

CHAPTER 22.80 CRITICAL AREAS

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22.80.010 Authority.

This chapter is adopted under the authority of Chapter 36.70A RCW (the Growth Management Act), other federal and state environmental regulations, including but not limited to the State Environmental Policy Act, and the State and Federal Endangered Species Acts.

22.80.020 Purpose.

The purpose of this chapter is to:

- A. Protect the public health, safety and welfare by preventing adverse impacts of development;
- B. Preserve and protect critical areas as identified by the Washington State Growth Management Act by regulating development within and adjacent to them;
- C. Mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;
- D. Prevent adverse cumulative impacts to wetlands, streams, shoreline environments, and fish and wildlife habitat;
- E. Protect the public and public resources and facilities from injury, loss of life, property damage or financial loss due to flooding, erosion, landslides, soils subsidence or steep slope failure;
- F. Implement the goals, policies, guidelines and requirements of the city of Monroe comprehensive plan and the Washington State Growth Management Act; and
- G. Establish review procedures for development proposals in and adjacent to wetlands.

22.80.030 Applicability of Other Regulations.

Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, shoreline substantial development permits, HPA permits, Army Corps of Engineers Section 404 permits, NPDES permits).

The applicant is responsible for complying with these requirements, apart from the process established in this chapter.

22.80.040 Maps and Inventories.

The city has prepared a series of maps which approximate boundaries for the following critical areas within the city limits: geologically hazardous areas, wetlands, floodplains and floodways, shorelines, creeks, streams, and natural drainage courses. These maps provide only approximate boundaries of known features and are not adequate substitutes for more detailed maps and/or studies that could identify alternative locations of known features or additional critical area features not illustrated on the map. Copies

of the maps are available for viewing at the Monroe City Hall. The Flood Insurance Rate Maps (FIRM) are available for review at Monroe City Hall; please contact the city engineer.

22.80.050 Applicability, Exemptions, Exceptions, and Allowed Uses.

A. Applicability.

1. The provisions of this chapter shall apply to all lands, all land uses and development activity, and all structures and facilities in the city, whether or not a permit or authorization is required, and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns or leases land within the city of Monroe. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the purpose and requirements of this chapter.
2. The city of Monroe shall not approve any development proposal or otherwise issue any authorization to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first assuring compliance with the requirements of this chapter.
 - a. Development proposals include proposals that require any of the following:
 - i. Building permit;
 - ii. Grading permit;
 - iii. Shoreline substantial development permit;
 - iv. Shoreline conditional use permit;
 - v. Shoreline variance;
 - vi. Right-of-way disturbance permit;
 - vii. Conditional use permit;
 - viii. Variance permit;
 - ix. Subdivision;
 - x. Short subdivision;
 - xi. Binding site plan;
 - xii. Accessory dwelling unit; or
 - xiii. Any subsequently adopted permits or required approvals not expressly exempted from these regulations.
3. Approval of a permit or development proposal pursuant to the provisions of this chapter does not discharge the obligation of the applicant to comply with the provisions of this chapter.

B. Exemptions. The following developments, activities, and associated uses shall be exempt from the provisions of this chapter, provided they are consistent with the provisions of other local, state, and federal laws and requirements:

1. Development and activities occurring in all isolated Category IV wetlands less than four thousand square feet that:
 - a. Are not associated with riparian areas or their buffers;
 - b. Are not associated with shorelines of the state or their associated buffers;
 - c. Are not part of a wetland mosaic;
 - d. Do not score five or more points for habitat function based on the 2014 update to the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication No. 14-06-029, or as revised and approved by Ecology); and
 - e. Do not contain a priority habitat or a priority area for a priority species identified by the Washington Department of Fish and Wildlife, do not contain federally listed species or their critical habitat.

Development and activities occurring in wetlands less than one thousand square feet that meet the above criteria and do not contain federally listed species or their critical habitat are exempt from the buffer provisions contained in this chapter.

2. Emergency activities that threaten public health, safety, welfare, or risk of damage to private property and that require remedial or preventative action in a time frame too short to allow for compliance with the requirements of this chapter.

Emergency actions that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area and/or its buffer. After the emergency, the person or agency undertaking the action shall fully restore and/or

mitigate any impacts to the critical area and buffers resulting from the emergency action in accordance with the approved critical area report and mitigation plan.

3. Single-family residential building permits are exempt from the requirements of this chapter when the development proposal involves:

- a. Structural modification of, addition to or replacement of an existing residential structure or construction of a new residential structure where construction and associated disturbance are clearly equal to or greater than two hundred ten feet from the nearest critical area; or
- b. Structural modification of, addition to, or replacement of an existing residential structure lawfully established prior to the effective date of the ordinance codified in this title that does not meet the building setback or critical area buffer requirements may be approved only if the modification, addition, replacement or related activity is located away from the critical area and does not increase the existing footprint within the critical area buffer or building setback by more than one thousand square feet.

4. Utilities.

a. Operation, maintenance or repair of existing structures, infrastructure improvements, existing utilities, public or private roads, dikes, levees, or drainage systems, including routine vegetation management activities when performed in accordance with approved best management practices, if the activity does not increase risk to life or property as a result of the proposed operation, maintenance or repair.

b. Activities within the Improved Right-of-Way. Replacement, modification, installation or construction of utility facilities, lines, pipes, mains, equipment or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a city-authorized private roadway, except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased storm water, subject to the following:

- i. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the right-of-way improvement, including disturbed areas; and
- ii. Retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance.

c. Minor Utility Projects. Utility projects which have minor or short-term impacts to critical areas, as determined by the zoning administrator in accordance with the criteria below, and which do not significantly impact the functions and values of a critical area(s); provided, that such projects are constructed with best management practices and additional restoration measures are provided.

Minor activities shall not result in the transport of sediment or increased storm water runoff. Such allowed minor utility projects shall meet the following criteria:

- i. There is no practical alternative to the proposed activity with less impacts on critical areas and all attempts have been made to first avoid impacts, minimize impacts, and lastly mitigate unavoidable impacts;
- ii. The activity involves the placement of a utility pole, street sign, anchor, vault, or other small component of a utility facility;
- iii. The activity involves disturbance of an area less than seventy-five square feet;
- iv. The activity will not reduce the existing functions and values of the affected critical areas; and
- v. Unavoidable impacts will be mitigated pursuant to an approved mitigation plan.

5. Activities and uses that do not require construction permits, in continuous existence since at least November 27, 1990, with no expansion of these activities within the critical area or associated buffer.

For the purpose of this subsection, "continuous existence" includes cyclical operations normally associated with horticulture and agricultural activities.

C. Exceptions. The proponent of the activity shall submit a written request for exception from the zoning administrator that describes the proposed activity and exception that applies. Depending on the exemption requested, the zoning administrator (for administrative decisions) or hearing examiner (for reasonable use exceptions) shall review the exception requested to verify that it complies with this chapter and approve or deny the exception.

1. Public Agency or Utility Exception. If the application if this chapter would prohibit a development proposal by a public agency or public utility that is essential to its ability to provide service, the agency or

utility may apply for an exception pursuant to this section. After holding a public hearing pursuant to MMC Chapter 22.84, Permit Processing, the hearing examiner may approve the exception if the hearing examiner finds that:

- a. There is no other feasible alternative to the proposed development with less impact on the critical areas, based on the demonstration by the applicant of the following factors:
 - i. The applicant has considered all possible construction techniques based on available technology that are feasible for the proposed project and eliminated any that would result in unreasonable risk of impact to the critical area; and
 - ii. The applicant has considered all available alignments within the range of potential alignments that meet the project purpose and for which operating rights are available.
 - b. The proposal minimizes and mitigates unavoidable impacts to critical areas and/or critical areas buffers. Any decision by the hearing examiner is final unless appealed.
2. Reasonable Use Exception. If the application of this chapter would deny all reasonable use of the property, development may be allowed which is consistent with the general purpose of this chapter and the public interest; provided, that the hearing examiner, after a public hearing, finds to the extent consistent with the constitutional rights of the applicant:
- a. This chapter would otherwise deny all reasonable use of the property;
 - b. There is no other reasonable use consistent with the underlying zoning of the property that has less impact on the critical area and/or associated buffer;
 - c. The proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the property;
 - d. Any alteration is the minimal necessary to allow for reasonable use of the property;
 - e. The inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant after the effective date of the ordinance codified in this chapter or its predecessor; and
 - f. The applicant may only apply for a reasonable use exception under this subsection if the applicant has also applied for a variance pursuant to MMC Chapter 22.66, Variances.
3. Innovative Development Design. An applicant may request approval of an innovative design that addresses buffer treatment in a manner that deviates from the standards for wetland, stream, fish and wildlife habitat conservation area buffers contained in this chapter under the following circumstances:
- a. Where the applicant is proposing to redevelop a previously developed site on which existing lawfully established structures or impervious surface encroach into the buffers otherwise required by this chapter for wetlands, streams, or fish and wildlife habitat conservation areas, the zoning administrator may reduce the required buffer to the boundary or boundaries of the lawfully established existing structures or impervious surface on the project property; provided, that the zoning administrator finds that:
 - i. Within the reduced buffer area, the applicant will use innovative design to improve the condition of the buffer consistent with the standards for the applicable critical area(s) set forth in this chapter;
 - ii. In addition, the applicant will provide compensatory mitigation (on site, off site, or through mitigation banks) that provides functions and values equivalent to those that would have been provided had the project conformed to the standard buffer set forth in this chapter; and
 - iii. The innovative design will not be materially detrimental to the public health, safety or welfare or injurious to other properties or improvements located outside of the subject property.
 - b. The applicant shall prepare a critical areas study consistent with MMC 22.80.070 demonstrating the innovative development design complies with the standards in this subsection. All applicants for innovative designs are encouraged to consider measures prescribed in guidance documents, such as watershed conservation plans or other similar conservation plans, and low impact storm water management strategies that address wetlands, fish and wildlife habitat conservation areas or buffer protection consistent with this section.
 - c. Where an applicant proposes to reduce the standard wetland, stream, fish and wildlife habitat conservation area buffers set forth in this chapter using innovative development design under this section, the other provisions of this chapter, including provisions regarding buffer reductions or modifications, shall not apply.

D. Activities Allowed in Wetlands. The activities listed below are allowed in wetlands. These activities do not require submission of a critical area report, except where such activities result in a loss of the functions and values of a wetland or wetland buffer. These activities include:

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 Chapter 76.09 RCW and Chapter 222-12 WAC.
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 groundwater 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 groundwater 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 nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All removed plant material shall be taken away from the site and 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. Revegetation 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.
8. Storm water management facilities. A wetland or its buffer can be physically or hydrologically altered to meet the requirements of an LID, runoff treatment or flow control BMP if all of the following criteria are met:
 - a. The wetland is classified as a Category IV or a Category III wetland with a habitat score of three to four points; and
 - b. There will be “no net loss” of functions and values of the wetland; and
 - c. The wetland does not contain a breeding population of any native amphibian species; and
 - d. The hydrologic functions of the wetland can be improved as outlined in questions 3, 4, 5 of Chart 4 and questions 2, 3, 4 of Chart 5 in the “Guide for Selecting Mitigation Sites Using a Watershed Approach,” or the wetland is part of a priority restoration plan that achieves restoration goals identified in a shoreline master program or other local or regional watershed plan; and
 - e. The wetland lies in the natural routing of the runoff, and the discharge follows the natural routing; and
 - f. All regulations regarding storm water and wetland management are followed, including but not limited to local and state wetland and storm water codes, manuals, and permits; and
 - g. Modifications that alter the structure of a wetland or its soils will require permits. Existing functions and values that are lost would have to be compensated/replaced.
9. Sites Subject to Development Agreement. Any proposed fill or alteration of a wetland on a site subject to a development agreement may be approved through a conditional use permit. In addition to the conditional use criteria in MMC Chapter 22.64, Conditional Use Permits, the hearing examiner shall consider the following criteria:
 - a. Mitigation is provided that locates and/or restores a compensatory wetland area on the same site, and the compensatory wetland area provides a higher level of wetland function than existed prior to the fill or alteration; and
 - b. Mitigation establishes buffers with dense, native vegetation to protect the wetland functions and values; and

- c. Assessment is provided demonstrating hydrology will support the created or reestablished wetland; and
- d. Alterations adhere to applicable city, state, and federal requirements and permitting including, but not limited to, U.S. Army Corps of Engineers and the Department of Ecology.
- e. A ten-year monitoring period is established, in accordance with MMC 22.80.080, Protection and Mitigation Measures, to ensure mitigation meets the design performance standards established in the approved mitigation plan.

22.80.060 Nonconforming Uses.

- A. Purpose. The purpose of this section establishes the terms and conditions for continuing nonconforming uses, structures and lots which are lawfully established prior to the effective date of the ordinance codified in this title.
- B. Standards.
 - 1. A legally established nonconforming lot, use or structure shall be deemed a legal nonconforming lot, use or structure and may be continued, transferred or conveyed and/or used as if conforming.
 - 2. The burden of establishing that any nonconforming lot, use or structure lawfully existed as of the effective date of the ordinance codified in this chapter shall, in all cases, rest with the owner and not with the city.
- C. Maintenance and Repair of Nonconforming Structures. Normal maintenance and incidental repair of legal nonconforming structures shall be permitted; provided, that it complies with all the sections of this chapter and other pertinent chapters of this code.
- D. Reconstruction. Reconstruction, restoration or repair of a legal nonconforming structure damaged by fire, flood, earthquake or other disasters shall be permitted; provided, that such reconstruction shall not result in the expansion of the nonconforming structure.
- E. Expansion of Nonconforming Use or Structure. No legal nonconforming use or structure may be expanded, enlarged, or extended in any way (including extension of hours of operation) unless such modification is in full compliance with this chapter or the terms and conditions of approved permits pursuant to this chapter.
- F. Discontinuance of Nonconforming Use. All legal nonconforming uses shall be encouraged to convert to a conforming use whenever possible. Conformance shall be required when:
 - 1. The use has changed;
 - 2. The structure(s) in which the use is conducted has moved; or
 - 3. The use is terminated or discontinued for more than two years, or the structure(s) which houses the use is vacated for more than two years.

22.80.070 Critical Areas Studies.

- A. Studies Required. When sufficient information to evaluate a proposal is not available, the zoning administrator or their designee shall notify the applicant that a critical areas report is required. The city may hire an independent qualified professional to verify that a critical areas report is necessary and may be used to review the subsequent report.

Critical areas reports shall be written by a qualified professional, as defined in the definitions section of this chapter. A critical areas report shall include a site analysis, a discussion of potential impacts, and specific mitigation measures designed to mitigate potential unavoidable impacts. A monitoring program may be required to evaluate the effectiveness of mitigating measures. These studies may be part of an expanded environmental checklist or included in an environmental impact statement.

- B. Timing and Use of Studies. When an applicant submits an application for any development proposal, it shall indicate whether any critical areas or buffers are located on or adjacent to the site. If a critical area report is required, the city may retain consultants, at the applicant's expense, to assist in review of studies that are outside the range of staff expertise. The presence of critical areas may require additional time for review.

- C. General Critical Areas Report Requirements. A critical areas report shall have three components: (a) a site analysis, (b) an impact analysis, and (c) proposed mitigation measures. More or less detail may be required for each component depending on the size of the project, severity, and potential impacts. The

zoning administrator may waive the requirement of any component when adequate information is otherwise available. All studies shall contain the following information unless it is already available in the permit application:

1. Map of the project area at a one-to-twenty or larger scale including:
 - a. Reference streets and property lines;
 - b. Existing and proposed easements, rights-of-way, and structures;
 - c. Contour intervals, as determined by the zoning administrator;
 - d. Hydrology. Show surface water features both on and adjacent to the site; show any water movement into, through, and off the project area; show stream and wetlands classifications; show seeps, springs, and saturated soil zones; and label wetlands not found on the city inventory maps as uninventoried; and
 - e. Location of buffer and building setback lines (if required or proposed).
 2. Written report detailing:
 - a. How, when, and by whom the report was performed (including methodology and techniques);
 - b. Weather conditions during and prior to any field studies if relevant to conclusions and recommendations;
 - c. Description of the project site and its existing condition;
 - d. The total acreage of the site in critical area(s) and associated buffers;
 - e. The proposed action and potential environmental impact of the proposed project to the critical area(s); and
 - f. The mitigation measures proposed to avoid or lessen the project impacts (during construction and permanently). When alteration to the critical area or its buffer is proposed, include a mitigation plan as specified by this chapter.
- D. Additional Wetland Report Requirements. In addition, for wetlands, reports shall include the following:
1. On the map:
 - a. The edge of the wetland as flagged and surveyed in the field using the approved federal wetland delineation manual and applicable regional supplements, as required by RCW 36.70A.175;
 - b. The edge of the one-hundred-year floodplain, if appropriate;
 - c. The location of any existing or proposed utility easements, rights-of-way, and trail corridors;
 - d. The location of any proposed wetland area(s) to be created through mitigation measures; and
 - e. The location of any proposed wetland alteration or fill.
 2. In the report:
 - a. Description of the wetland by classification and general condition of wetland;
 - b. Description of vegetation species and community types present in the wetland and surrounding buffer;
 - c. Description of soil types within the wetland and the surrounding buffer using the USDA Soil Conservation Service soil classification system;
 - d. Description of hydrologic regime and findings;
 - e. Description of habitat features present and determination of actual use of the wetland by any endangered, threatened, rare, sensitive, or unique species of plants or wildlife as listed by the federal government or state of Washington;
 - f. Description of existing wetland and buffer functions and values;
 - g. Description of any proposed alteration to the wetland or its buffer including, but not limited to, filling, dredging, modification for storm water detention, clearing, grading, restoring, enhancing, grazing or other physical activities that change the existing vegetation, hydrology, soils or habitat;
 - h. If applicable, description of potential impacts to wetland functions and values and description of any proposed mitigation measures; and
 - i. Description of local, state, and federal regulations and permit requirements.
- E. Additional Stream Report Requirements. In addition, for streams (including drainage ditches), reports shall include the following information:
1. On the map:
 - a. The location of the ordinary high water mark;
 - b. The toe of any slope twenty-five percent or greater within twenty-five feet of the ordinary high water mark;

- c. The location of any proposed or existing stream crossing, utility easements, rights-of-way and trails; and
 - d. The edge of the existing one-hundred-year floodplain and, if applicable, the edge of the floodway.
2. In the report:
- a. Characterization of riparian (streamside) vegetation species, composition, and habitat function;
 - b. Description of the soil types adjacent to and underlying the stream, using the Soil Conservation Service soil classification system;
 - c. Determination of the presence or absence of fish, and reference sources; and
 - d. When stream alteration is proposed, include stream width and flow, stability of the channel, type of substratum, discussions of infiltration capacity and biofiltration as compared to the stream prior to alteration, presence of hydrologically linked wetlands, analysis of fish and wildlife habitat, and proposed floodplain limits.
- F. Additional Flood Hazard Report Requirements. In addition, for areas in flood hazards, reports shall include the following information:
1. On the map:
- a. The location of all floodplains in the development;
 - b. The location of the floodway where it has been delineated on the most recent Flood Insurance Rate Map (FIRM);
 - c. Where basin plans have been completed and adopted, the location of the floodplain and floodways shall be based upon the hydrologic and hydraulic analysis;
 - d. Identification of all proposed structures and grading within the floodplain.
2. In the report:
- a. Identify how the boundaries of the floodways and floodplain were determined;
 - b. Record the elevation of National Geodetic Vertical Datum (NGVD) of the lowest floor of all new or substantially improved structures proposed in the existing floodplain.
- G. Additional Geologically Hazardous Area Report Requirements. For geologically hazardous areas, reports shall include the following information:
1. On the map:
- a. All geologically hazardous areas within or adjacent to the project area or that have potential to be affected by the proposal;
 - b. The top and toe of slope (Note: These should be located and flagged in the field subject to city staff review);
 - c. The location of any existing or proposed trails or utility corridors; and
 - d. All drainage plans for discharge of storm water runoff from developed areas.
2. In the report:
- a. A geological description of the site;
 - b. A discussion of any evidence of existing instability, significant erosion or seepage on the slope;
 - c. A discussion of the depth of weathered or loosened soil on the site and the nature of the weathered and underlying basement soils;
 - d. An estimate of load capacity, including surface water and groundwater conditions, public and private sewage disposal system, fill and excavations, and all structural development;
 - e. Recommendations for building limitations, structural foundations, and an estimate of foundation settlement;
 - f. A complete discussion of the potential impacts of seismic activity on the site;
 - g. Recommendations for management of storm water for any development above the top of slope;
 - h. A description of the nature and extent of any colluvium or slope debris near the toe of slope in the vicinity of any proposed development; and
 - i. Recommendations for appropriate building setbacks, grading restrictions, and vegetation management and erosion control for any proposed development in the vicinity of the geologically hazardous areas.
- H. Additional Fish and Wildlife Habitat Conservation Habitat Report Requirements.
1. In the Report. An assessment of habitats including the following site and proposal related information:

- a. A detailed description of vegetation on and adjacent to the project area;
- b. Identification of any species of local importance; priority species; or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
- c. A discussion of any federal, state, or local species management recommendations, including the state Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitat located on or adjacent to the project area;
- d. A detailed discussion of the potential impacts on habitat by the project, including potential impacts to water quality;
- e. A discussion of measures, including avoidance, minimization, and lastly mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with the mitigation sequencing; and
- f. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs.

22.80.080 Protection and Mitigation Measures.

The city of Monroe will use the following methods and mechanisms to accomplish the purposes of the critical areas regulations. This section shall be applied to all approved development applications and alterations when action is taken to implement the proposed action.

A. Native Growth Protection Easements. A native growth protection easement (NGPE) is an easement granted to the city for the protection of a critical area and/or its associated buffer. NGPEs shall be required as specified in these rules and shall be recorded on all subdivisions, short subdivisions, and final development permits and all documents of title and with the county recorder at the applicant's expense. The required language is as follows:

Dedication of a Native Growth Protection Easement (NGPE) conveys to the public a beneficial interest in the land within the easement. This interest includes the preservation of existing vegetation for all purposes that benefit the public health, safety and welfare, including control of surface water and erosion, maintenance of slope stability, visual and aural buffering, and protection of plant and animal habitat. The NGPE imposes upon all present and future owners and occupiers of land subject to the easement the obligation, enforceable on behalf of the public of the city of Monroe, to leave undisturbed all trees and other vegetation within the easement. The vegetation in the easement may not be cut, pruned, covered by fill, removed, or damaged without express permission from the city of Monroe, which permission must be obtained in writing.

Before beginning and during the course of any grading, building construction or other development activity on a lot or development site subject to the NGPE, the common boundary between the easement and the area of development activity must be fenced or otherwise marked to the satisfaction of the city of Monroe.

B. Critical Area Tracts. Critical area tracts are legally created nonbuilding lots containing critical areas and their buffers that shall remain undeveloped pursuant to the critical areas regulations. Separate critical area tracts are an integral part of the lot in which they are created; are not intended for sale, lease or transfer; and shall be incorporated in the area of the parent lot for purposes of subdivision and method of allocation and minimum lot size. The following development proposals shall identify such areas as separate tracts:

1. Subdivisions
2. Short subdivisions

Responsibility for maintaining tracts shall be held by a homeowners association, adjacent lot owners, the permit applicant or designee, or other appropriate entity as approved by the city of Monroe.

The following note shall appear on the face of all subdivisions and short subdivisions and shall be recorded on the title for all affected lots:

NOTE: All lots adjoining separate tracts identified as Native Growth Protection Easements are jointly and severally responsible for the maintenance and protection of the tracts. Maintenance includes

ensuring that no alteration occurs within the separate tracts and that vegetation remains undisturbed unless the express written permission of the city of Monroe has been received.

C. Building Setback Line (BSBL). Unless otherwise specified, a minimum BSBL of ten feet is required from the edge of any separate tract, buffer or NGPE, whichever is greatest.

D. Marking and/or Fencing.

1. Temporary Markers. The outer perimeter of the wetland or buffer and the limits of these areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field so no unauthorized intrusion will occur and is subject to inspection by the zoning administrator or their designee prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until directed by the zoning administrator, or until permanent signs and/or fencing, if required, are in place.

2. Permanent Marking and/or Fencing. Following the implementation of an approved development plan or alteration, the outer perimeter of the critical area or buffer that is not disturbed shall be permanently identified. This identification shall include permanent wood or metal signs on treated wood or metal posts. Signs shall be worded as follows:

Protection of this natural area is in your care.

Alteration or disturbance is prohibited. Please call the city of Monroe for more information.

The city shall approve sign locations during review of the development proposal. Along residential boundaries, the signs shall be at least four by six inches in size and spaced one per lot or every one hundred fifty feet for lots whose boundaries exceed one hundred fifty feet. At road endings, crossings, and other areas where public access to the critical area is allowed, the sign shall be a minimum of eighteen by twenty-four inches in size and spaced one every one hundred fifty feet.

Domestic grazing animals shall be excluded from stream, wetlands, and associated buffers by permanent fencing when necessary unless otherwise approved by the city.

The fencing may provide limited access to the stream or wetland for stock watering purposes, but shall minimize bank disturbance.

The city may require permanent fencing where there is a substantial likelihood of the presence of domestic grazing animals with the development proposal. The city shall also require such fencing when, subsequent to approval of the development proposal, domestic grazing animals are in fact introduced. The city may use any appropriate enforcement actions including, but not limited to, fines, abatement, or permit denial to ensure compliance.

E. Monitoring. The city will require monitoring in development proposals where alteration of critical areas or their buffers are approved. Such monitoring shall be an element of the required mitigation plan and shall document and track impacts of development on the functions and values of critical areas, and the success and failure of mitigation requirements. Monitoring may include, but is not limited to:

1. Establishing vegetation transects or plots to track changes in plant species composition over time;
2. Using aerial or other photography to evaluate vegetation community response;
3. Sampling surface waters and groundwaters to determine pollutant loading;
4. Measuring base flow rates and storm water runoff to model and evaluate water quantity predictions;
5. Measuring sedimentation rates; and
6. Sampling fish and wildlife populations to determine habitat utilization, species abundance, and diversity.

The property owner will be required to submit monitoring data and reports to the city on an annual basis or other schedule as required by the zoning administrator. Monitoring shall continue for a period of five years or for a period necessary to establish that the mitigation performance standards have been met.

When monitoring reveals a significant deviation from predicted impacts or a failure of mitigation measures, the applicant shall be responsible for appropriate corrective action. Contingency plans developed as part of the original mitigation plan shall apply, but may be modified to address a specific deviation or failure. Contingency plan measures shall be subject to the monitoring requirement to the same extent as the original mitigation measures.

As a condition of approval for any project for which monitoring is required pursuant to this section, the applicant shall be required to record the monitoring requirements on a form approved by the city of Monroe so that subsequent purchasers of the property subject to the monitoring requirements are bound by and aware of the requirements.

F. Notice on Title.

1. In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any real property containing a critical area or buffer on which a development proposal is submitted shall file a notice with the recordings division of Snohomish County. The notice shall state the presence of the critical area or buffer on the property, of the application of this title to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist. The notice shall run with the property.
2. This notice on title shall not be required for a development proposal by a public agency or public or private utility:
 - a. Within a recorded easement or right-of-way;
 - b. Where the agency or utility has been adjudicated the right to an easement or right-of-way; or
 - c. On the site of a permanent public facility.
3. The applicant shall submit proof that the notice has been filed for public record before the city of Monroe approves any development proposal for the property or, in the case of subdivisions and short subdivisions, at or before recording.

G. Fees. The applicant is responsible for the initiation, preparation, submission, and expense of all required reports, assessment(s), studies, plans, reconnaissance(s), peer review by qualified consultants, and other work prepared in support of, or necessary for, the city of Monroe critical areas review processing.

H. Performance Standards. Subdivisions and short subdivisions of land in critical areas and associated buffers are subject to the following:

1. Land that is wholly within a critical area or associated buffer may not be subdivided.
 2. Land that is partially within a critical area or associated buffer area may be subdivided; provided, that an accessible and contiguous portion of each new lot is:
 - a. Located outside the critical area and buffer; and
 - b. Large enough to accommodate the intended use.
 3. Accessory roads and utilities serving the proposed subdivision may be permitted within the critical area and associated buffer only if the zoning administrator determines that no other feasible alternative exists and when consistent with this chapter.
- I. Limited Density Transfer – Density Credit of Critical Areas.
1. An owner of property containing a critical area may be permitted to transfer the density attributed to the critical area to another, not containing a critical area(s) or its buffer, portion of the same site or property, subject to the limitations of this section.
 2. Up to one hundred percent of the density that could be achieved on the critical area and buffer portion of the site can be transferred to a portion of the site not containing a critical area, subject to:
 - a. The density limitation of the underlying zoning classification;
 - b. The minimum lot size of the underlying zoning classification may be reduced by thirty percent in order to accommodate the transfer in densities;
 - c. All other applicable standards established in Title 22 MMC, including, but not limited to, zoning lot area, lot coverage, and setback requirements, shall be met; and
 - d. The area to which density is transferred shall not be constrained by other critical areas regulation.

22.80.090 Wetland Development Standards.

A. General Standards. Activities and uses shall be prohibited from wetlands and wetland buffers, except as provided by this chapter. The following activities may only be permitted in a wetland or wetland buffer if the applicant can demonstrate that the activity will result in no net loss of the functions and values of the wetland and other critical areas:

1. Category I Wetlands. Activities and uses shall be prohibited from Category I wetlands, except as provided in the public agency and utility exception, reasonable use exception, and variance sections of this chapter.

2. Category II and III Wetlands. The following standards shall apply to Category II and III wetlands:
 - a. Water-dependent activities as provided for under the city's shoreline master program may be allowed where there are no practicable alternatives that would have a less adverse impact on the wetland and other critical areas.
 - b. Where non-water-dependent activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited, unless the applicant demonstrates that:
 - i. The basic project purpose cannot reasonably be accommodated on another site in the general region and successfully avoid, or result in less adverse impacts on, a wetland or its buffer;
 - ii. There are no feasible alternative designs of the project as proposed that would avoid, or result in less of an adverse impact on, a wetland or its buffer, such as a reduction in the size, scope, configuration, or density of the project.
3. Category IV Wetlands. Activities and uses that result in unavoidable and necessary impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical areas report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objective.
4. Property Access. Any wetland may be altered with the least possible impact and to the minimum extent necessary to gain access to developable property when no other alternative access exists. Alteration proposals shall be subject to city review and shall require compensation pursuant to a mitigation plan (see MMC 22.80.080, Protection and Mitigation Measures).
5. Storm Water Management. Storm water management facilities are not allowed in wetlands. Storm water management facilities, limited to storm water dispersion outfall and bioswales, may be allowed within the outer twenty-five percent of the buffer of Category III and IV wetlands only; provided, that:
 - a. No other location is feasible; and
 - b. The location of such facilities will not degrade the functions and values of the wetland.
6. Trails. Public and private trails may be allowed within all buffers where it can be demonstrated in a critical areas report that the wetland and wetland buffer functions and values will not be degraded by trail construction or use. Trail planning, construction, and maintenance shall adhere to the following criteria:
 - a. Trail alignment shall follow a path beyond a distance from the wetland edge equal to seventy-five percent of the buffer width except as needed to access viewing platforms. Trails may be placed on existing levees or railroad grades within these limits;
 - b. Trails shall be constructed of pervious materials. The trail surface shall meet all other requirements, including water quality standards set forth in the storm water manual adopted in MMC 15.01.025;
 - c. Trail alignment shall avoid trees in excess of six inches in diameter of any tree trunk at a height of four and one-half feet above the ground on the upslope side of the tree. Unavoidable impacts to trees shall be mitigated at a three to one replacement ratio;
 - d. Trail construction and maintenance shall follow the U.S. Forest Service Trails Management Handbook (FSH 2309.18, June 1987) and Standard Specifications for Construction of Trails (EM-7720-102, June 1984 or as revised);
 - e. Access trails to viewing platforms within the wetland may be provided. Trail access and platforms shall be aligned and constructed to minimize disturbance to valuable functions of the wetland or its buffer and still provide enjoyment of the resource;
 - f. Buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and
 - g. Equestrian trails shall provide measures to assure that runoff from the trail does not directly discharge to the wetland.
7. Utilities. Public and private utility corridors may be allowed within wetland buffers for Category II, III, and IV wetlands when no lesser impacting alternative alignment is feasible, and wetland and wetland buffer functions and values will not be degraded. Utilities, whenever possible, shall be constructed in existing, improved roads, drivable surface or shoulder, subject to compliance with road and

maintenance BMPs, or within an existing utility corridor. Otherwise, corridor alignment, construction, restoration and maintenance shall adhere to the following criteria:

- a. Corridor alignment shall follow a path beyond a distance from the wetland edge equal to seventy-five percent of the buffer width, except when crossing a Category IV wetland and its buffer;
- b. Corridor construction and maintenance shall maintain and protect the hydrologic and hydraulic functions of the wetland and the buffer;
- c. Corridors shall be fully revegetated with appropriate native vegetation upon completion of construction; and
- d. Utilities requiring maintenance roads shall be prohibited in wetland buffers unless the following criteria are met:
 - i. There are no lesser impacting alternatives;
 - ii. Any required maintenance roads shall be no greater than fifteen feet wide. Roads shall closely approximate the location of the utility to minimize disturbances; and
 - iii. The maintenance road shall be constructed of pervious materials and designed to maintain and protect the hydrologic functions of the wetland and its buffer.

B. Best Available Science. Any approval of alterations of impacts to a wetland or its buffer shall be supported by the best available science.

C. Native Growth Protection Easement/Critical Area Tract. As part of the implementation of approved development applications and alterations, wetlands and their buffers that remain undeveloped pursuant to the critical areas regulations, in accordance with MMC 22.80.080, Protection and Mitigation Measures, shall be designated as native growth protection easements (NGPE). Any wetland and its associated buffer created as compensation for approved alterations shall also be designated as an NGPE. When the subject development is a formal subdivision or short subdivision, wetlands and their buffers shall be placed in a critical areas tract instead of an NGPE, as described in MMC 22.80.080, Protection and Mitigation Measures.

D. 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 No. 14-06-029, or as revised and approved by Ecology). The adjacent land use intensity is assumed to be high.

Wetland buffers shall not include areas that are functionally and effectively disconnected from the wetland by a paved road or other substantially developed surface. This includes parking lots, walkways, and lawns that are of sufficient width and characteristic use such that buffer functions are not provided.

1. For wetlands that score five points or more for habitat function, the buffers in Table 22.80.090(D)(1) can be used if both of the following criteria are met:

- a. A relatively undisturbed, vegetated corridor at least one hundred 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 website 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 Table 22.80.090(D)(1) may be used with the required measures in Table 22.80.090(D)(2) alone.

- b. The measures in Table 22.80.090(D)(2) are implemented, where applicable, to minimize the impacts of the adjacent land uses.

2. For wetlands that score three to four habitat points, only the measures in Table 22.80.090(D)(2) are required for the use of Table 22.80.090(D)(1).

3. If an applicant chooses not to apply the mitigation measures in Table 22.80.090(D)(2), or is unable to provide a protected corridor where available, then Table 22.80.090(D)(3) must be used.

4. The buffer widths in Tables 22.80.090(D)(1) and 22.80.090(D)(3) 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.

**Table 22.80.090(D)(1):
Wetland Buffer Requirements for Western Washington
if Table 22.80.090(D)(2) Is Implemented and Corridor Provided**

Wetland Category	Buffer width (in feet) based on habitat score			
	3 – 4	5	6 – 7	8 – 9
Category I: Based on total score	75	105	165	225
Category I: Bogs and wetlands of high conservation value	190			225
Category I: Forested	75	105	165	225
Category II: Based on score	75	105	165	225
Category III (all)	60	105	165	225
Category IV (all)	40			

**Table 22.80.090(D)(2):
Required Measures to Minimize Impacts to Wetlands
(measures are required if applicable to a specific proposal)**

Disturbance	Required Measures to Minimize Impacts
Lights	<ul style="list-style-type: none"> • Direct lights away from wetland
Noise	<ul style="list-style-type: none"> • Locate activity that generates noise away from wetland • If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source • For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10-ft. heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic runoff	<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 wetland • Apply integrated pest management
Storm water runoff	<ul style="list-style-type: none"> • Retrofit storm water detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns that directly enters the buffer • Use low impact development techniques (for more information refer to Chapter 15.01 MMC)
Change in water regime	<ul style="list-style-type: none"> • Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	<ul style="list-style-type: none"> • Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion • Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	<ul style="list-style-type: none"> • Use best management practices to control dust

**Table 22.80.090(D)(3):
Wetland Buffer Requirements for Western Washington
if Table 22.80.090(D)(2) Is Not Implemented or Corridor Not Provided**

Wetland Category	Buffer width (in feet) based on habitat score			
	3 – 4	5	6 – 7	8 – 9
Category I: Based on total score	100	140	220	300
Category I: Bogs and wetlands of high conservation value	250			300
Category I: Forested	100	140	220	300
Category II: Based on score	100	140	220	300
Category III (all)	80	140	220	300
Category IV (all)	50			

E. Additional Buffers. The city may require increased buffer sizes as necessary to protect wetlands when either the wetland is particularly sensitive to disturbance or the development poses unusual impacts. Examples of circumstances that may require buffers beyond minimum requirements include, but are not limited to:

1. Unclassified uses;
2. The wetland is in a critical drainage basin;
3. The wetland is a critical fish habitat for spawning or rearing as determined by the Washington Department of Fish and Wildlife;
4. The wetland serves an important groundwater recharge area as determined by a groundwater management plan;
5. The wetland acts as habitat for endangered, threatened, rare, sensitive, or monitor species;
6. The land adjacent to the wetland and its associated buffer and included in the development proposal is classified as an erosion hazard area; or
7. A trail or utility corridor in excess of ten percent of the buffer width is proposed for inclusion in the buffer.

F. Buffer Averaging. The city will consider the allowance of wetland buffer averaging only when the buffer area width after averaging will not adversely impact the critical area and/or buffer functions and values. At a minimum, any proposed buffer averaging must also meet the following criteria:

1. The buffer area after averaging is no less than that which would be contained within the standard buffer; and
2. The buffer width shall not be reduced by more than twenty-five percent at any one point as a result of the buffer averaging.

G. Additional Wetland Mitigation Requirements. No net loss of wetland functions and values shall occur as a result of the overall project. If a wetland alteration is allowed, then the associated impacts will be considered unavoidable and the following mitigation measures to minimize and reduce wetland impacts shall be required, in addition to the requirements in MMC 22.80.080, Protection and Mitigation Measures.

1. Restoration/rehabilitation is required when a wetland (or stream) or its buffers has been altered on the site in violation of city regulations prior to development approval and as a consequence its functions and values have been degraded. Restoration is also required when the alteration occurs in violation of city regulations during the construction of an approved development proposal. At a minimum, all impacted areas shall be restored to their previous condition pursuant to an approved mitigation plan.
2. Restoration/rehabilitation is required when a wetland (or stream) or its buffers will be temporarily altered during the construction of an approved development proposal. At a minimum, all impacted areas shall be restored to their previous condition pursuant to an approved mitigation plan.

3. Compensation. The overall aim of compensation is no net loss of wetland and/or buffer functions on a development site. Compensation includes replacement or enhancement of wetlands and/or buffer (stream) depending on the scope of the approved alteration and what is needed to maintain or improve wetland and/or buffer functions. Compensation for approved wetland and/or buffer alterations shall meet the following minimum performance standards and shall occur pursuant to an approved mitigation plan.

4. Mitigation shall achieve equivalent or greater biological functions. Mitigation plans shall be consistent with the State Department of Ecology Wetland Mitigation in Washington State, Parts 1 and 2 (Publications No. 06-06-011a and b, 2006), as revised.

a. Preference of Mitigation Actions. Mitigation actions that require compensation shall occur in the following order of preference:

- i. Restoring wetlands on upland sites that were formerly wetlands.
- ii. Creating wetlands on disturbed upland sites such as those with vegetation cover consisting primarily of exotic introduced species.
- iii. Enhancing significantly degraded wetlands only after a minimum one-to-one replacement ratio has been met.

b. On Site and In-Kind. Unless otherwise approved, all wetland impacts shall be compensated for through restoration or creation of replacement wetlands that are in-kind, on site, and of similar or better wetland category. Mitigation shall be timed prior to or concurrent with the approved alteration and shall have a high probability of success. The following ratios shall apply to wetland restoration and creation for mitigation:

**Table 22.80.090(G)(1):
Wetland Mitigation Replacement Ratios**

Category and Type of Wetland	Creation or Reestablishment	Rehabilitation	Enhancement
I (Bog and wetlands of high conservation value)	Not considered possible	Case by case	Case by case
I (Mature forested)	6:1	12:1	24:1
I (Based on functions)	4:1	8:1	16:1
II	3:1	6:1	12:1
III	2:1	4:1	8:1
IV	1.5:1	3:1	6:1

c. Off Site and In-Kind. The city may consider and approve off-site compensation where the applicant can demonstrate that equivalent or greater biological and hydrological functions and values will be achieved. The compensation may include restoration, creation, or enhancement of wetland or streams so long as the project is within the same subdrainage basin. The compensation formulas required in subsection (G)(4)(c) of this section shall apply for off-site compensation as well.

d. Increased Replacement Ratios. The zoning administrator may increase the ratios under the following circumstances:

- i. Uncertainty exists as to the probable success of the proposed restoration or creation due to an unproven methodology or proponent; or
- ii. A significant period will elapse between impact and replication of wetland functions; or
- iii. The impact was unauthorized.

5. Decreased Replacement Ratios. The city may decrease the ratios required in subsection (G)(4)(c) of this section when all the following criteria are met:

- a. A minimum replacement ratio of one to one will be maintained;
- b. Documentation by a qualified wetlands specialist demonstrates that the proposed mitigation actions have a very high rate of success;

- c. Documentation by a qualified wetlands specialist demonstrates that the proposed mitigation actions will provide functions and values that are significantly greater than the wetland being impacted; and
 - d. The proposed mitigation actions are conducted in advance of the impact and have been shown to be successful.
6. Credit/Debit Method. To more fully protect functions and values, and as an alternative to the mitigation ratios found in the joint guidance “Wetland Mitigation in Washington State Parts I and II” (Ecology Publication No. 06-06-011a and b, Olympia, WA, March, 2006), the zoning administrator may allow mitigation based on the “credit/debit” method developed by the Department of Ecology in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Final Report” (Ecology Publication No. 10-06-011, Olympia, WA, March 2012), or as revised.
7. Wetland Enhancement as Mitigation.
- a. Impacts to wetlands may be mitigated by enhancement of existing significantly degraded wetlands only after a one-to-one minimum acreage replacement ratio has been satisfied. Applicants proposing to enhance wetlands must produce a critical areas report that identifies how enhancement will increase the functions and values of the degraded wetland and how this increase will adequately mitigate for the loss of wetland function at the impact site.
 - b. At a minimum, enhancement acreage shall be four times the acreage required for creation acreage under subsection (G)(4)(c) of this section. The ratios shall be greater than four times the required acreage when the enhancement proposal would result in minimal gain in the performance of wetland functions currently provided in the wetland.
 - c. Mitigation Plans for Alterations to Wetlands and Wetland Buffers. Mitigation plans shall be consistent with the State Department of Ecology Wetland Mitigation in Washington State, Parts 1 and 2 (Publications No. 06-06-011a and b, 2006), or as revised. At a minimum, the following components shall be included in a complete mitigation plan:
 - i. Baseline Information. Provide existing conditions information for both the impacted critical area and the proposed mitigation site as described in MMC 22.80.070(C), General Critical Area Report Requirements, and MMC 22.80.070(D), Additional Wetland Report Requirements.
 - ii. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and include:
 - (1) A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria, identification of compensation goals, identification of resource functions, and dates for beginning and completing site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area; and
 - (2) A review of the best available science supporting the proposed mitigation.
 - iii. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this chapter have been met. They may include water quality standards, species richness and diversity targets, habitat diversity indices, or other ecological, geological, or hydrological criteria.
 - iv. Detailed Construction Plan. These are the written specifications and descriptions of mitigation techniques. This plan should include the proposed construction sequencing, grading and excavation details, erosion and sedimentation control features, a native planting plan, and detailed site diagrams and any other drawings appropriate to show construction techniques or anticipated final outcome.
 - v. Monitoring and/or Evaluation Program. The mitigation plan shall include a program for monitoring construction of the compensation project, and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring, and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a minimum of five years, ten years when establishing woody vegetation, or a period necessary to establish that performance standards have been met.

- vi. Contingency Plan. This section identifies potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates projected performance standards have not been met.
8. Wetland Mitigation Banks. An alternative to on-site permittee-responsible mitigation involves use of wetland mitigation banks.
- a. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:
 - i. The bank is certified under state rules (Chapter 173-700 WAC);
 - ii. The city determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and
 - iii. The proposed use of credits is consistent with the terms and conditions of the certified bank instrument.
 - b. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the certified bank instrument.
 - c. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the certified bank instrument.

22.80.100 Stream Development Standards.

A. General Standards. Activities may only be permitted in a stream or stream buffer if the applicant can show that the proposed activity will not degrade the functions and values of the stream, stream buffer, or other critical area.

1. Type 1, 2, and 3 Streams. Activities and uses shall be prohibited in Type 1, 2, and 3 streams except as provided for in the public agency and utility exception, reasonable use exception, and variance sections of this chapter (see MMC 22.80.050, Applicability, Exemptions, and Exceptions).

2. Type 4 and 5 Streams. Activities and uses that result in unavoidable and necessary impacts may be permitted in Type 4 and 5 streams and buffers in accordance with an approved critical areas report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives.

3. Stream Crossings. Stream crossings shall be minimized, but when necessary they shall conform to the following standards as well as other applicable laws (see the state Department of Fish and Wildlife, or Ecology).

- a. The stream crossing is the only reasonable alternative that has the least impact;
- b. It has been shown in the critical areas report that the proposed crossing will not decrease the stream and associated buffer functions and values;
- c. All stream crossings using culverts shall use super span or oversized culverts with appropriate fish enhancement measures. Culverts shall not obstruct fish passage;
- d. All stream crossings shall be constructed during the summer low flow period between June 15th and September 15th or as specified by the state Department of Fish and Wildlife in the hydraulic project approval;
- e. Stream crossings shall not occur through salmonid spawning areas unless no other feasible crossing site exists;
- f. Bridge piers or abutments shall not be placed in either the floodway or between the ordinary high water marks unless no other feasible alternative placement exists;
- g. Stream crossings shall not diminish the flood-carrying capacity of the stream;
- h. Stream crossings shall provide for maintenance of culverts and bridges; and
- i. Stream crossings shall be minimized by serving multiple properties whenever possible.

4. Relocations. Type 4 streams beyond one-quarter mile of a stream with salmonids and Type 5 streams may be relocated with appropriate floodplain protection measures under the following conditions:

- a. Stream and buffer functions in the relocated stream section must be equal to or greater than the functions and values provided by the stream and buffer prior to relocation;
- b. The equivalent base flood storage volume shall be maintained;
- c. There shall be no impact to local groundwater;
- d. There shall be no increase in water velocity;

- e. There is no interbasin transfer of water;
- f. The relocation shall occur on-site and shall not result in additional encumbrances on neighboring properties unless necessary easements and waivers are obtained from affected property owners;
- g. The alteration conforms to other applicable laws or rules, including erosion control in accordance with the city of Monroe public works design and construction standards;
- h. The required mitigation plan has been reviewed and approved by the city of Monroe; and
- i. The studies required in the critical areas regulations section of these regulations shall be submitted and approved.

5. Trails. The criteria for alignment, construction, and maintenance of trails within wetlands and their buffers shall apply to trails within stream buffers. The criteria for stream crossings shall also apply.

6. Utilities. The criteria for alignment, construction, and maintenance within the wetland buffers shall apply to utility corridors within stream buffers. In addition, corridors shall not be aligned parallel with any stream channel unless the corridor is outside the buffer, and crossings shall be minimized. Crossings shall be contained within the existing footprint of an existing road or utility crossing where possible. Otherwise, crossings shall be at an angle greater than sixty degrees to the centerline of the channel. The criteria for stream crossing shall also apply.

7. Floodway-Dependent Structures. Floodway-dependent structures or installations may be permitted within streams if allowed or approved by other ordinances or other agencies with jurisdiction.

8. Stream Channel Stabilization. Stream bank stabilization shall only be allowed when it is shown, through a stream bank stability assessment conducted by a qualified fluvial geomorphologist or hydraulic engineer, that such stabilization is required for public safety reasons, that no other less intrusive actions are possible, and that the stabilization will not degrade in-stream or downstream channel stability. Stream bank stabilization shall conform to the Integrated Streambank Protection Guidelines developed by the Washington State Department of Fish and Wildlife, 2002 or as revised.

B. Best Available Science. Any approval of alterations of impacts to a stream or its buffers shall be supported by the best available science.

C. Native Growth Protection Easement/Critical Areas Tract. As part of the implementation of approved development applications and alterations, streams and their buffers shall remain undeveloped pursuant to the critical areas regulations, in accordance with MMC 22.80.080, Protection and Mitigation Measures, and shall be designated as native growth protection easements (NGPE). These include Type 1, 2, 3, and 4 streams when located within one-quarter mile of a stream with salmonids, unless the city has waived the NGPE requirements (see below), or where the alteration section expressly exempts Type 5 streams and Type 4 streams, when beyond one-quarter mile of a stream with salmonids, from an NGPE. Where a stream or its buffer has been altered on the site prior to approval of the development proposal, the area altered shall be restored using native plants and materials. The restoration work shall be done pursuant to an approved mitigation plan.

The city may waive the NGPE requirements on Type 4 streams, when located beyond one-quarter mile of a stream with salmonids, and Type 5 streams and their buffers if all the following criteria are met:

1. The stream does not flow directly into a stream used by salmonids;
2. The stream is not in a critical drainage basin;
3. All buffer, building setback line, and floodplain distances are identified on the appropriate documents of title;
4. The stream channel and buffer are maintained as a vegetated open swale without altering the channel dimensions or alignment and are recorded in a drainage easement to the city of Monroe that requires that the channel remain open and vegetated for water quality and hydrologic purposes;
5. All clearing proposed within the stream and its buffer shall occur between April 1 and September 1, or as further restricted by timing limits established by the state Department of Fish and Wildlife, and shall meet all erosion and sedimentation requirements of the city;
6. There are no downstream flooding or erosion problems within one-half mile of the site;
7. The stream is not within an erosion hazard area; and
8. No existing water wells are within or adjacent to the stream.

When the subject development is a formal subdivision or a short subdivision, the streams and their buffers shall be placed in a critical areas tract instead of an NGPE, as described in MMC 22.80.080, Protection and Mitigation Measures.

D. Minimum Buffers. The following buffers are the minimum requirements. All buffers shall be measured from the ordinary high water mark (OHWM).

1. Type 1 streams shall have a two-hundred-foot buffer on each side of the channel.
2. Type 2 streams shall have a two-hundred-foot buffer on each side of the channel.
3. Type 3 streams shall have a two-hundred-foot buffer on each side of the channel.
4. Type 4 streams, within a quarter mile of a stream with salmonids, shall have a buffer of one hundred fifty feet on each side of the channel.
5. Type 4 streams, beyond a quarter mile of a stream with salmonids, shall have a buffer of seventy-five feet on each side of the channel.
6. Type 5 streams shall have a fifty-foot buffer on each side of the channel.
7. Unclassified streams shall be assigned a rating based on the critical areas report and field verification, and the appropriate buffer shall apply.

E. Additional Buffers. The city may require increased buffer sizes as necessary to protect streams when either the stream is particularly sensitive to disturbances or the development poses unusual impacts. Examples of circumstances that may require buffers beyond minimum requirements include, but are not limited to:

1. Unclassified uses;
2. The stream is in a critical drainage basin as designated by the city of Monroe;
3. The stream reach adjacent to the development proposal serves as critical fish habitat for spawning and rearing;
4. The stream serves as habitat for endangered, threatened, rare, sensitive, or monitor species listed by the federal government or the state of Washington;
5. The land adjacent to the stream and its associated buffer and included within the development proposal is classified as an erosion hazard area; or
6. A trail in excess of ten percent of the buffer width is proposed for inclusion in the buffer.

F. Buffer Reductions. The city may reduce up to twenty-five percent of the buffer requirement only if sufficient information is available showing:

1. The applicant has demonstrated that mitigation sequencing efforts have been appropriately utilized: avoid, minimize, and lastly mitigate;
2. The proposed buffer reduction shall be accompanied by a mitigation plan that includes enhancement of the reduced buffer area;
3. The reduction will not adversely affect directly or indirectly the critical area and/or buffer in the short or long term;
4. The reduction will not adversely affect water quality;
5. The reduction will not destroy, damage or disrupt a significant habitat area; and
6. The reduction is necessary for reasonable development of the subject property.

G. Buffer Averaging. The city will consider the allowance of buffer averaging only when the buffer area after the averaging is no less than that which would be contained within the standard buffer. Additionally, the buffer width shall not be reduced by more than twenty-five percent at any one point as a result of the buffer averaging. The buffer width reduction will not adversely impact the critical area and/or its buffer functions and values.

H. Additional Stream Mitigation Requirements. No net loss of stream functions and values shall occur as a result of the overall project. The mitigation requirements for stream alterations, in addition to the requirements in MMC 22.80.080, Protection and Mitigation Measures, shall meet the following minimum performance standards and shall occur pursuant to an approved mitigation plan:

1. Maintain or improve stream channel dimensions, including depth, length, and gradient;
2. Restore disturbed stream buffer areas with native vegetation;
3. Create an equivalent or improved channel bed;
4. Create equivalent or improved biofiltration; and
5. Replace disturbed stream and stream buffer habitat features and areas.

I. Mitigation Plans for Alteration to Streams and Stream Buffers. The scope and content of a mitigation plan shall be decided on a case-by-case basis; as the impacts to the critical area increase, the mitigation measures to offset these impacts will increase in number and complexity. At a minimum, the following components shall be included in a complete mitigation plan:

1. Baseline Information. Provide existing conditions information for both the impacted critical areas and the proposed mitigation site, as described in MMC 22.80.070(C), General Critical Area Report Requirements, and MMC 22.80.070(E), Additional Stream Report Requirements.
2. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:
 - a. Description of the anticipated impacts to the critical areas, the mitigating actions proposed, and the purposes of the compensation measures, including the site selection criteria, identification of compensation goals, identification of resource functions, and dates for beginning and completing site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area; and
 - b. A review of the best available science supporting the proposed mitigation.
3. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this chapter have been met. They may include water quality standards, species richness and diversity targets, habitat diversity indices, or other ecological, geological, or hydrological criteria.
4. Detailed Construction Plan. These are the written specifications and descriptions of mitigation technique. This plan should include the proposed construction sequencing, grading and excavation details, erosion and sedimentation control features, a native planting plan, and detailed site diagrams and any other drawings appropriate to show construction techniques or anticipated final outcome.
5. Monitoring and/or Evaluation Program. The mitigation plan shall include a program for monitoring construction of the compensation project, and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring, and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for five years or a period necessary to establish that performance standards have been met.
6. Contingency Plan. This section identifies potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates projected performance standards have not been met.

The city of Monroe shall determine during the review of the requested studies which of the above components shall be required as part of the mitigation plan. Key factors in this determination shall be the size and nature of the development proposal, the nature of the impacted critical areas, and the degree of cumulative impacts on the critical area from other development proposals.

22.80.110 Fish and Wildlife Habitat Conservation Areas Standards.

A. General Standards. Fish and wildlife habitat conservation areas may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the qualitative functions and values of the habitat. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with this chapter.

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

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

B. Conditions. The zoning administrator shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffer, as necessary to minimize or mitigate any potential adverse impacts. Conditions may include:

1. Establishment of buffer zones;

2. Preservation of critically important vegetation;
3. Limitation of access to the habitat area, including fencing to deter unauthorized access;
4. Seasonal restrictions of construction activities;
5. Establishment of a duration and timetable for periodic review of mitigation activities; and
6. Requirement of a performance bond, when necessary, to ensure completion.

C. Mitigation. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biological functions and shall include mitigation for adverse impacts upstream and downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

D. Best Available Science. Any approval of alterations or impacts to habitat conservation area shall be supported by the best available science.

E. Native Growth Protection Easement/Critical Area Tract. As part of the implementation of approved development applications and alterations, fish and wildlife habitat conservation areas and any associated buffers that remain undeveloped pursuant to the critical areas regulations, in accordance with MMC 22.80.080, Protection and Mitigation Measures, shall be designated as native growth protection easements (NGPE).

When the subject development is a formal subdivision or a short subdivision, the fish and wildlife habitat conservation area(s) and any associated buffers shall be placed in a critical areas tract instead of an NGPE, as described in MMC 22.80.080, Protection and Mitigation Measures.

F. Buffers.

1. Buffer areas shall be established for areas of activity in, or adjacent to, habitat conservation areas when needed to protect such areas. Buffers shall consist of an undisturbed area of native vegetation, or areas identified for restoration, established to protect the integrity, function and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and type and intensity of human activity proposed to be conducted nearby, and shall be consistent with the management recommendations issued by the state Department of Fish and Wildlife.
2. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the seasonal period.

G. Endangered, Threatened, and Sensitive Species.

1. No development shall be allowed within a habitat conservation area or any associated buffer with which state or federally endangered, threatened, or sensitive species have a primary association.
2. Whenever activities are proposed adjacent to a habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such areas shall be protected through the application of protection measures in accordance with a critical areas report prepared by a qualified professional and approved by the city. Approval of alteration of land adjacent to the habitat conservation area or any associated buffer shall not occur prior to consultation with the state Department of Fish and Wildlife and the appropriate federal agency, if applicable.
3. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292).

H. Anadromous Fish.

1. Activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, the following:
 - a. Activities shall be timed to occur only during the allowable work window as designated by the state Department of Fish and Wildlife;
 - b. An alternative alignment or location for the activity is not feasible;
 - c. The activity is designed so that it will minimize the degradation of the functions or values of the fish habitat or other critical areas; and
 - d. Any impact to the functions and values of the habitat conservation area are mitigated in accordance with an approved critical areas report.
2. Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the

upstream migration of adult fish and shall prevent juveniles migrating downstream from being trapped or harmed.

3. Fills, when authorized, shall minimize the adverse impacts to anadromous fish and their habitat, shall mitigate any unavoidable impacts, and shall only be allowed for water-dependent uses.

22.80.120 Flood Hazard Area Development Standards.

All development proposals in an area of special flood hazard, as defined in MMC 22.12.200, are subject to the regulations in Chapter 14.01 MMC.

22.80.130 Geologically Hazardous Areas.

A. Designation. Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but may also increase the hazard to surrounding development and uses. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

1. Erosion hazard;
2. Landslide hazard;
3. Seismic hazard; and
4. Other geological events including tsunami, mass wasting, debris flows, rock falls, and differential settlement.

B. Designation of Specific Geologic Hazard Areas.

1. Erosion Hazard Areas. Erosion hazard areas are at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having "severe" or "very severe" rill and inter-rill erosion hazard.
2. Landslide Hazard Areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include, but are not limited to, the following:
 - a. Areas of historic failure, such as:
 - i. Those areas delineated by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "severe" limitation for building site development; or
 - ii. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Department of Natural Resources.
 - b. Areas with all three of the following characteristics:
 - i. Slopes steeper than fifteen percent; and
 - ii. Hillsides intersecting geologic contacts with a relatively permeable sediment overlaying a relatively impermeable sediment or bedrock; and
 - iii. Springs or groundwater seepage.
 - c. Areas that have shown movement during the Holocene epoch (from ten thousand years ago to the present) or that are underlain or covered by mass wastage debris of that epoch;
 - d. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and faults) in subsurface materials;
 - e. Slopes having a gradient steeper than eighty percent subject to rock fall during seismic shaking;
 - f. Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action;
 - g. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and
 - h. Any area with a slope of forty percent or steeper and with a vertical relief of ten or more feet except areas composed of consolidated rock. A slope delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.
3. Seismic Hazard Areas. Seismic hazard areas are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface failure. The strength of ground shaking is primarily affected by:
 - a. The magnitude of an earthquake;

- b. The distance from the source of an earthquake;
 - c. The type and thickness of geologic materials at the surface; and
 - d. The type of subsurface geological structure.
- C. Mapping of Geologically Hazardous Areas.
1. The approximate location and extent of geologically hazardous areas are shown on the adopted critical areas maps. The adopted critical areas maps include:
 - a. U.S. Geological Survey landslide hazard, seismic hazard, and volcanic hazard maps;
 - b. Department of Natural Resources seismic hazard maps of Western Washington, as they become available;
 - c. Department of Natural Resources slope stability maps, as they become available;
 - d. Federal Emergency Management Administration flood insurance maps; and
 - e. Locally adopted maps.
 2. These maps are to be used as a guide for the city of Monroe, project applicants, and/or property owners, and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.
- D. Best Available Science. Any approval of alterations of impacts to a geologically hazardous area or any associated buffers shall be supported by the best available science.
- E. Native Growth Protection Easement/Critical Area Tract. As part of the implementation of approved development applications and alterations, geologically hazardous areas and any associated buffers that remain undeveloped pursuant to the critical areas regulations, in accordance with MMC 22.80.080, Protection and Mitigation Measures, shall be designated as native growth protection easements (NGPE). When the subject development is a formal subdivision (plat) or a short subdivision (short plat), the geologically hazardous area(s) and any buffers shall be placed in a critical areas tract instead of an NGPE, as described in MMC 22.80.080, Protection and Mitigation Measures.
- F. Allowed Activities. The following activities are allowed in geologically hazardous areas and do not require submission of a critical areas report:
1. Erosion and Landslide Hazard Areas. Except as otherwise provided for in this chapter, only those activities approved and permitted consistent with an approved critical areas report in accordance with this chapter shall be allowed.
 2. Seismic Hazard Areas. The following activities are allowed within seismic hazard areas:
 - a. Construction of new buildings and/or additions will be reviewed on a case-by-case basis.
 - b. Installation of fences.
 3. Other Hazard Areas. The following activities areas are allowed within other geological hazard areas:
 - a. Construction of new buildings and/or additions will be reviewed on a case-by-case basis.
 - b. Installation of fences.
- G. Performance Standards – General Requirements.
1. Alterations of geologically hazardous areas or associated buffers may only occur for activities that:
 - a. Will not increase the threat of the geological hazard to adjacent properties beyond predevelopment conditions;
 - b. Will not adversely impact other critical areas;
 - c. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than predevelopment conditions; and
 - d. Are certified as safe as designed and under anticipated conditions by a qualified geotechnical engineer or geologist, licensed in the state of Washington.
- H. Performance Standards – Specific Hazards.
1. Erosion and Landslide Hazard Areas. Activities on sites containing erosion or landslide hazards shall meet the following requirements:
 - a. Buffers Required. A buffer shall be established for all edges of erosion or landslide hazard areas. The size of the buffer shall be determined by the city to eliminate or minimize the risk of property damage, death, or injury resulting from erosion and landslides caused in whole or part by the development, based upon review of and concurrence with a critical areas report prepared by a qualified professional.
 - b. Minimum Buffers. The minimum buffer shall be equal to the height of the slope or fifty feet, whichever is greater.

- c. Buffer Reduction. The buffer may be reduced to a minimum of ten feet when a qualified professional demonstrates to the zoning administrator's satisfaction that the reduction will adequately protect the proposed development, adjacent developments and uses, and the subject critical area.
- d. Increased Buffer. The buffer may be increased when the zoning administrator determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.
- e. Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a geotechnical analysis is submitted and certifies that:
 - i. The development will not increase surface water discharge or sedimentation to adjacent properties beyond the predevelopment condition;
 - ii. The development will not decrease slope stability on adjacent properties; and
 - iii. Such alteration will not adversely impact other critical areas.

I. Design Standards. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this chapter. The requirements for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design standards are:

- 1. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of one and one-half for static condition and one and two-tenths for dynamic conditions. Analysis of dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the International Building Code;
- 2. Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;
- 3. Structures and improvements shall minimize alterations to the natural contours of the slope and foundations shall be tiered where possible to conform to existing topography;
- 4. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
- 5. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;
- 6. The use of retaining walls that allow the maintenance of existing natural slopes is preferred over graded artificial slopes; and
- 7. Development shall be designed to minimize impervious lot coverage.

J. Vegetation. Vegetation shall be retained unless it can be shown that the removal will not increase the geologic hazards, and a vegetation management plan is submitted with the request.

K. Seasonal Restriction. Clearing shall be allowed only from May 1st to October 1st of each year; provided, that the city may extend or shorten the dry season on a case-by-case basis depending on the actual weather conditions, except that timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practices permit issued by the state Department of Natural Resources.

L. Utility Lines and Pipes. Utility lines and pipes shall be permitted in the erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be located above ground and be properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Storm water conveyance shall be allowed only through a high-density polyethylene pipe with fuse-welded joints, or similar product that is technically equal or superior.

M. Point Discharge. Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:

- 1. Conveyance via continuous storm pipe downslope to a point where there are no erosion hazard areas downstream from the discharge; and
- 2. Access roads and utilities may be permitted within the erosion or landslide hazard area and associated buffers if the city determines that no other feasible alternative exists.

N. Subdivisions. The division of land in erosion or landslide hazard areas and associated buffers is subject to provisions established for all critical areas in MMC 22.80.080, Protection and Mitigation Measures.

O. Prohibited Development. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and associated buffers.

22.80.140 Bonds.

An applicant for development within a critical area as identified herein may be required to furnish the city with a performance bond and/or maintenance bond for any required mitigating measures. The city attorney or zoning administrator shall determine the amount and time limitation of the bond or other security.

22.80.150 Appeal.

Appeals of administrative decisions shall be governed by MMC Chapter 22.84, Permit Processing.

22.80.160 Enforcement.

The provisions of MMC Chapter 22.10, Administration and Enforcement, shall regulate the enforcement of these critical areas regulations.

Adherence to the provisions of this chapter and/or to the project conditions shall be required throughout the construction of the development. Should the zoning administrator determine that a development is not in compliance with the approved plans, a stop work order may be issued for the violation. In the event of a violation of this chapter, the zoning administrator shall have the power to order complete or partial restoration of the critical area by the person or agent responsible for the violation. If such responsible person or agent does not complete such restoration within a reasonable time following the order, the city shall have the authority to restore the affected critical area to the prior condition wherever possible and the person or agent responsible for the original violation shall be indebted to the city for the cost of restoration. When a stop work order has been issued, construction shall not continue until such time as the violation has been corrected and that the same or similar violation is not likely to reoccur.