adopted pursuant to RCW 90.58.380.

Improvement. Any structure or manmade feature.

Isolated Wetlands will be classified by the Washington State Wetland Rating System for Western Washington, Ecology Publication #14-06-029 or as revised by Ecology state wetland rating system for Western Washington. However, the following elements may be considered when identifying locally important functions of a wetland. 1. Are outside of and not contiguous to any wetland system of one acre or more, or the 100-year floodplain of a lake, river, creek, or stream; and,

2. Have no contiguous hydric soil or hydrophytic vegetation between the wetland and contiguous wetlands of one acre or more or any surface water.

Landslide Hazard Areas. Areas potentially subject to risk of mass movement due to a combination of factors, including historic failures.

Land Uses, High Intensity. a zone classification allowing more than one dwelling unit per acre

Land Uses, Low Intensity. Includes land uses which are associated with low levels of human disturbance or low habitat impacts, including, but not limited to, passive recreation, open space, or those uses listed in §SMP.220 (Allowed Activities).

Land Uses, Medium Intensity. Includes land uses which are associated with moderate levels of disturbance such as open space parks with biking and jogging, etc, conversion of moderate-intensity agriculture (orchards, hay fields, etc), paved trails, gravel roads, utility corridors or right-of-way shared by several utilities including access/maintenance roads.

Mineral Resource Lands. Lands primarily devoted to the extraction of gravel, sand, other construction materials, or valuable metallic or mineral substances.

Native Vegetation. Plant species that are indigenous to the Puget Sound Lowlands region.

Natural Condition. Lands that retain native vegetation, forest duff and naturally occurring contours and drainage patterns not modified by human activity.

Natural Resource Lands. Agriculture, forest, and mineral resource lands as defined in this section.

Constructed Stormwater Wetland. A stormwater management system that is designed and built to function similar to the naturally occurring wetland including native trees and shrubs allowed to grow to maturity.

Nonconforming. Any use, structure, lot, condition, activity, or any other feature or element of private property or the use or utilization of private property that does not conform to any of the provisions of this code or that was not approved by the city through the appropriate decision-making process required under this code.

Open Space. Land not covered by buildings, roadways, parking areas, or other surfaces through which water cannot percolate into the underlying soils.

Ordinary high water mark. As defined by RCW 90.58.030(2) (b), as now or hereafter amended.

Palustrine Wetland. Freshwater with open water, emergent herbaceous vegetation, scrub-shrub vegetation, and/or trees.

Pond. Any inland body of water, either naturally or artificially formed or increased, that has a surface area of 1,000 square feet or more, *except*: These do not include ponds deliberately designed and created from dry sites such as canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities. *Practicable Alternative.* An alternative that is available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes, and having fewer impacts to environmentally critical areas. It may include an area not owned by the applicant that can reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity.

Priority Habitats. Areas with which priority species have a primary association, as determined by the Washington Department of Fish and Wildlife. Priority habitats have one or more of the following attributes: comparatively high or significant species density or richness, significant breeding habitat, significant seasonal ranges, significant wildlife movement corridors, limited availability, and/or high vulnerability.

Priority species. Wildlife species of concern due to their population status and their sensitivity to habitat alteration.

Riparian Habitat. An ecosystem that occurs in the transition zone between aquatic and upland environments.

Scrub-shrub Wetlands. A wetland with at least thirty percent of its surface area covered with woody vegetation less than twenty feet in height or s; 3-inch diameter at breast height.

Seismic Hazard Areas. Areas subject to the risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction or surface faulting. Ground shaking is a primary risk, followed by some unstable slopes causing damage below them.

Slope. See §SMP.600 (Geological Hazardous Areas—Classification).

Sphagnum. Any of a large genus of mosses that grows only in wet acidic soils and whose remains become compacted with other plant debris to form peat.

Streams. Those areas where surface waters flow sufficiently to produce a defined channel or bed. A defined channel or bed is indicated by hydraulically sorted sediments or the removal of vegetative litter or loosely rooted vegetation by the action of moving water. The channel or bed need not contain water year-round. This includes DNR Stream Types S, F, F-ESA, Np, Ns (WAC 222-16-030, or as amended hereafter). This definition is not meant to include irrigation ditches, canals, stormwater runoff devices or other entirely artificial watercourses unless they are used to convey any stream naturally occurring prior to construction. Those topographic features that resemble streams but have no defined channels (i.e. swales) shall be considered streams when hydrologic and hydraulic analyses done pursuant to a development proposal predict formation of a defined channel after development.

Steep Slope. See §SMP.600 (Geological Hazardous Areas—Classification).

Structure. Anything which is built or constructed; an edifice or building of any kind, or any piece of work artificially built-up or composed of parts joined together in some definite manner. Not included are fences less than six feet in height, retaining wall, rockeries, and similar improvements of a minor character less than three feet in height.

Unavoidable. Impacts that remain after a person proposing to alter environmentally critical areas have demonstrated that no practicable alternative exists for the proposed project.

Use. "Development" as that term is defined in Chapter 90.58 RCW. Also means the nature of the activities taking place on private property or within structures thereon.

Water-Dependent. A use for which the use of surface water would be essential in fulfilling the purpose of the proposed project.

Wetlands. "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 that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do

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

Part III. General Provisions

SMP.200 Applicability.

This Appendix applies to environmentally critical areas within the City's shoreline jurisdiction. The maps included in Appendix A of this SMP show the general location of the City's shoreline jurisdiction; however, whether an environmentally critical area is within shoreline jurisdiction shall be determined by the Shoreline Administrator. No action shall be taken by any person that results in any alteration of any environmentally critical area or their buffers except as consistent with the purposes, objectives, and goals of this Appendix.

SMP.210 Regulated Activities.

(a) All land use and/or development activities on lands containing environmentally critical areas or affecting off-site environmentally critical areas are subject to this Appendix and are prohibited unless:

1. The use or activity is found to be exempt by the Community Development Director per the -Allowed Uses sections of this Appendix; or,
2. The use or activity meets the performance standards found in the -Requirements sections of this Appendix; or,

(b) Land use and development activities include, but are not limited to, the following activities:

1. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind.
2. The dumping, discharging, or filling with any material.
3. The draining, flooding, or disturbing of the water level or water table.
4. The driving of pilings.
5. The placing of obstructions.
6. The construction, reconstruction, demolition, or expansion of any structure.
7. The destruction or alteration of vegetation in an environmentally critical area through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character and function of an environmentally critical area.
8. Activities that result in a significant change of water temperature, a significant change of physical or chemical characteristics of water sources, including quantity, or the introduction of pollutants.

SMP.220 Allowed Activities.

Unless specifically prohibited elsewhere in this Appendix, or unless the use affects a critical area structure, function or value, the following uses are allowed in any environmentally critical area:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife.
2. Outdoor recreational activities (including fishing, bird watching, hiking, boating, swimming, canoeing, etc.) and aquatic recreation facilities authorized by this SMP (unless otherwise prohibited from a particular area because of site-specific issues).
3. When approval is granted by the City, the recreational harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require killing the plant, tilling of soil, planting of crops, or alteration of a wetland by changing existing topography, water conditions or water sources.
4. Education, scientific research, and use of nature trails.
5. Navigation aids and boundary markers.

6. 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.
7. Normal maintenance, repair, or operation of existing structures, facilities, or improved areas.
8. Environmentally critical area restoration work or relocation work which would improve the function of the environmentally critical area, when done pursuant to a plan approved by the City.

SMP.230 Compliance.

All land uses or development applications shall be reviewed to determine whether an environmentally critical area exists on the property for which the application is filed, what the action's impacts to any existing environmentally critical area would be, and what actions are required for compliance with this Appendix. No construction activity, including land clearing or grading, shall be permitted until the information required by this Section is reviewed and the City approves a plan.

SMP.240 Classification as an Environmentally Critical Area.

Criteria for classification as an environmentally critical area will be listed under the pertinent sections of this Appendix.

SMP.250 Procedures.

The City of Arlington shall not grant any approval or permission to conduct development or use in an environmentally critical area prior to the applicant's fulfillment of the requirements of this Appendix. The Community Development Director is authorized to adopt administrative procedures for the purpose of carrying out the provisions of this Appendix.

SMP.260 Submittal Requirements.

To enable the City to determine compliance with this Appendix, at the time of application submittal the applicant shall file a SEPA Environmental Checklist (if use is subject to SEPA), site/resource specific reports as specified in §SMP.270 (General Provisions—Site/Resource Specific Reports), and any other pertinent information requested by the Department of Community Development. The Community Development Director may waive any of these submittal requirements if it is deemed unnecessary to make a compliance determination.

SMP.270 Site/Resource Specific Reports.

Unless waived per §SMP.260 (General Provisions—Submittal Requirements), all applications for land use or development permits proposed on properties containing or adjacent to environmentally critical areas or their defined buffers (see section specific requirements) shall include site/resource specific reports prepared to describe the environmental limitations of the site. These reports shall conform in format and content to guidelines prepared by the Department of Community Development, which is hereby authorized to do so.

SMP.280 Maps and Inventory.

The approximate location and extent of environmentally critical areas in the City are displayed on various inventory maps available at the Department of Community Development. More data will be included as inventories are completed in compliance with the requirements of the Growth Management Act. Maps and inventory lists are guides to the general location and extent of environmentally critical areas. Environmentally critical areas not shown are presumed to exist in the City and are protected under all the provisions of this Appendix. The Shoreline Jurisdiction Areas are identified in the adopted Shoreline maps (SMP, Sect 3.2.6) In the event that any of the designations shown on the maps or inventory lists conflict with the criteria set forth in this Appendix, the criteria and site specific conditions shall control.

SMP.290 Dedication of Environmentally Critical Area Easements.

(a) In order to protect environmentally critical areas, Environmentally Critical Area easements or tracts, where proposed as mitigation, shall be marked as such and dedicated to the City and

recorded with Snohomish County. Appropriate demarcation methods shall be as set forth in the -Public Works Construction Standards and Specifications, and include appropriate permanent fencing and signage unless otherwise determined by the Natural Resources Manager.

(Amended by Ord. 1365, 6/13/05). Fencing or demarcation method must be built of materials that are permanent in nature. Fencing may not be required if the site is a know migration route for wildlife and due to other constraints such as roadways or buildings a fence would prevent migration of those species. Alternative methods of demarcation will be required to replace signage when determined that effectiveness of signage may be limited.

(b) Anyone may offer to dedicate an Environmentally Critical Area easement or tract and its buffer to the City even if not proposed as mitigation.

(c) Such easements or tracts shall cover the environmentally critical area as delineated by their defined boundaries and their buffers.

(d) The basic controlling language for such easements shall be as follows, though site/resource specific modifications may be made:

"Critical Area Protection Easement: This open space tract is intended to protect <<< *insert ECA type and native vegetation* >>> and shall preclude: grading or any recontouring of the land; placement of structures, wells, leach fields, utility lines and/or easements, and any other thing; vehicle activity; grazing; dumping; and the addition or removal of vegetation, except pursuant to an approved restoration plan, and except that vegetation may be selectively removed and/or pervious trails and/or utility lines compatible with native tree and shrub vegetation may be placed in the buffer areas in locations approved by the Director of Planning and Community Development."

SMP.300 Dedication of Land and/or Easements in Lieu of Required Parks or Open Space.

The dedication of environmentally critical areas and their buffers may not be used for satisfying the park or open space requirements of AMC Chapter 20.52 (Recreational Facilities & Open Space).

SMP.310 Increased Buffer Widths

The permit-issuing authority shall require increased standard buffer zone widths on a case-by-case basis when a larger buffer is necessary to protect environmentally critical area functions and values based on local conditions. This determination shall be supported by appropriate documentation showing that it is reasonably related to protection of the functions and values of the regulated environmentally critical area. Such determination shall be attached as a permit condition and shall demonstrate that:

(a) A larger buffer is necessary to maintain viable populations of existing species; or

(b) The environmentally critical area is used by species proposed or listed by the federal government or the state as endangered, threatened, sensitive, candidate, or monitor, 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 has minimal vegetative cover or slopes greater than 15 percent and is therefore susceptible to severe erosion, and erosion control measures will not effectively prevent adverse environmentally critical area impacts.

(d) The recommended widths for buffers are based on the assumption that the buffer is vegetated with a native plant community appropriate for the ecoregion or with one that performs similar functions. If the existing buffer is un-vegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided. Generally, improving the vegetation will be more effective than widening the buffer.

SMP.320 Buffer Width Averaging.

Buffer widths may be modified by averaging. In no instance shall the buffer width be reduced by more than 25% of the standard buffer unless specifically identified in other sections of the SMP. 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 or that there would be a benefit to the Environmentally Critical Area;
- (b) That the least impactful aspects of the proposed land use would be located adjacent to areas where the buffer width is reduced;
- (c) That width averaging will not adversely impact the environmentally critical area functional values; and
- (d) That the total area contained within the buffer after averaging is no less than that contained within the standard buffer prior to averaging.

SMP.330 Buffers to be retained in Natural Condition

Except as otherwise specified, all buffers shall be retained in their natural condition. Where buffer disturbance may, or has occurred during construction, re-vegetation with native vegetation will be required.

SMP.340 Building Setbacks from Buffers

A building setback of 15 feet is required from the edge of any critical area buffer, as defined in subsequent sections of this Appendix. Minor structural intrusions into the area of the building setback may be allowed if the permit-issuing authority determines that such intrusions will not negatively impact the environmentally critical area or cause the buffer vegetation to be trimmed or removed. The setback shall be identified on the site plan.

~~SMP 360. Reserved~~

SMP.370 Non-Conforming Activities.

Except for cases of discontinuance as part of normal agricultural practices, non-conforming uses shall be governed by Section 6 of this SMP and AMC Chapter 20.32 (Nonconforming Situations).

SMP.380 Assessment Relief.

The Snohomish County Assessor's office considers environmentally critical area regulations in determining the fair market value of land. Any owner of an undeveloped critical area who has dedicated an easement or entered into a perpetual conservation restriction with the City of Arlington or a qualified nonprofit organization to permanently control some or all regulated activities in that portion of land assessed consistent with these restrictions shall be considered for exemption from special assessments to defray the cost of municipal improvements such as sanitary sewers, storm sewers, and water mains.

SMP.390 Mitigation Plan Requirements.

In the event that mitigation is required, the applicant shall be required to provide a mitigation plan for approval by the Community Development Director. The plan shall provide information on land acquisition, construction, maintenance and monitoring of the replaced critical area. All mitigation plans shall include the following submitted by the applicant or a qualified biologist, civil or geotechnical engineer:

- (a) Specific goals and objectives describing site function, target species and selection criteria;
- (b) Performance standards that shall include criteria for assessing goals and objectives;
- (c) Contingency plans that clearly define course of action or corrective measures needed if performance standards are not met;
- (d) A legal description and a survey prepared by a licensed surveyor of the proposed development site and location of the critical area(s) on the site.
- (e) The need for performance or maintenance securities.
- (f)) A scaled plot plan that indicates the proposed construction in relation to zoning setback requirements and sequence of construction location in relation to zoning setback requirements and sequence of construction phases including cross-sectional details, topographic survey data (including percent slope, existing and finished grade elevations) and other technical information as required in sufficient detail to explain, illustrate and provide for:
 - 1. Soil and substrate conditions, topographic elevations, scope of grading and excavation proposal, erosion and sediment treatment and source controls needed for critical area construction and maintenance;
 - 2. Planting plans specifying plant species, types, quantities, location, size spacing, or density. The planting season or timing, watering schedule, and nutrient requirements for planting, and where appropriate, measures to protect plants from destruction; and
 - 3. Contingency or mid-course corrections plan and a minimum five year monitoring and replacement plan establishing responsibility for removal of exotic and nuisance vegetation and permanent establishment of the critical area and all component parts.
- (g) A clearly defined approach to assess progress of the project.
- (h) The plan must indicate ownership, size, type, and complete ecological assessment including flora, fauna, hydrology, functions, etc., of the critical area being restored or created; and
- (i) The plan must also provide information on the natural suitability of the proposed site for establishing the replaced critical area, including water source and drainage patterns, topographic position, wildlife habitat opportunities, value of existing area to be converted, etc.
- (j) Once the plan is implemented, as-builts shall also be submitted pursuant to Department of Public Works requirements.

Part IV. Fish and Wildlife Conservation Areas

SMP.400 Classification.

Fish and Wildlife Conservation Areas include:

- (a) Lands containing priority habitats and species, including plant and/or animal species listed on Federal or State threatened or endangered species lists.
- (b) Ponds and their submerged aquatic beds that provide fish or wildlife habitat.
 - 1. "Type S" waters of the state as defined in WAC 222-16-030, which includes all waters, within their ordinary high-water mark, as inventoried as "shorelines of the state" under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW, but not including those waters' associated wetlands as defined in Chapter 90.58 RCW.
- (c) Segments of natural waters and periodically inundated areas of their associated wetlands that are used by salmonids for off-channel habitat. These areas are critical to the maintenance of optimum survival of juvenile salmonids. This habitat shall be identified based on the following criteria:
 - 1. The site must be connected to a stream bearing salmonids and accessible during some period of the year; and
 - 2. The off-channel water must be accessible to juvenile salmonids through drainage with less than a 5% gradient.
- (d) Lakes, ponds, and streams planted with game fish (defined at RCW 77.09.020), including those planted under the auspices of a federal, state, local, or tribal programs, or which support priority fish species as identified by the Department of Fish and Wildlife.
- (e) State natural area preserves and natural resource conservation areas.

(f) Habitats or species of local importance. Such habitats or species may be locally listed per the process elucidated in §SMP.420 (Species/Habitats of Local Importance).

SMP.410 Determination of Boundary.

The Community Development Director shall determine the boundaries of Fish and Wildlife Conservation Areas. In doing so he may rely on information from qualified federal, state, county, or tribal agencies or on a biological resources survey prepared by a qualified wildlife biologist per the Department's Biological Resources Survey Guidelines. Such reports or information may be required to be provided by an applicant for an activity or permit at the request of the City. In the location of shoreline jurisdiction the adopted Shoreline designation maps establish the boundary. When a project is at or below OHWM and within shoreline setbacks, the OHWM shall be determined by a site-specific investigation using field indicators.

SMP.420 Species/Habitats of Local Importance.

(a) Species or habitats may be listed as a -species or habitat of local importance by the City Council according to the following process:

1. An individual or organization must:
 - a. Demonstrate a need for special consideration based on: (i) declining populations, (ii) sensitivity to habitat manipulation; or (iii) commercial or game value, or other special value, such as flood refugia or public appeal.
 - b. Propose relevant management strategies considered effective and within the scope of this Appendix.
 - c. Provide species habitat location(s) on a map.
2. Submitted proposals will be reviewed by the Community Development Director and forwarded to the Departments of Fish and Wildlife and Natural Resources, and/or other local, state, federal, or tribal agencies or experts for comment and recommendation regarding accuracy of data and effectiveness of proposed management strategies.
3. The City Council will hold a public hearing for proposals found to be complete, accurate, potentially effective, and within the scope of this Appendix. Approved nominations will become designated a "Species or Habitat of Local Importance" and will be subject to the provisions of this Appendix.

(b) Species or Habitats of Local Importance include:

1. [None adopted as of 22 September 2003]

SMP.430 Allowed Activities.

Except where regulated by other sections of this or any other Title or law, the following uses shall be allowed within Fish and Wildlife Conservation Areas when the requirements of §SMP.440 (Fish and Wildlife Conservation Areas—Requirements) have been met and mitigation adequate to alleviate any other impacts has been proposed:

(a) Those activities listed in §SMP.220 (General Provisions—Allowed Activities)

(b) Activities consistent with the species located there and all applicable state and federal regulations regarding the species, as determined by the Community Development Director, who will consult with other resource agencies including Tribes as to their recommendations based on adopted standards or guidance.

(c) Within the 50-foot management zone of the buffer required pursuant to §SMP.440 (Fish & Wildlife Conservation Areas--Requirements) the following uses are allowed as long as 65% of native tree cover is established and maintained and the Total Effective Impervious Area (TIA) remains below 3%:

1. When the 50-foot management zone is in an already developed state including buildings, parking lots, lawn or ornamental landscaping stormwater management systems designed to blend into the natural landscape allowing full mature growth of native trees and shrubs, and

provide the same or greater functional habitat that would occur in a naturally vegetated buffer. Specifically, this does not include buried vaults, ecology block or grass-lined ponds or swales (though ponds or swales planted with native vegetation may be allowed). Such systems are required to provide diffuse effluent point(s) to the immediate edge of the no-touch buffer to allow infiltration and polishing.

Walkways and trails, provided that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent (25%) of the wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five (5) feet in width for pedestrian use only. Raised boardwalks utilizing non-treated pilings may be acceptable.2. Utility easements and access routes that are built so as to not affect the lateral or vertical hydrology of the system, and are compatible with full maturity of native tree and shrub species.

3. Other uses as may be approved by the City's Natural Resources Manager as recommended in a local, state or federal watershed management plan or low impact development regulations.

SMP.440 Requirements.

(a) Except as provided in Subsections (b) and (c):

1. For endangered or threatened salmonid Fish and Wildlife Conservation Areas, a 150-foot buffer shall be required for all regulated activities adjacent to the Fish and Wildlife Conservation Areas. This buffer shall consist of a 100-foot area closest to the stream or river being designated a Native Growth Protection Easement in which no human activities may be allowed (except as provided by §SMP.430 (Fish and Wildlife Conservation Areas—Allowed Activities), and the remaining 50-foot zone being designated a -management zone, in which vegetation may be managed solely for public health and safety reasons that may threaten structures or public infrastructure. The Natural Resource may require a landowner to have an assessment performed by a professional arborist to determine if a tree is hazardous. If found hazardous the methods of removal will utilize options that will result in some level of habitat function (i.e. snag, nurse log, etc) Buffers for salmonid Fish and Wildlife Conservation Areas shall be measured pursuant to §SMP.730 (Streams, Creeks, Lakes, & Other Surface Water--Requirements).

2. For all other Fish and Wildlife Conservation Areas, the applicant shall have a habitat protection plan prepared by a qualified biologist, in which appropriate buffers and other protection shall be identified based on the best available science and/or standards promulgated by the state or federal agency with jurisdiction for the identified species being protected. Buffers shall be measured from the Fish and Wildlife Conservation Areas boundary as surveyed in the field.

(b) Buffer widths may be increased based on recommendations by the state or federal agency with jurisdiction.

(c) Buffer widths from Fish and Wildlife Conservation Areas may be decreased in areas where specific project recommendations can be found in section SMP 320 of this chapter, local watershed recovery plans, the Shoreline Master Program has identified allowed uses, a habitat protection plan, or either a property-specific or programmatic biological assessment showing that the proposal would have negligible adverse impact on the protected species or habitat (with or without mitigation) has been approved by the state or federal agency with jurisdiction. Said biological assessments would be prepared by the applicant in a format approved by the agency with jurisdiction. The width of the buffer would be determined through this biological assessment approval process but could in no case be reduced to less than that required for the underlying environmentally critical areas by other sections of this chapter. *(Amended by Ord. No. 1351, 9/7/04)*

(d) For streams upstream from an endangered or threatened salmonid Fish and Wildlife Conservation Area, if requested by the City, applicants shall have prepared a report analyzing potential downstream impacts to the FWCA and propose appropriate measures to mitigate any identified significant impacts. Such reports shall be prepared by a qualified biologist.

(e) The applicant shall dedicate a functionally exclusive Environmentally Critical Area easement for the protection of wildlife and/or habitat over the Fish and Wildlife Conservation Areas and its buffer, as determined above. Where such requirement leads to, or would in the opinion of the permit-issuing authority lead to, a court finding of a taking mitigation as described in §SMP.450 (Fish and Wildlife Conservation Areas—Mitigation) may be considered.

SMP.450 Mitigation.

In order to avoid significant environmental impacts and, if in the opinion of the permit-issuing authority the requirements listed in §SMP.440 (Fish and Wildlife Conservation Areas—Requirements) do not adequately mitigate impacts, the applicant for a land use activity or development permit may consider performing the following actions, listed in order of preference. What is considered adequate mitigation will depend on the nature and magnitude of the potential impact. Specific mitigation requirements are outlined in the Shoreline Master Program regulations.

(a) Where on-site protection is not possible, dedicate a functionally exclusive easement for the protection of equivalent (in type and value) wildlife and/or habitat over Fish and Wildlife Conservation Areas and a 150-foot buffer on off-site Fish and Wildlife Conservation Areas at a minimum 2:1 ratio (2 offsite areas for every 1 onsite area impacted) on property that would likely not be required to dedicate such an easement were it to undergo a permitting process. If functionally equivalent habitat is not available, then a higher ratio may be considered to compensate. The location of any off-site Fish and Wildlife Conservation Areas shall be located as near to the site as possible, following this preferred order: i) hydrologically connected to the impacted Fish and Wildlife Conservation Areas or via an intact habitat corridor, ii) elsewhere within the City, iii) within the Arlington UGA, iv) within the sub-basin, and v) watershed.

Part V. Frequently Flooded Areas

~~SMP.500 Classification.~~

~~Classification for Flood Zones shall be consistent with the 100-year floodway and floodplain designations as adopted by the City, or where the City has not adopted such a designation, by the 100-year flood zone designation of the Federal Emergency Management Agency and the National Flood Insurance Program. Any such designations adopted by the City shall consider the following criteria if and when designating and classifying these areas:~~

~~(a) Flooding impact to human health, safety, and welfare and to public facilities and services; and,~~

~~(b) Documentation including federal, state and local laws, regulations and programs, local maps and federally subsidized flood insurance programs; and,~~

~~(c) The future floodplain defined as a channel of the stream and that portion of the adjoining floodplain which is necessary to contain and discharge the base flood flow at build-out without any measurable increase in flood heights.~~

~~SMP.510 Determination of Boundary.~~

~~The boundary of a Flood Zone shall be contiguous with the 100-year floodway and floodplain designations as adopted by the City, or where such a designation has not been adopted by the City, the 100-year floodplain designation of the Federal Emergency Management Agency (FEMA) and the National Flood Insurance Program where it has been delineated (shown on Flood Insurance Rate Maps (FIRM)). Where this information does not exist, the boundary~~

determination shall be made by a licensed engineer and based upon the same criteria used by FEMA including the consideration of the Channel Migration Zone. The Flood Plain Administrator shall confirm this determination.

~~SMP.520 Allowed Activities.~~

~~Except where regulated by other sections of this or any other Title or law, the following uses shall be allowed within floodways or flood plains when the requirements of §SMP.530 (Frequently Flooded Areas—Requirements) have been met and mitigation adequate to alleviate any other impacts has been proposed:~~

~~(a) Floodways~~

- ~~1. Those activities allowed per the Shoreline Master Program regulations and §SMP.220 (General Provisions—Allowed Activities).~~
- ~~2. Outdoor recreational activities (including fishing, bird watching, hiking, boating, swimming, canoeing, bicycling, etc.) and aquatic recreation facilities authorized by this SMP.~~
- ~~3. Those uses allowed by §20.64.150 (Permissible Uses Within Floodways).~~

~~(b) Floodplains~~

- ~~1. All those activities allowed in floodways~~
- ~~2. Recreational Fields~~
- ~~3. Those uses allowed by and consistent with the regulations of Appendix 20.64 (Floodways, Floodplains, Drainage, and Erosion).~~

~~SMP.530 Requirements.~~

~~All land uses and development proposals shall comply with the regulations for general and specific flood hazard protection (see Chapter 20.64, Floodways, Floodplains, Drainage, and Erosion). Development shall not reduce the effective base flood storage volume. Reduction of the floodwater storage volume effectiveness due to grading, construction, or other regulated activities shall be compensated for by creating on- or off-site detention and/or retention ponds. Effective storage capacity must be maintained. Base flood data and flood hazard notes shall be on the face of any recorded plat or site plan including, but not limited to, base flood elevations, flood protection elevation, boundary of floodplain and zero rise floodway.~~

~~SMP.540 Mitigation.~~

~~If potential flooding impacts cannot be avoided by design or by providing on- or off-site detention and/or retention ponds, other forms of mitigation may be considered in order to avoid significant environmental impacts. Applicants must provide mitigation plans exploring and analyzing any proposed mitigation measures, which must be consistent with the Shoreline Master Program and the regulations of AMC Chapter 20.64 (Floodways, Floodplains, Drainage, and Erosion).~~

Part VI. Geologically Hazardous Areas

SMP.600 Classification.

(a) Geologically Hazardous Areas include areas susceptible to erosion, sliding, earthquakes, liquefaction, or other geological events. Geologically Hazardous Areas shall be classified based upon the history or existence of landslides, unstable soils, steep slopes, high erosion potential or seismic hazards. In determining the significance of a geologically hazardous area the following criteria shall be used:

1. Potential economic, health, safety, and environmental impact related to construction in the area;
2. Soil type, slope, vegetative cover, and climate of the area;

3. Available documentation of history of soil movement, the presence of mass wastage, debris flow, rapid stream incision, stream bank erosion or undercutting by wave action, or the presence of an alluvial fan which may be subject to inundation, debris flows, or deposition of stream-transported sediments.
- (b) The different types of Geologically Hazardous Areas are defined as follows:
1. Erosion hazard areas are as defined by the USDA Soil Conservation Service, United States Geologic Survey, or by the Department of Ecology Coastal Zone Atlas. The following classes are high erosion hazard areas.
 - a. Class 3, class U (unstable) includes severe erosion hazards and rapid surface runoff areas;
 - b. Class 4, class UOS (unstable old slides) includes areas having severe limitations due to slope; and,
 - c. Class 5, class URS (unstable recent slides).
 2. Landslide hazard areas shall include areas subject to severe risk of landslide based on a combination of geologic, topographic and hydrologic factors. Some of these areas may be identified in the Department of Ecology Coastal Zone Atlas, or through site-specific criteria. Landslide hazard areas include any of the following:
 - a. Areas characterized by slopes greater than 15 percent and impermeable soils (typically silt and clay) frequently interbedded with permeable granular soils (predominantly sand and gravel) or impermeable soils overlain with permeable soils or springs or groundwater seepage.
 - b. Any area that has exhibited movement during the Holocene epoch (from 10,000 years ago to present) or which is underlain by mass wastage debris of that epoch;
 - c. Any area potentially unstable due to rapid stream incision, stream bank erosion or undercutting by wave action.
 - d. Any area located on an alluvial fan presently subject to or potentially subject to inundation by debris flows or deposition of steam-transported sediments;
 - e. Any area with a slope of 33 percent or greater and with a vertical relief of ten or more feet except areas composed of consolidated rock;
 - f. Any area with slope defined by the United States Department of Agriculture Soil Conservation Service as having a severe limitation for building site development; and
 - g. Any shoreline designated or mapped as class U, UOS, or URS by the Department of Ecology Coastal Zone Atlas.
 3. Slopes:
 - a. Moderate slopes shall include any slope greater than or equal to 15 percent and less than 33 percent.
 - b. Steep slopes shall include any slope greater than or equal to 33 percent.
 4. Seismic hazard areas shall include areas subject to severe risk of earthquake damage as a result of seismic induced settlement, shaking, slope failure or soil liquefaction. These conditions occur in areas underlain by cohesion less soils of low density usually in association with a shallow groundwater table.

SMP.610 Determination of Boundary.

The Community Development Director, relying on a geotechnical or similar technical report and other information where available and pertinent, shall make determination of a boundary of a Geologically Hazardous Area. Such reports or information shall be provided by an applicant for an activity or permit at the request of the City.

SMP.620 Allowed Activities.

Except where regulated by other sections of this or any other Title or law, the following uses shall be allowed within Geologically Hazardous Areas when the requirements of §SMP.630 (Geologically Hazardous Areas—Requirements) have been met and mitigation adequate to alleviate any other impacts has been proposed:

- (a) Those activities allowed per §SMP.220 (General Provisions—Allowed Activities).
- (b) Any other use allowed per the zone and Shoreline Master Program, provided that it meets the requirements of §SMP.630 (Geologically Hazardous Areas—Requirements) and will not have a detrimental impact on the health, safety, and welfare of the public, or will not negatively impact neighboring properties.
- (c) Recontouring of land to eliminate geologically hazardous areas, including steep slopes, is expressly prohibited unless otherwise approved through the land use permit process (not the construction plan review process). The permit issuing authority may approve recontouring to eliminate geological hazardous areas only upon finding that such action would serve the health, safety, and welfare of the general public and not just a particular development proposal.

SMP.630 Requirements.

(a) Erosion Hazard Areas: All development proposals on sites containing erosion hazard areas shall comply with the following requirements:

- 1. Erosion control plan: The applicant shall submit an erosion control plan prior to the approval of any permit. Plans shall be consistent with the guidelines set forth in the Uniform Building Code (UBC) grading section and the Department of Public Works' Construction Standards and Specifications.
- 2. Alteration: All authorized clearing for roads, utilities, etc., shall be limited to the minimum necessary to accomplish the engineering design. Alterations of erosion hazard sites shall meet the requirements of AMC Chapter 20.44, Part II (Land Clearing, Grading, Filling, and Excavation).

(b) Landslide Hazard Areas: All development proposals on sites containing landslide hazard areas shall comply with the following requirements:

- 1. Alterations: Landslide hazard areas located on slopes 33 percent or greater shall be altered only as allowed under standards for steep slopes set forth in this section. Landslide hazard areas and land adjacent to such a hazard area located on slopes less than 33 percent may be altered if:
 - a. The proposal will not increase surface water discharge or sedimentation and will not decrease adjacent property slope stability; and
 - b. It can be demonstrated through geotechnical analysis that there is no significant risk to the development proposal or adjacent properties or that the proposal can be designed so that the landslide hazard is significantly eliminated or mitigated such that the site and adjacent property are rendered as safe as an area without landslide hazards.
- 2. Buffers: Unless the alteration is approved under the provisions in Subsection 1 above (Alterations), a minimum buffer of 50 feet shall be provided from the edges of all landslide hazard areas regardless of slope. The buffer may be extended beyond these limits to mitigate erosion hazards.
- 3. Building Setback Lines: All buildings are required to be set back a minimum of 15 feet from the buffer or landslide hazard area.

(c) Slopes: Grading, vegetation removal, and other site disturbances on slopes can lead to erosion or landslides. If the amount of the slope disturbed is decreased, then the risk of erosion and landslides decreases. The risk is also less on slopes that are less steep. Therefore, all site disturbances on moderate and steep slopes and their buffers shall be reviewed and certain standards are required to be met depending on the percent of slope.

1. The maximum slope and buffer disturbance allowed, unless restricted for other reasons, is:

Table SMP-2: Slope Disturbance Allowed Slope	Disturbance Allowed
1 - 14%	100%
15 - 24%	60%
25 – 32%	45%
33% or greater	0%

2. Development on moderate and steep slopes shall meet the following standards:
- a. Development must be located to minimize disturbance and removal of vegetation and also to protect most critical areas and retain open space.
 - b. Structures must be located or clustered where possible to reduce disturbance and maintain natural topographic character.
 - c. Grading shall be minimized;
 - d. Structures should conform to the natural contour of the slope, with foundations tiered where possible to conform to existing topography of site.
 - e. Natural surface or sub-surface drainage courses shall be preserved.
 - f. All development proposals shall be designed to minimize the footprint of building and other disturbed areas. Common access drives and utility corridors are encouraged.
 - g. All development shall be designed to minimize impervious lot coverage and should incorporate under- or over-structure parking and multi-level structures.
 - h. Roads, walkways and parking areas should be designed to parallel the natural contours.
 - i. Access shall be in the least critical area of the site.

3. Additional standards for steep slopes: All proposed development on steep slopes shall be avoided if possible. Alterations are allowed in only the following instances provided that the standards in 1 and 2, above, can be met; and, where it has been demonstrated through a soils report prepared by a geotechnical engineer that no adverse impact will result from the proposal and where approved surface water conveyance will result in minimum slope and vegetation disturbance:

- a. The construction of approved public or private trails provided they are constructed in a manner that is not detrimental to surface water runoff control (e.g., cable lift access); and
- b. The construction of public or private utility corridors in accordance with SMP regulations provided it has been demonstrated that such alterations will not increase landslide or erosion risks.

4. In all other cases, no disturbance is allowed on a steep slope and a minimum 15-foot vegetated buffer shall be established from the top, toe and along all sides of the slope. The buffer may be extended beyond these limits on a case-by-case basis to mitigate landslide and erosion hazards.

(d) Seismic Hazard Areas: Standards for development in seismic hazard areas shall be in accordance with the provisions in the IBC, as adopted by the City of Arlington.

(e) For all Geological Hazardous Areas on which development is not permitted by the above regulations, the applicant shall dedicate to the City an exclusive Environmentally Critical Area easement for the protection of Geological Hazardous Areas over the Environmentally Critical Area and a buffer consistent with the standards listed above.

SMP.640 Mitigation.

If potential geologic impacts cannot be avoided by adhering to the above requirements, other forms of mitigation may be considered. Applicants must provide mitigation plans exploring and analyzing any proposed mitigation measures. What is considered adequate mitigation will depend on the nature and magnitude of the potential impact to the Shoreline and a ecological function. For example, some potential risk due to construction in geologically hazardous areas may be reduced through retention of existing vegetation.

Part VII. Streams, Creeks, Rivers, Lakes and Other Surface Water

SMP.700 Classification.

The City hereby adopts the stream classification system of the state, as specified in WAC 222-16-030, as may be amended. Briefly, these are as follows (see WAC 222-16- 030 for complete definitions of Types):

- (a) -Type S Water means all the waters, within their ordinary high-water mark, as inventoried as -shorelines of the statell under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW, but not including those waters' associated wetlands as defined in Chapter 90.58 RCW.
- (b) Type F-ESA Water means all the waters meeting the criteria of Type F stream, but have been identified as having presumed use by ESA listed fish species.
- (b) "Type F Water" shall mean segments of natural waters that are not classified as Type 1 Water and have a substantial fish, wildlife, or human use. These are segments of natural waters and periodically inundated areas of their associated wetlands, which:
 - 1. Are diverted for domestic use by more than 100 residential or camping units or by a public accommodation facility licensed by the State to serve more than 100 persons, where such diversion is determined by the Washington State Department of Ecology to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type 2 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;
 - 2. Are within a federal, state, local, or private campground having more than 30 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;
 - 3. Are used by substantial numbers of anadromous or resident game fish for spawning, rearing or migration. Waters having the following characteristics are presumed to have highly significant fish populations:
 - a. Stream segments having a defined channel 20 feet or greater in width between the ordinary high-water marks and having a gradient of less than 4 percent.
 - b. Lakes, ponds, or impoundments having a surface area of 1 acre or greater at seasonal low water; or
 - 4. Are used by salmonids for off-channel habitat. These areas are critical to the maintenance of optimum survival of juvenile salmonids. This habitat shall be identified based on the following criteria:
 - a. The site must be connected to a stream bearing salmonids and accessible during some period of the year; and
 - b. The off-channel water must be accessible to juvenile salmonids through drainage with less than a 5% gradient.
 - c. Ponds or impoundments having a surface area of less than 0.5 acre at seasonal low water and having an outlet to an anadromous fish stream.

5. Are highly significant for protection of downstream water quality. Tributaries which contribute greater than 20 percent of the flow to a Type S or F Water are presumed to be significant for 1,500 feet from their confluence with the Type S or F Water or until their drainage area is less than 50 percent of their drainage area at the point of confluence, whichever is less.

(d) -Type Np Water

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 the 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. Np waters begin downstream of the point along the channel where the contributing basin area is at least 52 acres in size.

(e) -Type Ns Water shall be

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 Type Np water. Ns waters must be physically connected by an above-ground channel system to Type S, F, or Np waters.

(f) -Non-natural water course means constructed vegetated swales and ditches that are designed and installed for the express purpose of periodically moving storm water not associated with naturally occurring streams.

SMP.710 Determination of Boundary.

The Community Development Director, relying on delineation by a licensed engineer or other comparable expert, shall determine the boundary of the creek, stream, river, lake, or other surface water. For ravines with banks greater than ten (10) feet in depth the boundary shall be contiguous with the top of the bank. Where there is no ravine or the bank is less than ten (10) feet in depth, the boundary shall be contiguous with the Ordinary High Water Mark. In case of disagreement as to its location, the ultimate decision on the OHWM shall rest with Ecology.

SMP.720 Allowed Activities.

Except where regulated by other sections of this, Shoreline Master Program or any other Title or law (e.g., see Part IV of this Appendix, Fish and Wildlife Conservation Areas), the following uses shall be allowed within streams, creeks, rivers, lakes, and other surface waters when the requirements of §SMP.730 (Streams, Creeks, Rivers, Lakes and Other Surface Water—Requirements) have been met and mitigation adequate to alleviate any other impacts has been proposed:

(a) Those activities allowed under §SMP.220 (General Provisions—Allowed Activities).

(b) Bridges and other crossings for public and private rights-of-way where no other feasible means on ingress and egress to a parcel is available.

SMP.730 Requirements.

(a) To retain the natural functions of streams and stream corridors, and unless modified by Part IV (Fish & Wildlife Habitat), the streamside buffers listed in Table SMP-3: Non-ESA Stream Buffer Width shall be maintained on both sides of the Environmentally Critical Area. All existing native vegetation within these buffers shall be preserved. (Note also that buffer averaging may be allowed pursuant to §SMP.320 (General Provisions—Buffer Width Averaging).)

(b) To protect the natural functions and aesthetic qualities of a stream and stream buffer, a detailed temporary erosion control plan that identifies the specific mitigating measures to be implemented during construction to protect the water from vegetation removal, erosion, siltation, landslides and hazardous construction materials shall be required. The City of Arlington shall

review and approve the plan with the appropriate state, federal and tribal agencies, and any adjacent jurisdiction.

(c) In accordance with the Shoreline Master Plan the buffer set-back in the Historic Shoreline Business District is 30 feet landward from the OHWM or Top of Slope whichever is most protective of the shoreline, and those activities that are allowed under AMC 20.64 Floodplains.

Table SMP-3: Non-ESA Stream Buffer Width Stream

Type	Standard Buffer
S	150 feet
F-ESA	150 feet
F	100 feet
Np	50 feet
Ns	50 feet
Non-natural	None

- (c) The applicant shall dedicate to the City an exclusive Environmentally Critical Area easement for the protection of creeks, streams, rivers, lakes, or other surface water over the Environmentally Critical Area and a buffer consistent with the standards listed in Subsection (a).

SMP.740 Mitigation.

(a) In order to avoid significant environmental impacts for those activities not regulated by the Shoreline Master Program and allowed pursuant to §SMP.720 (Streams, Creeks, Rivers, Lakes and Other Surface Water—Allowed Activities), the applicant for a land use or development permit will select one or more of the following mitigation action, listed in order of preference. What is considered adequate mitigation will depend on the nature and magnitude of the potential impact.

1. On-Site Environmentally Critical Area Restoration/Improvement—Restoration or improvement in functional value of degraded on-site waterways and/or their buffers at a 2:1 ratio (2 square feet for every 1 square foot impacted).
2. On-Site ECA/ Creation—Creation of on-site waterways and their buffers at a 2:1 ratio (2 square feet for every 1 square foot impacted).
3. On-Site ECA Buffer Restoration—Restoration or improvement in functional value of degraded on-site waterway buffers at a ratio of 6:1.

(b) All ECA restoration, creation and/or enhancement projects required pursuant to this Appendix either as a permit condition or as the result of an enforcement action shall follow a mitigation plan prepared in conformance to the requirements of §SMP.390 (Mitigation Plan Requirements).

Part VIII. Wetlands

SMP.800 Classification.

~~(a) Wetlands shall be rated according to the Washington State wetland rating system for: Washington State Wetland Rating System for Western Washington, -- Revised, Ecology Publication #194-06-0295) or as revised by Ecology. Wetland rating categories shall be applied as the wetland exists at the time of the adoption of this Title or as it exists at the time of an~~ **NA**

associated permit application. Wetland rating categories shall not change due to illegal modifications. Wetlands identified as having local significance in hydrologic and habitat functions may be rated higher based on importance.

~~(b)~~(a) Wetland Types.

1. **Category I.** Category I wetlands are: 1) relatively undisturbed estuarine wetlands larger than 1 acre; 2) wetlands that are identified by scientists of the Washington Natural Heritage Program/DNR as ~~high quality~~ wetlands of high conservation value; 3) bogs; 4) mature and old-growth forested wetlands larger than 1 acre; 5) wetlands in coastal lagoons; or 6) wetlands that perform many functions well and score ~~70-23~~ or above.

Category I wetlands represent a unique or rare wetland type, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain some ecological attributes that are impossible to replace within a human lifetime, or provide a very high level of functions.

2. **Category II.** Category II wetlands are: 1) estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre; 2) ~~a wetland identified by the Washington State Department of Natural Resources as containing "sensitive" plant species; 3) a bog between ¼ and ½ acre in size; 4) an interdunal wetland larger than 1 acre; or 5) wetlands with a moderately high level of functions. Wetland₁ scoring between 51-20 and 69-22 points. Wetlands identified as having local significance in reducing flooding or providing habitat.~~

Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but they still need a relatively high level of protection.

3. **Category III.** Category III wetlands are: ~~1) wetlands with a moderate level of functions scoring between 16-30 and 50-19 points that can be adequately replaced with a well-planned mitigation project.~~

~~Generally, wetlands in this category may have been disturbed in some way and are often less diverse or more isolated from other natural resources in the landscape than category II wetlands; or 2) interdunal wetlands between 0.1 and 1 acre in size. Generally, wetlands in this category may have been disturbed in some way and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.~~

~~3-4.~~ **Category IV.** Category IV wetlands have the lowest levels of functions scoring less than ~~16-30~~ points and are often heavily disturbed. These are wetlands that should be replaceable, and in some cases may be improved. 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. -

SMP.810 Determination of Boundary.

(a) The Community Development Director, relying on a field investigation supplied by an applicant, and applying the wetland definition provided in this Appendix shall determine the location of the wetland boundary. Qualified professional and technical scientists shall perform wetland delineations. Identification of wetlands and delineation of their boundaries pursuant to this Chapter shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements. All areas within the City meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this Chapter. Criteria to be included in required wetland identification reports may be found in §SMP.390 Mitigation Plan Requirements). The applicant is required to show the location of the wetland boundary on a scaled drawing as a part of the permit application.

1. Designating, Defining, and Identifying Wetlands. Wetlands are those areas, identified in accordance with RCW 90.58.030: "Wetlands" means areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands. All areas within the [city/county] meeting the criteria in the wetland definition regardless of whether these areas have previously been identified or mapped, are hereby designated critical areas and are subject to the provisions of this Title.

2. Mapping.

(a) The approximate location and extent of wetlands are shown on the adopted critical area(s) maps. The following critical area(s) maps, including [*locally Adopted maps or the National Wetlands Inventory*] are hereby adopted. Additionally, soil maps produced by U.S. Department of Agriculture Natural Resources Conservation Service may be useful in helping to identify potential wetland areas. These maps are to be used as a guide for the [city/county], project applicants, and/or property owners to identify potential wetland areas that may be subject to the provisions of this Title.

It is the actual presence of wetlands on a parcel, as delineated by the requirements of the methods in the approved federal wetland delineation manual and applicable regional supplements in accordance with WAC 173-22-035. The exact location of a wetland's boundary shall be determined through the performance of a field delineation by a qualified wetlands professional, applying the approved federal wetland delineation manual and applicable regional supplements in accordance with WAC 173-22-035.

(b) Where the applicant has provided a delineation of the wetland boundary, the Community Development Director shall verify the accuracy of, and may render adjustments to, the boundary delineation. In the event the applicant contests the adjusted boundary delineation, the Community Development Director shall, at the applicant's expense, obtain expert services to render a final delineation.

(c) When agreed to by the applicant, the Community Development Director may waive the requirement that the applicant provide the delineation of boundary and rely on staff delineation. The Community Development Director shall consult with qualified professional scientists and technical experts or other experts as needed to perform the delineation. The applicant will be charged for the costs incurred. Where the Community Development Director performs a wetland delineation at the request of the applicant, such delineation shall be considered a final determination.

SMP.820 Allowed Activities.

Except where regulated by other sections of this, Shoreline Master Program or any other Title or law, and provided they are conducted using best management practices, the following uses shall be allowed within wetlands and their buffers when the requirements of §SMP.830 (Wetlands—Requirements) and SMP.840 (Wetlands—Mitigation) have been met, state and federal approvals have been granted when required, and mitigation adequate to alleviate any other impacts has been proposed:

Generally uses will be required to avoid and minimize impacts, and compensate for the impact that may reduce the functions of the wetland or its buffers.

- (a) Those uses listed in §SMP.220 (General Provisions—Allowed Activities).
- (b) In Class III and Class IV wetlands only, access to developable portions of legal lots where:
 - 1. There is no other feasible method of accessing the property,
 - 2. Altering the terrain would not cause drainage impacts to neighboring properties, and
 - 3. Not more than 2,500 square feet of wetland is impacted, and mitigated.
- (c) Permitted Uses in a Wetland Buffer—Regulated activities shall not be allowed in a buffer except for the following:
 - 1. Activities having minimal adverse impacts on buffers and no adverse impacts on regulated wetlands. These may include low intensity, passive recreational activities such as low impact trails in outer 25% non-permanent wildlife watching blinds, short-term scientific or educational activities, and sports fishing;
 - 2. With respect to category III and IV wetlands, stormwater management facilities having no reasonable alternative on-site location; or
 - 3. With respect to category III and IV wetlands, development having no feasible alternative location when the following conditions have been met: Impacts are the minimum necessary; Buffer impacts are mitigated through buffer averaging.
- (d)
 - 1. Those activities and uses conducted pursuant to the Washington State Forest Practices Act and its rules and regulations, WAC 222-12-030, where state law specifically exempts local authority, except those developments requiring local approval for Class 4 – General Forest Practice Permits (conversions) as defined in RCW 76.09 and WAC 222-12.
 - 2. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.
 - 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, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.
 - 4. Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer, provided that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column will be disturbed.
 - 5. Enhancement of a wetland through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All

removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Re-vegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

6. Educational and scientific research activities.

7. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, provided that the maintenance or repair does not expand the footprint of the facility or right-of-way and impacts are mitigated.

8. Stormwater management facilities. Stormwater management facilities are limited to stormwater dispersion outfalls and bioswales. They may be allowed within the outer twenty-five percent (25%) of ~~50-foot management zone, whichever is most protective, of~~ Category II, III or IV wetlands ~~buffer~~s when ~~the 50-foot management zone is~~ in an already developed state including buildings, parking lots, lawn or ornamental landscaping stormwater management systems designed to blend into the natural landscape allowing full mature growth of native trees and shrubs, and provide the same or greater functional habitat that would occur in a naturally vegetated buffer. Specifically, this does not include buried vaults, ecology block or grass-lined ponds or swales (though ponds or swales planted with native vegetation may be allowed). Such systems are required to provide diffuse effluent point(s) to the immediate edge of the no-touch buffer to allow infiltration and polishing, provided that:

a. No other location is feasible; and

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

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

9. Non-Conforming Uses. Repair and maintenance of non-conforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.

SMP.830 Requirements.

~~(a) Buffer Requirements. The following buffer widths have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06- 029, or as revised and approved by Ecology) Buffers—ECA buffers shall be required for all regulated activities adjacent to regulated wetlands as provided in Table SMP-4, below, unless modified per Subsection (b). Any wetland created, restored, or enhanced as compensation for approved wetland alterations shall also include the standard buffer required for the category of the created, restored, or enhanced wetland. All buffers shall be measured from the wetland boundary as determined pursuant to §SMP.810 (Wetlands—Determination of Boundary). The width of the wetland buffer zone shall be determined according to wetland category and the proposed land use. These buffers have been established to reflect the impact of land use intensity on wetland functions and values.~~

~~(b) The standard buffer widths in Table SMP-4 have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington state wetland rating system for Western Washington.~~

1. For wetlands that score 6 points or more for habitat function, the buffers in Table 4 can be used if both of the following criteria are met:
 - i. A relatively undisturbed, vegetated corridor at least 100 feet wide is protected between the wetland and any other Priority Habitats as defined by the Washington State Department of Fish and Wildlife. The latest definitions of priority habitats and their locations are available on the WDFW web site at: <http://wdfw.wa.gov/hab/phshabs.htm>
The corridor must be protected for the entire distance between the wetland and the Priority Habitat by some type of legal protection such as a conservation easement.
Presence or absence of a nearby habitat must be confirmed by a qualified biologist. If no option for providing a corridor is available, Table 4 may be used with the required measures in Table 6 alone.
 - ii. All of the measures in Table 6 are implemented, where applicable, to minimize the impacts of the adjacent land uses.
2. For wetlands that score 3-5 habitat points, only the measures in Table 6 are required for the use of Table 4.
3. If an applicant chooses not to apply the mitigation measures in Table 6, or is unable to provide a protected corridor where available, then Table 5 must be used.
- ~~4.4. The buffer widths in Table 4 and Table 6 assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided. The use of the standard buffer width requires the implementation of the measures in Table SMP 5, where applicable, to minimize the impacts of the adjacent land uses.~~
 - ~~2. If an applicant chooses not to apply the mitigation measures in Table SMP 5 or other sections of this document, then a 33% increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.~~
 - ~~3. The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is un-vegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community of the buffer should be widened to ensure that adequate functions of the buffer are provided.~~
 - ~~4. Additional buffer widths are added to the standard buffer widths as indicated in Table SMP 4.~~

~~(c)~~ The applicant shall dedicate to the City an exclusive Environmentally Critical Area easement for the protection of wetlands over the Environmentally Critical Area and a buffer consistent with the standards listed in Subsection (a).

~~(d)~~ (b)

Table SMP 4 – Wetland Buffer Requirements for Western Washington if Table 6 is Implemented and Corridor Provided

Wetland Category	Additional- b Buffer width if wetland scores 21—25 3-5 habitat points	Additional- b Buffer width if wetland scores 26 – 7 29 habitat points	Additional- b Buffer width if wetland scores 830 – 9 36 habitat points
Category I: based on total score	Add 30 ft 75 ft.	Add 90 ft 110 ft.	Add 150 ft 225 ft.
Category I: Bogs	190 ft. NA	190 ft. NA	225 ft. Add 35 ft
Category I: Natural Heritage Wetlands	NA	NA	Add 35 ft
Category I: Forested	Add 30 ft 75 ft.	Add 90 ft 110 ft.	Add 150 ft 225 ft.
Category II: Based on Score	Add 30 ft 75 ft.	110 ft. Add 90 ft	Add 150 ft 225 ft.
Category III: (all)	Add 45 ft 60 ft.	Add 110 95 ft.	225 ft. NA
Category IV: (all)	40 ft. NA	NA 40 ft.	40 ft. NA

Table SMP 5 – Wetland Buffer Requirements for Western Washington if Table 6 is NOT Implemented and Corridor NOT Provided

<u>Wetland Category</u>	<u>Buffer width if wetland scores 3-5 habitat points</u>	<u>Buffer width if wetland scores 6 – 7 habitat points</u>	<u>Buffer width if wetland scores 8 – 9 habitat points</u>
<u>Category I: based on total score</u>	<u>100 ft.</u>	<u>150 ft.</u>	<u>300 ft.</u>
<u>Category I: Bogs</u>	<u>250 ft.</u>	<u>250 ft.</u>	<u>300 ft.</u>
<u>Category I: Forested</u>	<u>100 ft.</u>	<u>150 ft.</u>	<u>300 ft.</u>
<u>Category II: Based on Score</u>	<u>100 ft.</u>	<u>150 ft.</u>	<u>300 ft.</u>
<u>Category III: (all)</u>	<u>80 ft.</u>	<u>150 ft.</u>	<u>300 ft.</u>
<u>Category IV: (all)</u>	<u>50 ft.</u>	<u>50 ft.</u>	<u>50 ft.</u>

Table SMP_56. ~~Examples of Required Measures to Minimize Impacts~~Required measures to minimize impacts to wetlands (This is not a complete list of measures.) (All measures are required if applicable to a specific proposal)

<u>Examples of Disturbance</u>	<u>Activities and Uses that Cause Disturbances</u>	<u>Examples of Measures to Minimize Impacts</u>

Lights	<ul style="list-style-type: none"> • Parking lots • Warehouses • Manufacturing • Residential • Parks 	<ul style="list-style-type: none"> • Direct lights away from critical areas and buffers • Day use only regulations preventing the need for lights • Timer on lights
Noise	<ul style="list-style-type: none"> • Manufacturing • Residential 	<ul style="list-style-type: none"> • <u>Locate activity that generates noise away from wetlands</u> • <u>Seasonal limitations on hours of operation</u>
Toxic runoff*	<ul style="list-style-type: none"> • Parking lots • Roads • Manufacturing • Residential areas • Application of agricultural pesticides • Landscaping 	<ul style="list-style-type: none"> • Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150 ft of critical area or buffer • Apply integrated pest management
Stormwater runoff	<ul style="list-style-type: none"> • Parking lots • Roads • Manufacturing • Residential areas • Commercial • Landscaping 	<ul style="list-style-type: none"> • Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns that directly enters the buffer
Change in water regime	<ul style="list-style-type: none"> • Impermeable surfaces • Lawns • Tilling • Forest and forest duff 	<ul style="list-style-type: none"> • Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns • Retain minimum forest and forest duff

	removal	
Pets and human disturbance	<ul style="list-style-type: none"> • Residential areas • Parks 	<ul style="list-style-type: none"> • Use privacy fencing; plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion; place wetland and its buffer in a separate tract
Dust	<ul style="list-style-type: none"> • Construction sites 	<ul style="list-style-type: none"> • Use best management practices to control dust
Disruption of corridors or connections	<ul style="list-style-type: none"> • Roads • Residential • Commercial • Manufacturing • Landscaping • Stormwater 	<ul style="list-style-type: none"> • Maintain connection to offsite areas that are undisturbed • Restore corridors or connections to offsite habitats by replanting
<p>* These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site.</p>		

SMP.840 Mitigation.

(a) In order to avoid significant environmental impacts, the applicant for a land use or development permit shall compensate for unavoidable wetland impacts, listed in order of preference and in accordance with section 4.2 of the Shoreline Master Plan. What is considered adequate mitigation will depend on the nature and magnitude of the potential impact, or specifically identified in the Shoreline Master Program as required mitigation..

1. On-Site Wetlands Restoration/ Improvement—Restoration or improvement in functional value of degraded on-site wetlands and/or their buffers at the ratio listed in Table SMP-6 according to the wetland type.
2. On-Site Wetlands Creation—Creation of on-site wetlands and their buffers at the ratio listed in Table SMP-6 according to the wetland type.
3. On-Site Wetlands Buffer Restoration—Restoration or improvement in functional value of degraded on-site wetland buffers at the ratio listed in Table SMP-6 according to the wetland type.
4. Off-Site Wetlands Protection—Where on-site protection is not possible, dedicate an exclusive easement for the protection of equivalent (in ecological type and function) wetland and its buffer on an off-site wetland at the ratio listed in Table SMP-6 according to the wetland type. The location of any off-site wetland mitigation area shall be located within the same watershed as the impact and as near to the site as possible, following this preferred order: (i) contiguous to the impacted wetland, (ii) within the same drainage

basin where it would best provide the same function as the impacted wetland, and (iii) elsewhere within the City.

(b) All wetland restoration, creation and/or enhancement projects required pursuant to this Appendix either as a permit condition or as the result of an enforcement action shall follow a mitigation plan prepared in conformance to the requirements of §SMP.390 (Mitigation Plan Requirements).

(c) **Location of mitigation.** When compensatory measures are appropriate pursuant to the mitigation priority sequence above, preferential consideration shall be given to measures that replace the impacted functions directly and in the immediate vicinity of the impact. However, alternative compensatory mitigation within the watershed sub-basin that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans applicable to the area of impact may be authorized. If there are no previously identified mitigation opportunities in the impacted sub-basin identified in local watershed or comprehensive plans the applicant will use a watershed approach in selecting mitigation sites utilizing *Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington)* (Publication #09-06-32). Authorization of compensatory mitigation measures may require appropriate safeguards, terms, or conditions as necessary to ensure no net loss of ecological functions. (WAC 173-26-201(2) (e) (ii) (B))

(c) Mitigation ratios for the replacement of impacted wetlands shall be as listed in Table SMP-6.

Table SMP - 6

Category and Type of Wetland	Creation or Re-establishment	Rehabilitation	Enhancement	Preservation
Category I: Bog, Natural Heritage site	Not considered possible	6:1	Case by case	10:1
Category I: Mature Forested	6:1	12:1	24:1	24:1
Category I: Based on functions	4:1	8:1	16:1	20:1
Category II	3:1	6:1	12:1	20:1
Category III	2:1	4:1	8:1	15:1
Category IV	1.5:1	3:1	6:1	10:1

SMP 850 Monitoring

1. For projects that include native vegetation, a detailed five-year or ten-year vegetation maintenance and monitoring program to include the following:
 - (a) Goals and objectives of the shoreline stabilization plan;
 - (b) Success criteria by which the implemented plan will be assessed;

- (c) 1. A Ten (10) year maintenance and monitoring plan for wetland projects with trees and shrubs , consisting of site visits done in years 1, 2, 5, 7 and 10 by a qualified professional, with progress reports submitted to the Shoreline Administrator and all other agencies with jurisdiction following the site visits ; and,
 - 2. Compensatory mitigation projects shall be monitored for a minimum of five years with monitoring plans submitted for 0, 1 , 2, 3 and 5 years.
 - (d) A contingency plan in case of failure.
2. Monitoring of Fish and Wildlife populations may be required.

Part ~~VIII~~X. Aquifer Recharge Areas

SMP.900 Purpose and Objectives.

(a) The purpose of this Part is to protect public aquifer recharge areas. Additionally, it is the intent of this Part to adopt development regulations, as required in RCW 36.70A.060, that preclude land uses or development that is incompatible with critical areas designated under RCW 36.70A.170.

(b) The objectives of this Part are to:

- 1. Protect human life and health;
- 2. Assure the long-term conservation of resources;
- 3. Protect groundwater; and,
- 4. Further the public interest in the conservation and wise use of lands.

SMP.910 Applicability.

(a) All development except those exempted in Subsection (b) is subject to the regulations of this Part.

(b) The following uses are exempt from this Part:

- 1. Uses legally existing on any parcel prior to these regulations' adoption.

SMP.920 Information Required Upon Application.

All land use permit applications for development subject to these regulations shall include the information specified in Table SMP-6, Groundwater Protection Administration Guidance Chart.

SMP.930 Hydrogeologic Site Evaluations.

Hydrogeologic site evaluations shall address the following:

- (a). Soil texture, permeability, and contaminant attenuation properties;
- (b) Characteristics of the unsaturated top layer of soil, the vadose zone, and geologic material, including permeability and attenuation properties;
- (c)Depth to groundwater and/or impermeable soil layer;
- (d)Aquifer properties such as hydraulic conductivity and gradients.
- (e) Potential impacts to the aquifer or groundwater.

SMP.940 Best Management Practices (BMP) Plans.

Best Management Practices (BMP) Plans shall detail what actions or operations may harm the aquifer if not performed or managed properly and how such actions or operations shall be performed or managed so as to avoid impacts. Permit applications may be conditioned on on-going adherence to the BMP Plan.

SMP.950 Mitigation Plans

(a) If the evaluation identifies significant impacts to critical public aquifer storage recharge areas, the project applicant is required to document potential impacts and provide a discussion of alternatives by which such impacts could be avoided or prevented.

(b) The applicant shall provide a detailed mitigation plan for avoiding potential impacts. The City may require that the mitigation plan include preventative measures, monitoring, process control, and remediation, as appropriate. The mitigation plan must be approved by the City and be implemented as a condition of project approval.

SMP.960 Imposition of Conditions on Projects

Based on available information, including that provided by the applicant pursuant to the requirements of Sections SMP.920 (Aquifer Recharge Areas—Information Required Upon Application), the permit-issuing authority shall impose conditions designed to prevent degradation of groundwater quality or quantity. Such conditions may include determining background water quality and quantity prior to development, determining groundwater levels, monitoring of those levels, mitigation plans including prevention, and development of groundwater quality or quantity management plans. All conditions on permits shall be based on known, available, and reasonable methods of prevention, control, and treatment.

Table SMP-6: Groundwater Protection Administration Guidance Chart Project

Use Type	Information Required with Application
1. Underground Storage Tanks (USTs) as defined by Chapter 173-360 WAC	A Best Management Practices Plan is required, as is proof of compliance with Department of Ecology regulations and the license number of the installer. A mitigation plan may be required.
2. Commercial, industrial, institutional, or other facilities that store, use, handle, or produce hazardous substances or waste products (as defined by WAC 173-303-101)	A Best Management Practices Plan is required. A mitigation plan may be required.
3. On-site sewage disposal systems serving large developments, or any single use generating sufficient effluent over three thousand five hundred (3,500) gallons per day, require approval of their plans by the Department of Health under Chapter 246-272 WAC or the Department of Ecology under Chapter 173-240 WAC	Proof of compliance with Department of Ecology and/or Snohomish County Health District requirements. A mitigation plan may be required.
4. Petroleum pipelines	Both a Hydrologic Site Evaluation and a Best Management Practices Plan are required. A mitigation plan may be required.
5. Solid waste facilities	Both a Hydrologic Site Evaluation and a Best Management

	Practices Plan are required. A mitigation plan may be required.
6. Land application of sewage sludge from sewage treatment works which combine industrial waste and/or commercial waste with domestic waste or any sewage sludge application exceeding two (2) acres in size	Both a Hydrologic Site Evaluation and a Best Management Practices Plan are required. These studies shall determine the application rate. A mitigation plan may be required.
7. All other development.	Determination of whether the project lies within a public groundwater recharge area or whether any wells are located within 100 feet of the project. If either of these criteria is met, the applicant must show how all applicable regulations, including but not limited to those of the Department of Ecology and/or Snohomish County Health District, are met. A mitigation plan may be required.