

CHAPTER 15.12 – FLOOD DAMAGE PREVENTION

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1 **15.12.010** Purpose.

- 2 A. The purpose of this chapter is to promote public health, safety and general welfare; reduce the
- annual cost of flood insurance; and minimize public and private losses due to flood conditions in
- 4 specific areas through a set of floodplain management regulations that:
- 5 1. Protect human life and health;
- 6 2. Minimize expenditure of public money for costly flood control projects;
- Minimize the need for rescue and relief efforts associated with flooding and generally
 undertaken at the expense of the general public;
- 9 4. Minimize prolonged business interruptions;
- 5. Minimize damage to public facilities, utilities, streets, and bridges located in flood hazard areas;
- Help maintain a stable tax base by providing for the sound use and development of flood hazard
 areas and minimize blight areas caused by flooding;
- 7. Notify potential buyers that a property is located within an area of special flood hazard;
- 8. Notify those who occupy areas of special flood hazard that they assume responsibility for their actions; and
- 9. Participate in and maintain eligibility for flood insurance and disaster relief.
- 17 B. In order to accomplish these purposes, this chapter includes methods and provisions for:
- 1. Restricting or prohibiting development that is dangerous to health, safety, and property due to
 water or erosion hazards, or which results in damaging increases in erosion, flood heights, or
 velocities;
- 2. Requiring that development vulnerable to floods be protected against flood damage at the time 22 of initial development;
- Controlling the alteration of natural floodplains, stream channels, and natural protective
 barriers which help accommodate or channel floodwaters;
- Controlling filling, grading, dredging and other development which may increase flood damage;
 and
- 27 5. Preventing or regulating the development of flood barriers that unnaturally divert floodwaters
 28 or may increase flood hazards in other areas.

30 **15.12.020 Definitions.**

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A. For the purposes of this chapter and to clarify the intent and meaning of certain words or terms, the following list of definitions is provided. Unless specifically defined below, words or phrases used in



- this chapter shall carry their customary meaning and shall be interpreted to give this chapter its
 most reasonable application.
 - B. Definitions.

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- 1. "Accessory structure" means a structure that is not habitable and that is on the same parcel of property as a principal structure, the use of which is incidental to the use of the principal structure. Examples of accessory structures include detached garages, carports, storage sheds, tool sheds and boathouses.
 - 2. "Area of special flood hazard" means the land in the floodplain within a community subject to a one (1) percent or greater change of flooding in any given year. It is shown on the FIRM as the A, AE, or VE Zone.
 - 3. "ASCE 24" means the most recent version of "ASCE 24: Flood Resistant Design and Construction," published by the American Society of Civil Engineers.
- 4. "Base flood" or "100-year flood" means the flood having a one (1) percent chance of being equaled or exceeded in any given year.
- 5. "Base flood elevation" or "BFE" means the elevation to which floodwater is anticipated to riseduring the base flood.
 - "Basement" means any area of a building having its floor sub-grade (below ground level) on all sides.
 - 7. "Building" means anything built or constructed principally above ground level that is not a major aboveground utility facility or utility pole. For the purposes of floodplain management, a building may be either a "Structure" or "Development." Examples of buildings that are not a structure include gazebos, pavilions, picnic shelters, or a carport that is open on all or three (3) sides.
 - 8. "Building code" means, for the purposes of floodplain management, the technical regulations for development currently adopted by the City, including but not limited to Chapter 15.04 MMC, Chapter 15.08 MMC, Chapter 15.16 MMC, Chapter 13.12 MMC, and the currently adopted engineering and development standards of the City.
- 9. "Breakaway wall" means a wall that is not part of the structural support of a structure and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the structure or the supporting foundation system.



| 1 | 10. "0 | Coastal high hazard area" means any area of special flood hazard subject to high velocity wave |
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| 2 | ac | ction from storms or seismic sources. These areas are designated on the FIRM as Zone VE. |
| 3 | 11. "(| Construction, new" means: |
| 4 | a. | For the purposes of determining insurance rates, structures for which the start of |
| 5 | | construction commenced on or after August 11, 1975, including any subsequent |
| 6 | | improvements to such structures; or |
| 7 | b. | For the purposes of floodplain management, structures for which the start of construction |
| 8 | | commenced on or after the effective date of a floodplain management regulation at the |
| 9 | | time the construction permit was issued and includes any subsequent improvements to |
| 10 | | such structures. |
| 11 | 12. "(| Construction, start of" means the date the floodplain and associated construction permit(s) |
| 12 | W | ere issued for new construction or a substantial improvement, as defined in this chapter, |
| 13 | pı | ovided that the actual start of construction, repair, reconstruction, rehabilitation, addition, |
| 14 | pl | acement or other improvement was within 180 days from the issue date of the permit(s). |
| 15 | a. | The actual start date means either: |
| 16 | | i. For new construction, the first placement of permanent construction of a structure on |
| 17 | | the site or the placement of a manufactured home on a foundation; or |
| 18 | | ii. For substantial improvement, the first alteration of any wall, ceiling, floor or other |
| 19 | | structural part of a building, whether or not that alteration affects the external |
| 20 | | dimensions of the building. |
| 21 | b. | Permanent construction includes the pouring of slab or footings, installation of piles, |
| 22 | | construction or columns, or any work beyond the stage of excavation. |
| 23 | c. | Permanent construction does not include: |
| 24 | | i. Land preparation, such as clearing, grading, or filling; |
| 25 | | ii. The installation of streets, sidewalks, or walkways; |
| 26 | | iii. The installation of exterior utilities; |
| 27 | | iv. Excavation for a basement, footings, piers, or foundations or the erection of temporary |
| 28 | | forms; nor |
| 29 | | v. The installation of accessory structures, such as garages or sheds not occupied as |
| 30 | | dwelling units or not part of the main structure. |
| 31 | 13. "(| Critical facility" means a facility for which even a slight chance of flooding might be too great. |
| 32 | Cr | ritical facilities include, but are not limited to, uses identified by Flood Design Class 3 and 4 in |



Table 1-1 in ASCE 24. These occupancies include, but are not limited to, uses such as schools, 1 2 nursing homes, hospitals, police, fire and other emergency response facilities, and uses which 3 produce, use or store hazardous materials or hazardous waste. 4 14. "Development" means any manmade change to improved or unimproved real estate, including 5 but not limited to: a. Construction, repair, reconstruction, rehabilitation, addition, placement, exterior alteration 6 or other improvement of structures or buildings, including changes to exterior and interior 7 8 finishes: 9 b. Bulk heading; 10 c. Driving of pilings; 11 d. Dumping; e. Installation, expansion, modification, relocation or removal of any utility facility, major 12 13 aboveground utility facility, or utility pole; 14 f. Land-disturbing activity; 15 g. Major and minor maintenance; h. Placing of obstructions; 16 Removal of native vegetation; 17 Storage of equipment or materials; or 18 j. 19 k. Any project of a temporary or permanent nature which modifies buildings, structures, or 20 land within the area of special flood hazard that is not operations as defined by this chapter. 15. "Elevation Certificate" means an administrative tool of the NFIP that can be used to provide 21 22 elevation information, to determine the proper insurance premium rate, and to support a 23 request for a Letter of Map Amendment (LOMA) or a Letter of Map Revision based on fill 24 (LOMR-F). 16. "Elevated building" means, for insurance purposes, a structure without a basement that has its 25 26 lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, 27 pilings, or columns. 17. "Emergency activity" means development activity that is required due an unanticipated and 28 29 imminent threat to public health, safety, or the environment and that requires remedial or 30 preventative action in a time frame too short to allow for compliance with the requirements of this chapter. As a general matter, flooding or other seasonal events that can be anticipated and 31



| 1 | may occur but that are not imminent are not an emergency event that would require an |
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| 2 | emergency activity. |
| 3 | 18. "Federal Insurance Administrator" means the administrator of the Federal Emergency |
| 4 | Management Agency. |
| 5 | 19. "Flood" or "flooding" means: |
| 6 | a. A general and temporary condition of partial or complete inundation of normally dry land |
| 7 | areas from: |
| 8 | i. The overflow of inland or tidal waters; |
| 9 | ii. The unusual and rapid accumulation or runoff of surface waters from any source; or |
| 10 | iii. Mudslides (i.e. mudflows) which are proximately caused by flooding as defined in |
| 11 | paragraph (a)(ii) of this definition and are akin to a river of liquid and flowing mud on |
| 12 | the surfaces of normally dry land areas, as when earth is carried by a current of water |
| 13 | and deposited along the path of the current. |
| 14 | b. The collapse or subsidence of land along the shore of a lake or other body of water as a |
| 15 | result of erosion or undermining caused by: |
| 16 | i. Waves or currents of water exceeding anticipated cyclical levels; |
| 17 | ii. A sudden and unusually high water level in a natural body of water, accompanied by a |
| 18 | severe storm; |
| 19 | iii. An unanticipated force of nature, such as a flash flood or abnormal tidal surge; or |
| 20 | iv. A similarly unusual and unforeseeable event which results in flooding as defined in |
| 21 | paragraph (a)(i) of this definition. |
| 22 | 20. "Flood insurance rate map" (FIRM) means the official map of a community, on which the Federal |
| 23 | Insurance Administrator has delineated both the areas of special flood hazard and the risk |
| 24 | premium zones applicable to the community. |
| 25 | 21. "Flood insurance study" (FIS) or "flood elevation study" means an examination, evaluation and |
| 26 | determination of: |
| 27 | a. Flood hazards and, if appropriate, corresponding water surface elevations; |
| 28 | b. Flood-related erosion hazards; and/or |
| 29 | c. Mudslide (i.e. mudflow). |
| 30 | 22. "Floodplain" or "flood-prone area" means any land area susceptible to being inundated by |
| 31 | water from any source. Also see the definition for "flood." |



- 23. "Floodplain administrator" means the community official designated by title to administer and enforce the floodplain management regulations.
 - 24. "Floodplain management regulation" means the controls placed on development or other activities in the area of special flood hazard by the City and state government for the purpose of flood damage prevention and reduction, including, but not limited to, zoning ordinances, subdivision regulations, building codes, health regulations, critical area ordinances, shoreline master programs, grading and erosion control ordinances and other applications of police power together with any amendments thereto.
 - 25. "Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.
 Floodproofed structures are those that have the structural integrity and design to be impervious to floodwater below the BFE.
 - 26. "Floodproofing, dry" means a combination of measures that results in a structure, including the attendant utilities and equipment, being watertight with all elements substantially impermeable to the entrance of floodwater and with structural components having the capacity to resist flood loads.
 - 27. "Floodproofing, wet" means the use of damage-resistant materials and construction techniques to minimize flood damage to a structure by intentionally allowing floodwaters to enter and exit automatically, without human intervention.
 - 28. "Functionally dependent use" means a use which cannot perform its intended use unless it is located or carried out in close proximity to water. The term only includes docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities. The term does not include long-term storage, related manufacturing facilities, retail or other commercial or residential activities.
 - 29. "Habitable" means space in a structure for living, sleeping, eating or cooking.
- 30. "Hazardous materials" means any material, including any substance, waste, or combination thereof, which because of its characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human, animal or plant health, safety, property or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
- 31. "Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.



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- 1 32. "Historic structure" means any structure that is listed as historic pursuant to Chapter 2.52 MMC.
- 2 33. "Impervious surface" means impervious surfaces as defined in Chapter 17.08 MMC.
- 3 34. "Land-disturbing activity" means, for the purposes of floodplain management, boring, clearing, 4 dredging, drilling, excavation, filling, grading, paving, pigging, trenching, removal of sand, gravel, 5 minerals, or other materials, or any other activity that results in a change to the land.
- 35. "Lowest floor" means the lowest floor of the lowest enclosed area, including the basement,

 crawlspace, or enclosure floor. The lowest floor is determined using the NFIP Elevation

 Certificate, as prepared by a land surveyor licensed by the State of Washington. Unfinished or

 flood-resistant enclosures, used solely for the parking of vehicles, building access or storage are

 not considered a structure's lowest floor, provided that the space complies with the applicable

 flood ventilation opening or floodproofing requirements of this chapter for residential and non-
 - 36. "Maintenance" means, for the purposes of floodplain management, any activity performed to continue or achieve either the originally anticipated useful life of an improvement, or to retain a suitable level of performance. The term "maintenance" excludes operations activities and may be a form of "development" as defined in this chapter.
 - 37. "Maintenance, major" means any maintenance activity that is typically completed one (1) year or more apart. Examples of major maintenance include, but are not limited to:
- a. Fire protection system repair;
 - b. Overlays and seal coating of roads and parking lots;
- c. Painting of buildings or structures;

residential structures at all times.

- d. Repair of an existing utility facility that requires land-disturbing activity;
- e. Roof repair, maintenance, replacement or flood coating; or
- f. Substantial improvements to an existing structure.
- 25 38. "Maintenance, minor" means planned maintenance activities completed at least once per year 26 that do not involve any land-disturbing activity or a structure. Examples of minor maintenance 27 include, but are not limited to:
- a. Boat launch cleaning;
- b. Fence repair and painting;
- 30 c. Graffiti removal and associated surface restoration;
- d. Irrigation system repair;
- e. Paint striping and other safety markings;



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f. Park amenity cleaning, repair and replacement; 1 2 g. Parking meter cleaning, repair and replacement; 3 h. Pressure washing; 4 i. Routine landscaping activities, such as adding bark or mulch, edging or trimming; fertilizing, 5 mowing, planting annuals, or weeding; 6 j. Sign repair; 7 k. Traffic safety sign repair and replacement; 8 I. Utility or equipment repair and cleaning (e.g. hydrant painting or meter setting in an existing 9 meter box). 10 39. "Manufactured home" means a structure designed and constructed to be transportable in one or more sections, is built on a permanent chassis, and designed to be used as a dwelling unit 11 when connected to the required utilities that include plumbing, heating, and electrical systems 12 13 contained therein. "Manufactured homes" must meet or exceed the standards established by federal law 42 U.S.C. 5401-5403 and meet or exceed the requirements for a "designated 14 manufactured home" as defined in RCW 35.63.160, now or hereafter amended. For the 15 purposes of floodplain management, "manufactured homes" includes "mobile homes" but does 16 not include "modular homes" or "recreational vehicles." 17 40. "Market value" means the assessed value of the structure prior to any damage, reconstruction, 18 19 rehabilitation, addition, or other improvement. 20 41. "Mean high tide" means, for the purposes of floodplain management, the vertical datum to which the coastal transect baseline (or zero (0) feet) is shown on the community's FIRMs. 21 42. "Mean sea level" means, for the purposes of floodplain management, the vertical datum to 22 23 which the BFE(s) shown on the community's FIRMs are referenced. 24 43. "Native vegetation" means native vegetation as defined in Chapter 17.08 MMC. 44. "NFIP" means the National Flood Insurance Program. 25 45. "Operations" means, for the purposes of floodplain management, any activity performed that 26 27 does not involve a permanent, manmade change to improved or unimproved real estate. Operations activities are typically day-to-day services that are of a transient nature and that are 28 29 not a form of maintenance or development. Examples of operations activities include, but are 30 not limited to:

a. Custodial services and cleaning;

b. Fire protection services;



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1 c. Security services; 2 d. Snow removal; 3 e. Trash and recycling removal; and f. Utility or equipment inspection, testing, and exercising (e.g. generator testing or water line 4 5 flushing). 46. "Ordinary high water mark" means the ordinary high water mark as defined in Chapter 17B.08 6 7 MMC. 8 47. "Public agency" means a City, county, special purpose district or other political subdivision of 9 the state of Washington or the federal government. 48. "Reasonably safe from flooding" means development that is designed and built to be safe from 10 flooding based on consideration of current flood elevations studies, historical data, high water 11 marks and other reliable data known to the community. In unnumbered A Zones where flood 12 13 information is not available and cannot be obtained by practicable means, reasonably safe from flooding means that the lowest flood is at least two (2) feet above the highest adjacent grade. 14 49. "Recreational vehicle" means a vehicle that is: 15 a. Built on a single chassis; 16 b. 400 sq. ft. or less when measured at the largest horizontal projection; 17 c. Designed to be self-propelled or permanently towable by a light duty truck; and 18 19 d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use. 20 50. "Solid waste" means solid waste as defined in Chapter 8.16 MMC. 21 22 51. "Structure" means any of the following that are located principally above ground (see also "Building" and "Development"): 23 24 a. A walled and roofed building, with at least two (2) outside rigid walls and a fully secured 25 roof; b. A gas or liquid storage tank; or 26 27 c. A manufactured home. 52. "Substantial damage" means damage of any origin sustained by a structure, where the cost of 28 restoring the structure to its pre-damage condition would equal or exceed 50 percent of the 29

market value of the structure before the damage occurred.



1 53. "Substantial improvement" means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value 2 3 of the structure before the start of construction of the improvement, as defined in this section. 4 a. The term substantial improvement includes structures which have incurred substantial 5 damage, as defined in this section, regardless of the actual repair work performed. b. The term substantial improvement does not include: 6 i. Any project for improvement of a structure to correct previously identified existing 7 8 violations of state or local health, sanitary, building or other safety code specifications 9 that have been identified by the local official responsible for such codes and that are the 10 minimum necessary to assure safe living conditions; or ii. Any alteration of a historic structure, as defined in this chapter, provided that the 11 alteration will not preclude the structure's continued designation as a historic structure. 12 13 54. "Utility" means an entity whose principal purpose is to provide electricity, water, sewer, storm drainage, gas, radio, television, telephone and/or other forms of communication utilizing 14 electromagnetic spectrum to the public. "Utility" can specifically mean the City of Mukilteo 15 surface water utility established pursuant to Chapter 13.16 MMC. 16 17 55. "Utility, major aboveground facility" means an improvement installed aboveground and outside 18 public right-of-way, including electrical substations, water towers, sewer lift stations, natural gas 19 regulating stations containing aboveground structures, and man-made regional detention or 20 retention facilities. 56. "Utility facility" means any system for producing, transmitting, distributing, or collecting a utility 21 22 service that is not a major aboveground utility facility or utility pole. 57. "Utility pole" means an object designed and used primarily for the support of electrical wires, 23 24 telephone wires, television cable, traffic signals, or lighting for streets, parking areas, or 25 pedestrian paths. 26 27 15.12.030 Applicability. 28 This chapter applies to all areas of special flood hazard within the jurisdictional limits of the City. 29 30 15.12.040 Adoption and incorporation by reference. 31 A. The City hereby adopts and incorporates the following into this chapter as if set forth in full, to the

extent necessary to interpret and implement this chapter:

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1. The areas of special flood hazard identified in the Federal Emergency Management Agency's 1 "Flood Insurance Study for Snohomish County, Washington, and Incorporated Areas" (FIS), 2 3 effective June 19, 2020. 2. The areas of special flood hazard identified on the Federal Emergency Management Agency's 4 5 "Flood Insurance Rate Maps" (FIRMs), effective June 19, 2020, identified more specifically by the following map numbers: 6 a. 53061C1010F; 7 8 b. 53061C1015F; 9 c. 53061C1020F; and 10 d. 53061C1310F. 3. Federal Emergency Management Agency's "Elevation Certificate and Instructions," as existing or 11 12 as amended. 13 4. Federal Emergency Management Agency's "Floodproofing Certificate for Non-Residential Structures," as existing or as amended. 14 5. Federal Emergency Management Agency's "NFIP Technical Bulletins," as existing or as amended. 15 6. Federal Emergency Management Agency's "P-758: Substantial Improvement / Substantial 16 17 Damage Desk Reference," as existing or as amended. 7. American Society of Civil Engineers "ASCE 24: Flood Resistant Design and Construction," as 18 19 existing or as amended. 8. American Society of Civil Engineers "ASCE 7: Minimum Design Loads and Associated Criteria for 20 Buildings and Other Structures," as existing or as amended. 21 22 B. A copy of the documents referenced above shall be filed and maintained by the City clerk for use and examination by the public. 23 24 25 15.12.050 Interpretation. A. In the interpretation and application of this chapter, all provisions shall be: 26 27 1. Considered the minimum requirements; 2. Liberally construed in favor of the City; and 28 29 3. Deemed neither to limit nor repeal any other powers granted under state statutes.

deed restrictions. Where this chapter conflicts or overlaps with any other provision of local, state or

B. This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants or



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2 apply. 3 C. The degree of flood protection required by this chapter is considered reasonable for regulatory 4 purposes and is based on scientific and engineering considerations. Large floods can and will occur 5 on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter 6 does not imply that land outside the area of special flood hazard or uses permitted within such areas 7 will be free from flooding or flood damages. 8 D. This chapter shall not create a liability on the part of the City of Mukilteo, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on 9 10 this chapter or any administrative decision lawfully made hereunder. 11 15.12.060 Floodplain administrator. 12 13 A. The director of the Community Development Department, or designee, is hereby appointed as the floodplain administrator to administer, implement, and enforce this chapter. 14 B. Duties of the floodplain administrator include, but are not limited to: 15 1. Permit review. The floodplain administrator may approve, conditionally approve, or deny 16 applications for activities regulated by this chapter after a determination of compliance with the 17 following: 18 19 a. The permit requirements of this chapter have been satisfied; b. All other required local, state, and federal permits have been obtained; and 20 c. The project site is reasonably safe from flooding. 21 22 2. Records. 23 a. All records pertaining to the provisions of this chapter are required to be kept in perpetuity 24 and available for public inspection, in accordance with 44 CFR 60.3(b)(5)(iii). 25 b. Where BFE data is provided in accordance with MMC 15.12.060(B)(4), maintain a record of the following for all new or substantially improved structures: 26 27 i. The actual, as-built elevation in relation to mean sea level, including the basement, and 28 a copy of the Elevation Certificate; ii. Whether or not the structure contains a basement; 29 30 iii. For non-residential structures, the elevation in relation to mean sea level to which the structure was floodproofed and a copy of the Floodproofing Certificate. 31

federal law, or of any easement covenant or deed restriction, the more restrictive language shall



15.12.070 Approval required.

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| 1 | | c. | Documentation on the Elevation Certificate of the elevation of the bottom of the lowest |
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| 2 | | | horizontal structural member for structures in the VE Zone. |
| 3 | | d. | Documentation of all calculations supporting substantial improvement and substantial |
| 4 | | | damage applications. |
| 5 | 3. | No | tification. |
| 6 | | a. | Whenever an annexation is initiated pursuant to Chapter 35A.14 RCW that includes an area |
| 7 | | | of special flood hazard, the floodplain administrator shall provide written notification to the |
| 8 | | | Federal Insurance Administrator and FEMA Region X. |
| 9 | | b. | Whenever a watercourse is to be altered or relocated, the floodplain administrator shall: |
| 10 | | | i. Notify adjacent communities and the Department of Ecology prior to such action; |
| 11 | | | ii. Submit evidence of such notification to the Federal Insurance Administrator and FEMA |
| 12 | | | Region X; and |
| 13 | | | iii. Assure that the flood carrying capacity of the altered or relocated portion of said |
| 14 | | | watercourse is maintained. |
| 15 | 4. | Int | erpretation of FIRM boundaries. |
| 16 | | a. | When BFE data has not been provided for an A or VE Zone with the FIS or FIRMs, the |
| 17 | | | floodplain administrator shall: |
| 18 | | | i. Obtain, review, and reasonably utilize the best available BFE data available from a |
| 19 | | | federal, state, or other reputable source in order to administer the provisions of this |
| 20 | | | chapter; and |
| 21 | | | ii. Review floodplain permit applications to assure that proposal will be reasonably safe |
| 22 | | | from flooding. The test of reasonableness is a local judgment and includes the use of |
| 23 | | | historical data, high water marks, photographs of past flooding, etc., where available. |
| 24 | | | Applicants shall be notified that failure to elevate habitable structures at least two (2) |
| 25 | | | feet above the highest adjacent grade in these zones may result in higher insurance |
| 26 | | | rates. |
| 27 | | b. | The floodplain administrator shall not interpret the boundaries of the areas of special flood |
| 28 | | | hazard shown on the FIRM. |
| 29 | | c. | In the event there appears to be a conflict between the boundary mapped on the FIRM and |
| 30 | | | actual field conditions, any person may apply for a Letter of Map Change with FEMA. |
| 31 | | | |



- A. Approval shall be obtained prior to any development located partially or entirely within an area of
- 2 special flood hazard. The approval shall be in the form of a floodplain letter, a programmatic
- 3 floodplain development permit, or a floodplain development permit.
- 4 B. The permit shall be for all development that is part of the total proposal, including any
- 5 interdependent parts.
- 6 C. All development in the area of special flood hazard is subject to the terms of this chapter and any
- 7 other applicable regulations.

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- 15.12.080 Permitted, conditional, temporary and interim uses.
- 10 All uses permitted in accordance with Chapter 17.16 MMC by the underlying zoning district are also
- permitted in the area of special flood hazard, except uses prohibited by the underlying shoreline
- designation, if applicable (see Title 17B MMC).

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- 14 **15.12.090** Floodplain letter.
- 15 A. No private or public entity shall undertake activities listed in this section prior to submitting a
- written request to the City.
- 17 B. The activities in this section shall be construed narrowly. Only those activities that meet the precise
- terms of one or more of the listed activities may be granted a floodplain letter.
- 19 C. A floodplain letter is required for the following activities, provided that the activity does not
- 20 otherwise meet the definition of "development" in this chapter and conforms to all other applicable
- 21 regulations:
- 1. Interior improvements to an existing structure, the cost of which is less than 50 percent of the
- 23 market value of the structure before the start of construction of the improvement;
- 24 2. Invasive plant management;
- Minor maintenance on private property;
- Pest management;
- 5. Snagging of dead, dying, or diseased vegetation;
- 28 6. Removal of hazardous trees, provided:
- 29 a. The tree is determined to be hazardous by a certified arborist;
- b. The owners' property or adjacent properties, or the health and safety of the general public
- or employees are in danger of damage; and



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- c. Such activities are determined by the City to have minimal impacts to the area of special
 flood hazard;
 - 7. Marking of property lines or corners in accordance with Chapter 58.04 RCW;
 - 8. Site exploration and investigation activities that are necessary for preparation of an application for development, including soil tests, water quality studies, wildlife studies and similar tests and investigations, provided:
 - a. The activity does not interfere with normal use of the site;
 - b. The activity will be the minimum necessary to carry out the work or studies and shall have no significant adverse impact on the environment; and
 - c. The activity does not involve the installation of any structure, and upon completion of the activity the vegetation and land configuration of the site are restored to conditions existing before the activity.
- D. A floodplain letter is not an exemption from compliance with this chapter, nor from any other applicable regulations.
- E. Notwithstanding the activities provided by this section, any activities occurring partially or entirely within the area of special flood hazard shall comply with the intent of these standards and should consider alternatives and reasonable methods that avoid or minimize potential impacts.
- F. If any part of a proposed activity is not eligible for a floodplain letter, then a floodplain development permit is required for the entire proposal. In case of any question as to whether an activity qualifies for a floodplain letter, the City's determination shall prevail and shall be determinative.

22 15.12.100 Programmatic floodplain development permit.

- A. Programmatic floodplain permits may be issued by the floodplain administrator to eliminate the need for individual floodplain development permits by public agencies and utilities for ongoing, routine development activities that are unlikely to cause an adverse cumulative impact to the area of special flood hazard.
- 27 B. The following activities may be included as part of a programmatic floodplain development permit:
- 28 1. Minor maintenance;
- 29 2. Boat launch installation, storage and removal;
- 3. Installation of park amenities, such as park benches, fire pits, and the like, parking meters, or traffic safety signs;



- 4. Removal of up to up to three (3) cubic yards of unlawfully dumped or littered solid waste over the term of the permit; and
 - 5. Restoration of existing impervious surfaces in a manner that does not:
 - a. Exceed one (1) cubic yard of material over the term of the permit;
- 5 b. Exceed six (6) inches in depth; or
- 6 c. Create new surface area.

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- 8 **15.12.110** Floodplain development permit.
- 9 A floodplain development permit is required for all development that does not qualify for a floodplain
- 10 letter or programmatic floodplain development permit.

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- 12 <u>15.12.1820 Emergencies.</u>
- 13 A. A floodplain development permit shall not be immediately required of a public agency or utility
- when responding to an emergency event; provided that the floodplain administrator shall be
- 15 <u>notified in writing within 72 hours of the start of the emergency development activity.</u>
- 16 B. Any emergency development activity completed as part of response to an emergency event shall be
- documented, including but not limited to:
- 18 1. Time, date, and location of the emergency event;
- 19 2. The cause of the emergency event;
- 20 3. The name(s) of the responding public agency and/or utility;
- 21 <u>4. A description of development activity completed;</u>
- 5. An inventory of the materials used; and
- 23 6. Quantities in cubic yards of any land-disturbing activities completed.
- 24 C. Nothing herein shall relieve a responding public agency or utility from the requirement to obtain any
- 25 <u>required permits for an emergency activity.</u>
- 26 <u>D. An application for a floodplain development permit shall be submitted to the City within 30 calendar</u>
- 27 <u>days of the end of the emergency event or emergency activity, whichever is later.</u>
- 28 E. After the emergency event, the public agency or utility shall restore and/or mitigate any impacts to
- 29 the area of special flood hazard. Additional restoration, mitigation, or enhancement activities may
- be required as part of the floodplain development permit approval.
- 31 F. Emergency activities shall not include new permanent structures where none previously existed.
- 32 Where structures are deemed by the floodplain administrator to be the appropriate means to



| 1 | address the emergency situation, upon abatement of the emergency situation the new structure |
|----|--|
| 2 | shall be removed or any permits which would have been required, absent an emergency, obtained. |
| 3 | G. Any work done not in accordance with this chapter or other applicable regulations shall be required |
| 4 | to come into compliance. |
| 5 | |
| 6 | 15.12. 120 - <u>130</u> Application. |
| 7 | A. All applications shall be made on forms furnished by the City and submitted with the following |
| 8 | information: |
| 9 | Floodplain letter application requirements: |
| 10 | a. Application form; |
| 11 | b. Review fee; |
| 12 | c. Activity description; and |
| 13 | d. Proposed date(s) of the activity- <u>; and</u> |
| 14 | d.e. For any proposed interior improvements, a detailed estimate of the cost of all labor, |
| 15 | materials, and items necessary to perform the proposed work, in accordance with Section |
| 16 | 4.4 of FEMA's P-758 Desk Guide. |
| 17 | 2. Programmatic floodplain permit application requirements: |
| 18 | a. Application form; |
| 19 | b. Review fee; |
| 20 | c. Project narrative, including a description of each activity proposed and typical schedule; |
| 21 | d. Site plans for each requested location meeting the current submittal requirements of the |
| 22 | City, including at a minimum: |
| 23 | i. Date, scale, and north arrow; |
| 24 | ii. Parcel boundaries; |
| 25 | iii. Floodplain boundary and Zone(s), as shown on the current FIRM; |
| 26 | iv. Mean sea level; |
| 27 | v. If any of the proposed activities are also located within the shoreline jurisdiction, the |
| 28 | ordinary high water mark; |
| 29 | vi. Topographic contours at two (2) or five (5) foot intervals; |
| 30 | vii. Existing structures and buildings, including dimensions; |
| 31 | viii. Existing pedestrian facilities, including sidewalks and pathways; |



| 1 | | ix. | Existing amenities, including signs, light poles, trash cans, fire pits, benches, <u>fences or</u> |
|----|--------|-------|--|
| 2 | | | other barriers, parking meters, and the like; |
| 3 | | x. | Existing recreational facilities, including docks, boat launches, athletic areas, and the |
| 4 | | | like; |
| 5 | | xi. | Existing utilities; |
| 6 | | xii. | Existing landscaped and natural areas; |
| 7 | | xiii. | Existing irrigation system; |
| 8 | | xiv. | Existing easements; and |
| 9 | | xv. | Location of temporary or permanent storage. |
| 10 | 3. Flo | odpl | ain development permit application requirements: |
| 11 | a. | For | all Zones: |
| 12 | | i. | Application form; |
| 13 | | ii. | Review fee; |
| 14 | | iii. | Project narrative, including a description of: |
| 15 | | | (a) The total proposal, including any interdependent parts; |
| 16 | | | (b) The portion of the proposal within the area of special flood hazard; |
| 17 | | | (c) The extent to which the watercourse will be altered or relocated as a result of the |
| 18 | | | proposal; and |
| 19 | | | (d) Temporary and permanent impacts to the natural functions of the area of special |
| 20 | | | flood hazard -; and |
| 21 | | | (d)(e) A description of how the proposal meets all applicable minimum design |
| 22 | | | standards contained in this chapter. |
| 23 | | iv. | Site plans meeting the current submittal requirements of the City, including at a |
| 24 | | | minimum: |
| 25 | | | (a) Date, scale, and north arrow; |
| 26 | | | (b) Parcel boundaries; |
| 27 | | | (c) Floodplain boundary and zone(s), as shown on the current FIRM; |
| 28 | | | (d) Mean sea level; |
| 29 | | | (e) If also located within the shoreline jurisdiction, the ordinary high water mark; |
| 30 | | | (f) Project boundaries; |
| 31 | | | (g) Nature of work; |
| 32 | | | (h) Topographic contours at two (2) or five (5) foot intervals; |



| 1 | | (i) Existing and proposed structures and buildings, including: |
|----|----|--|
| 2 | | (i) Dimensions; |
| 3 | | (ii) Elevation in relation to mean sea level of the lowest floor, consistent with the |
| 4 | | FEMA Elevation Certificate; and |
| 5 | | (iii) Elevation in relation to mean sea level to which any existing structure or |
| 6 | | building has been floodproofed; |
| 7 | | (j) Existing and proposed utilities; |
| 8 | | (k) Existing and proposed easements; and |
| 9 | | (I) Location of temporary or permanent storage; |
| 10 | | v. A copy of any existing and proposed easements; |
| 11 | | vi. A copy of any permit applications to other agencies, including but not limited to |
| 12 | | electrical permits, environmental permits, and other local, state or federal permits; |
| 13 | | vii. For any work on a structure, a detailed estimate of the cost of all labor, materials, and |
| 14 | | items necessary to perform the proposed work, in accordance with Section 4.4 of |
| 15 | | FEMA's P-758 Desk Guide; |
| 16 | | viii. For each new or substantially improved structure, a preliminary Elevation Certificate, |
| 17 | | completed by a surveyor licensed in Washington State; |
| 18 | | ix. For each substantially improved structure, the market value of the structure as |
| 19 | | determined by the Snohomish County Assessor. In the event there are multiple |
| 20 | | structures on site, a copy of the assessed value for individual structures shall be |
| 21 | | obtained from the Snohomish County Assessor. |
| 22 | | ix.x.For <u>each</u> structures that <u>are is</u> to be floodproofed: |
| 23 | | (a) A preliminary Floodproofing Certificate for Non-Residential Structures, prepared by |
| 24 | | an engineer or architect licensed in Washington State; and |
| 25 | | (b) A description of the floodproofing methods used to comply with the requirements |
| 26 | | of MMC 15.12.210; |
| 27 | b. | Additional requirements for proposals any new or substantially improved structures in VE |
| 28 | | Zones: |
| 29 | | i. A preliminary V-Zone Design Certificate, prepared by an engineer or architect licensed in |
| 30 | | Washington State. |
| 31 | c. | Additional requirements for proposals that will alter the BFE or boundaries of the area of |
| 32 | | special flood hazard: |



applicant in the same manner.

| 1 | | | i. | A copy of the engineering documentation and analysis of the proposed change; |
|----|-----|--------------------|----------------------------|--|
| 2 | | | ii. | A copy of the Letter of Map Change application to FEMA. The applicant is solely |
| 3 | | | | responsible for initiating and receiving approval from FEMA; and |
| 4 | | | iii. | If a Conditional Letter of Map Revision is approved by a FEMA, a copy of the full |
| 5 | | | | documentation package, including any required property owner notifications, shall be |
| 6 | | | | submitted prior to the City prior to issuance of any floodplain permit. |
| 7 | В. | The | e floodp | lain administrator may require any other such information that is reasonably necessary to |
| 8 | | rev | iew an a | application. |
| 9 | | | | |
| 10 | 15. | 12. <mark>1</mark> | 30 - <u>140</u> | Review process. |
| 11 | A. | Det | termina | tion of complete application. |
| 12 | | 1. | Within | $28\ calendar\ days\ after\ receiving\ an\ application,\ the\ City\ shall\ mail\ or\ personally\ provide\ a$ |
| 13 | | | writter | n determination of completeness to the applicant which states either: |
| 14 | | | a. Th | at the application is complete; or |
| 15 | | | b. Th | at the application is incomplete and states what additional information is necessary to |
| 16 | | | ma | ake the application complete. |
| 17 | | 2. | For flo | odplain development permits, other agencies with jurisdiction shall be identified in the |
| 18 | | | City's c | determination of completeness as required above, to the extent known by the City. |
| 19 | | 3. | An app | lication is complete when it meets the submission requirements outlined in MMC |
| 20 | | | 15.12. | 120. This determination of completeness shall be made when the required submittals are |
| 21 | | | determ | nined to be in a comprehensible format and contain at least the minimum amount of |
| 22 | | | inform | ation to allow review of the project to progress even though additional information may |
| 23 | | | be req | uired or project modifications may be undertaken subsequent to initial project review. |
| 24 | | | The Cit | cy's determination of completeness shall not preclude the City from requesting additional |
| 25 | | | inform | ation or studies either at the time of the determination of completeness or at some later |
| 26 | | | time. | |
| 27 | | 4. | If the a | pplicant receives a determination of incompleteness from the City, the applicant shall |
| 28 | | | have 9 | 0 calendar days to submit the necessary information to the City. Within 14 calendar days |
| 29 | | | after a | n applicant has submitted the requested additional information, the City shall prepare a |
| 30 | | | writter | n determination of completeness as described in the section above and notify the |
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- If the applicant does not submit the required information within the 90-calendar-day period, the floodplain administrator shall find that the application has lapsed for failure to submit the necessary information in a timely manner and close the land use development permit application file. The floodplain administrator may grant time extensions to submit the required information, not to exceed an additional 90 calendar days.
 - 6. If, within 28 calendar days of the date of the submitted application, the City has not provided a written determination of completeness, the application shall be deemed complete.
 - B. The City shall review the application for compliance with the State Environmental Policy Act in accordance with MMC 17.13.060(C).
- 10 C. Floodplain letter review process.
- A floodplain letter is a minor, administrative review that does not require public notice or a
 public hearing.
- 2. The floodplain administrator shall prepare a floodplain letter for each request. The statement shall indicate the specific activity requested, any activities that are approved, and provide a summary of the City's findings of the consistency of the proposed activity with the requirements of this chapter.
- 17 D. Programmatic floodplain permit review process.
 - A programmatic floodplain development permit is a minor, administrative review that does not require public notice or a public hearing.
 - 2. Programmatic floodplain development permits shall be evaluated to prevent cumulative adverse impacts to the area of special flood hazard.
- 22 3. The floodplain administrator shall prepare findings that include:
 - a. Permittee and contact information;
- b. Duration of permit;
- c. Geographic area covered by permit;
- d. Permitted activities and any restrictions or conditions on the method, number, type,
 location or timing of activities;
- e. List any activities requested that are not approved as part of the programmatic permit approval; and
- f. Includes an analysis of the consistency of the activity or activities with the requirements of this chapter.



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- 4. Activity tracking and quarterly reporting is required. The floodplain administrator shall prescribe the procedures for how such tracking and reporting occurs.
- E. Floodplain development permit review process.
 - When the floodplain development permit application is for a proposal that also requires land use or development review subject to major review under MMC 17.13.030(B), the floodplain review process shall be integrated with any required public notice or public hearing.
 - a. Review may be consolidated pursuant to MMC 17.13.060(F).
 - b. The floodplain administrator shall be solely responsible for preparing findings for the floodplain application. If the review is consolidated and the highest decision authority is not the floodplain administrator, the floodplain administrator shall prepare an analysis, findings, and recommended conditions, if any, for the staff report to the decision authority.
 - 2. All floodplain development permit applications not subject to major review pursuant to subsection (1) shall be processed as a minor, administrative review and shall not require public notice or public hearing.
 - 3. The floodplain administrator shall review the application and prepare findings that analyzes the consistency of the application with the requirements of this chapter and Chapter 17.52 MMC.

18 **15.12.140-150 Decision.**

- A. Following the completion of any hearing, procedure, or administrative decision, the floodplain application shall be approved, approved with conditions or denied and a written decision shall be issued within 10 calendar days. The floodplain administrator may include any such conditions, modifications, or safeguards necessary to assure consistency of the project with this chapter, the NFIP, and any other applicable regulations.
 - 1. For floodplain development permit applications subject to major review, a notice of decision shall be published as set forth in MMC 17.13.080(C).
- For floodplain letters, programmatic floodplain development permits, and floodplain development permits subject to minor review, a published notice of decision is not required. However, a memorandum shall be sent to the applicant and placed in the permit file containing findings of fact.
- 30 B. The decision shall be issued within the following time periods after the City notifies the applicant 31 that the application is complete, subject to any delays permitted by law:
- 1. For floodplain letters, the decision shall be issued within 30 calendar days;



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- For programmatic floodplain development permits, the decision shall be issued within 60
 calendar days;
- 3. For floodplain development permits, the decision or notice of decision shall be issued within 1204 calendar days.
- 5 C. To determine the number of days that have elapsed after the floodplain administrator has notified 6 the applicant that the application is complete, the following periods shall be excluded:
 - Any period during which the applicant has been requested by the City to correct plans, perform required studies, or provide additional information;
- 9 2. Any period during which an environmental impact statement is being prepared following a determination of significance;
- 3. Any period for administrative appeals of land use development permits, if an open record appeal hearing or a closed record appeal, or both, are allowed;
- 4. Any extension of time mutually agreed upon by the applicant and the City.
- D. The time limits established in this section do not apply if the floodplain application requires substantial revisions by the applicant, in which case the time period shall start from the date at which the revised floodplain application is determined to be complete.
- 17 E. If the City is unable to issue its decision within the time period set forth under subsection (B), it shall provide written notice to the project applicant including the reasons the time limits have not been met and an estimated date for issuance of the decision.

21 **15.12.150.160** Permit issuance.

- 22 A floodplain development permit shall be issued together with any associated land use and/or
- 23 development permits. In no case shall a floodplain development permit be issued prior to any associated
- 24 land use and/or development permits.

26 **15.12.**160-<u>170</u> Inspection.

- A. All property or project sites included as part of an application shall be subject to inspection by the floodplain administrator, or designee, during application review and completion of the development activity. The floodplain administrator shall be granted unlimited right of entry to the project site during regular business hours, or other hours as mutually agreed upon, by the applicant for the
- 31 purposes of making inspections to determine that the requirements of the plans and permits are



- MUKILTEO being complied with, and for the purposes of taking corrective measures of an emergency nature. 1 2 The cost of such corrective measures shall be borne by the applicant. 3 B. Final inspection and approval for new and substantially improved structures authorized by a 4 floodplain development permit shall only occur when: 5 1. All machinery and/or equipment is installed; 2. Final grading around the structure and any associated equipment or accessory structures is 6 7 complete; and 8 3. The final Elevation Certificate, Floodproofing Certificate, and V-Zone Design Certificate are 9 complete and submitted to the City. 10 11 15.12.170-180 Expiration. A. Floodplain approvals shall be valid for the following terms: 12 13 1. A floodplain letter shall be valid for 180 days from the date of approval. 2. A programmatic floodplain development permit shall be valid for a period of up to one (1) year 14 15 from the date of approval. 3. A floodplain development permit shall be valid for 180 days from the date of issuance.
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- 17 B. Renewals.

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- 1. No renewals shall be granted for floodplain letters. 18
- 19 2. A programmatic floodplain development permit may be renewed for a period of up to one (1) 20 year, provided:
 - a. A request is submitted to the floodplain administrator a minimum of 14 calendar days in advance of the date of expiration; and
 - b. There have been no changes to the FIRM.
- 24 3. A floodplain development permit may be renewed for a period of an additional 180 days, 25 provided:
 - a. A request is submitted to the floodplain administrator a minimum of 14 calendar days in advance of the date of expiration;
 - b. Activities approved under the floodplain development permit have commenced; and
- 29 c. There have been no changes to the FIRM.

31 15.12.270190 Appeals.



| 1 | A. Any appeal of a decision on a floodplain application decision shall follow the procedures set forth in |
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| 2 | Chapter 17.13.090 MMC, except that the following appeal authorities shall apply instead of MMC |
| 3 | <u>17.13.070 Table 6:</u> |
| 4 | 1. Appeals of decisions made by the floodplain administrator shall be made to the Hearing |
| 5 | Examiner. |
| 6 | 2. Appeals of decisions made under consolidated review where the highest decision authority is |
| 7 | not the floodplain administrator shall be made to Snohomish County Superior Court. |
| 8 | |
| 9 | 15.12.180 Emergencies. |
| 10 | A.—A floodplain development permit shall not be immediately required of a public agency or utility |
| 11 | when responding to an emergency event; provided that the floodplain administrator shall be |
| 12 | notified in writing within 72 hours of the start of the emergency development activity. |
| 13 | B.A. Any emergency development activity completed as part of response to an emergency event shall be |
| 14 | documented, including but not limited to: |
| 15 | 1.—Time, date, and location of the emergency event; |
| 16 | 2.1: The cause of the emergency event; |
| 17 | 3.1. The name(s) of the responding public agency and/or utility; |
| 18 | 4.1. A description of development activity completed; |
| 19 | 5.1. An inventory of the materials used; and |
| 20 | 6.1: Quantities in cubic yards of any land disturbing activities completed. |
| 21 | C.A. Nothing herein shall relieve a responding public agency or utility from the requirement to obtain any |
| 22 | required permits for an emergency activity. |
| 23 | D.AAn application for a floodplain development permit shall be submitted to the City within 30 |
| 24 | calendar days of the end of the emergency event or emergency activity, whichever is later. |
| 25 | E.A. After the emergency event, the public agency or utility shall restore and/or mitigate any impacts to |
| 26 | the area of special flood hazard. Additional restoration, mitigation, or enhancement activities may |
| 27 | be required as part of the floodplain development permit approval. |
| 28 | F. <u>A.</u> Emergency activities shall not include new permanent structures where none previously existed. |
| 29 | Where structures are deemed by the floodplain administrator to be the appropriate means to |
| 30 | address the emergency situation, upon abatement of the emergency situation the new structure |
| 31 | shall be removed or any permits which would have been required, absent an emergency, obtained. |



| 1 | G.A | Any work done not in accordance with this chapter or other applicable regulations shall be |
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| 2 | | required to come into compliance. |
| 3 | | |
| 4 | 15. | 12. 190- 200 Minimum design standards – all development. |
| 5 | A. | In all areas of special hazard where BFE data has been provided in the FIS or FIRMs, or in accordance |
| 6 | | with MMC 15.12.060(B)(4), the minimum design standards of this section and the specific design |
| 7 | | standards contained in this chapter are required. |
| 8 | B. | Anchoring. |
| 9 | | 1. All new construction and substantial improvements, including those related to manufactured |
| 10 | | homes, shall be anchored to prevent flotation, collapse, or lateral movement of the structure |
| 11 | | resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. |
| 12 | | 2. All manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement, |
| 13 | | and shall be installed using methods and practices that minimize flood damage. Anchoring |
| 14 | | methods may include, but are not limited to, use of over-the-top or frame ties to ground |
| 15 | | anchors. |
| 16 | C. | Construction materials and methods. |
| 17 | | 1. All new construction and substantial improvements shall be constructed: |
| 18 | | a. With materials and utility equipment resistant to flood damage; and |
| 19 | | b. Using methods and practices that minimize flood damage. |
| 20 | | 2. Air conditioning, electrical, heating, plumbing, mechanical, ventilation equipment and other |
| 21 | | service facilities shall be designed and/or otherwise elevated or located to prevent water from |
| 22 | | entering or accumulating within the equipment during conditions of flooding. |
| 23 | D. | Enclosed area below the lowest floor. If structures are constructed or substantially improved with |
| 24 | | fully enclosed areas below the lowest floor, the areas shall be used solely for: |
| 25 | | 1. Parking of vehicles; |
| 26 | | 2. Ingress and egress to the structure; or |
| 27 | | 3. Storage. |
| 28 | E. | Recreational vehicles shall only be permitted in the area of special flood hazard when: |
| 29 | | 1. It is on the property for less than 180 days per calendar year; and |
| 30 | | 2. Is fully licensed and ready for highway use, on wheels or jacking system, attached to the site |
| 31 | | only by quick disconnect-type utilities and security devices, and have no permanently attached |
| 32 | | additions. |



| 1 | F. | Storage. |
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| 2 | | 1. The storage or processing of materials that could be injurious to human, animal, or plant life if |

- released due to damage from flooding is prohibited in areas of special flood hazard. All
 fertilizers, chemicals, gases and hazardous materials shall be handled in compliance with all
 applicable local, state and federal regulations. No fertilizers, chemicals, gases or other hazardous
 materials shall be stored below the BFE.
- 7 2. Storage of non-hazardous materials or equipment may be allowed where:
 - a. The storage structure is dry floodproofed or elevated to at least one (1) foot above the BFE, and firmly anchored to prevent flotation; or
 - b. The materials or equipment are readily removable from the area within the time available after a flood warning.
- 12 G. Utilities.

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- 1. All utilities shall be floodproofed to the maximum extent practicable.
- All new and replacement water supply systems shall be designed to minimize or eliminate
 infiltration of floodwaters into the systems.
 - 3. All new and replacement sanitary sewer systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
 - 4. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- 20 H. New development and subdivision proposals.
- 21 1. All subdivisions and new development shall:
 - a. Be consistent with the need to minimize flood damage;
 - Have public utilities and facilities, such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage; and
 - c. Have adequate drainage provided to reduce exposure to flood damage.
- Any new development or subdivision proposal consisting of one of the following shall also
 provide BFE data as part of the application:
 - a. 50 or more lots; or
- b. Is on a site that is five (5) acres or more.

31 **15.12.**200.**210** Additional design standards – residential structures.



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- A. Fully enclosed areas below the lowest floor that are subject to flooding, including attached garages where the floor slab is constructed below the BFE, are prohibited unless such areas are designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs shall:
 - 1. Have a minimum of two (2) openings with a total net area of not less than one (1) square inch for every one (1) square foot or portion thereof of enclosed area subject to flooding;
 - 2. The bottom of all openings shall be no higher than one (1) foot above the higher of the final interior grade (or floor) and the finished exterior grade immediately under each opening; and
 - 3. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exist of floodwater; or
 - 4. Alternatively, an engineer or architect licensed in Washington State may design and certify engineered openings that meet or exceed the minimum performance criteria contained in subsections (A)(1) through (A)(3) of this section.
 - B. In AE and A Zones where the BFE has been determined or can be reasonably obtained, new construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one (1) foot or more above the BFE. Mechanical equipment and utilities shall be waterproof or elevated at least one (1) foot above the BFE. Crawlspaces that are below finished exterior grade on all sides are prohibited.
- In A Zones where the BFE has not been determined or cannot be reasonably obtained, new
 construction and substantial improvement of any habitable structure shall be reasonably safe from
 flooding, and the lowest floor shall be at least two (2) feet above the highest adjacent grade.
- D. In VE Zones, new construction and substantial improvement of any residential structure shall also meet the requirements of MMC 15.12.260. <u>Crawlspaces are prohibited.</u>

25 **15.12.210-220** Additional design standards – non-residential structures.

- A. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet the requirements of the following subsections:
 - 1. Preferred floodproofing method:
- a. Fully enclosed areas below the lowest floor that are subject to flooding, including garages attached to a residential structure where the floor slab is constructed below the BFE, are prohibited unless such areas are designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs shall:



| 1 | | i. Have a minimum of two (2) openings with a total net area of not less than one (1) |
|----|----------|---|
| 2 | | square inch for every one (1) square foot or portion thereof of enclosed area subject to |
| 3 | | flooding; |
| 4 | i | ii. The bottom of all openings shall be no higher than one (1) foot above the higher of the |
| 5 | | final interior grade (or floor) and the finished exterior grade immediately under each |
| 6 | | opening; and |
| 7 | | (a) Openings may be equipped with screens, louvers, valves, or other coverings or |
| 8 | | devices, provided that they permit the automatic entry and exist of floodwater; or |
| 9 | | (b) An engineer or architect licensed in Washington State may design and certify |
| 10 | | engineered openings that meet or exceed the minimum performance criteria |
| 11 | | contained in subsections (A)(1)(a)(i) through (A)(1)(a)(iii) of this section. |
| 12 | b. | In AE and A Zones where the BFE has been determined or can be reasonably obtained, new |
| 13 | | construction and substantial improvement of any structure shall have the lowest floor, |
| 14 | i | including basement, elevated one (1) foot or more above the BFE, or elevated as required by |
| 15 | | ASCE 24, whichever is greater. Mechanical equipment and utilities shall be waterproofed or |
| 16 | | elevated at least one (1) foot above the BFE, or elevated as required by ASCE 24, whichever |
| 17 | i | is greater. |
| 18 | c. | In A Zones where the BFE has not been determined or cannot be reasonably obtained, new |
| 19 | | construction and substantial improvement of any structure shall be reasonably safe from |
| 20 | | flooding, and the lowest floor shall be at least two (2) feet above the highest adjacent grade. |
| 21 | d. | In VE Zones, new construction and substantial improvement of any habitable structure shall |
| 22 | | also meet the requirements of MMC 15.12.210. |
| 23 | 2. If th | e requirements of subsection 1 are not met, then design for new construction and |
| 24 | subs | stantial improvement of any habitable structure shall meet or exceed the following |
| 25 | mini | mum criteria: |
| 26 | a. | Be dry floodproofed so that below one (1) foot or more above the BFE the structure is |
| 27 | , | watertight with walls substantially impermeable to the passage of water, or dry |
| 28 | • | floodproofed to the elevation required by ASCE 24, whichever is greater; |
| 29 | b. | Have structural components capable of resisting hydrostatic and hydrodynamic loads and |
| 30 | 1 | effects of buoyancy; |
| 31 | c. | Be certified by an engineer or architect licensed in Washington State that the design and |
| 32 | | methods of construction are in accordance with accepted standards of practice for meeting |



| 1 | | | provisions of this subsection based on their development and/or review of the structural | | | | |
|----|----|--|---|--|--|--|--|
| 2 | | design, specifications and plans. Such certifications shall be provided to the official as set | | | | | |
| 3 | | | forth in MMC 15.12.060(B)(2); and | | | | |
| 4 | В. | Арр | Applicants who choose to meet the requirements of MMC 15.12.210(A)(2) shall be notified that | | | | |
| 5 | | floo | flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level. | | | | |
| 6 | | For | For example, a structure that is floodproofed to the BFE will be rated as one (1) foot below the BFE. | | | | |
| 7 | | Floo | Floodproofing the building an additional amount, such as floodproofing to one (1) foot above the | | | | |
| 8 | | BFE, | BFE, will reduce insurance premiums. | | | | |
| 9 | | | | | | | |
| 10 | 15 | .12. 22 | 20-<u>230</u> Additional design standards – accessory structures. | | | | |
| 11 | A. | Acce | essory structures shall be designed and constructed in accordance with the following | | | | |
| 12 | | requ | requirements: | | | | |
| 13 | | 1. | Use of the accessory structure is limited to parking of vehicles or storage; | | | | |
| 14 | | 2. | The maximum size of the structure is 650 sq. ft.; | | | | |
| 15 | | 3. | The maximum height of the structure is 15 ft.; | | | | |
| 16 | | 4. | The accessory structure shall be adequately anchored to prevent flotation, collapse, and lateral | | | | |
| 17 | | | movement; | | | | |
| 18 | | 5. | Any machinery or equipment serving the accessory structure shall be elevated or floodproofed | | | | |
| 19 | | | to or above the BFE; | | | | |
| 20 | | 6. | The accessory structure shall be designed in accordance with MMC 15.12.210; | | | | |
| 21 | | 7. | In VE Zones, the accessory structure shall also comply with the requirements of 15.12.260(A)(5); | | | | |
| 22 | | 8. | The structure shall have low damage potential; | | | | |
| 23 | | 9. | The structure shall not be habitable. | | | | |
| 24 | В. | If an | accessory structure is converted to another use, it shall be brought into full compliance with | | | | |
| 25 | | the | current standards governing such use. | | | | |
| 26 | | | | | | | |
| 27 | 15 | .12. 23 | 30-<u>240</u> Additional design standards – critical facilities. | | | | |
| 28 | A. | Construction of new critical facilities shall be located outside the area of special flood hazard to the | | | | | |
| 29 | | max | imum extent possible. | | | | |
| 30 | В. | Cons | struction of new critical facilities shall be permitted when no other feasible alternative site is | | | | |
| 31 | | avai | lable. The applicant shall provide the following additional information with the application: | | | | |



- Documentation of a need for the project, as supported by a detailed written analysis of the
 projected service population, an inventory of existing and planned comparable facilities, and the
 projected demand for the type of facility proposed; and
 - 2. Evidence of investigation of alternative sites, including a detailed explanation of site selection methodology, as verified by the City and reviewed by associated jurisdictions and agencies.
- C. Critical facilities constructed wholly or partially within the area of special flood hazard shall have the
 lowest floor elevated either three (3) feet above BFE or to the height of the 500-year flood,
 whichever is higher.
- 9 D. To the extent possible, ingress and egress to the critical facility shall be elevated above and 10 protected to three (3) feet above BFE or to the height of the 500-year flood, whichever is higher.
- E. Floodproofing and sealing measures shall be completed to ensure that hazardous materials will not
 be displaced by or released into floodwaters.

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- 14 15.12.240-250 Additional design standards manufactured homes.
- 15 A. All newly placed or substantially improved manufactured homes shall:
- 1. Be elevated on a permanent foundation such that the manufactured home is elevated one (1) foot or more above the BFE: and
 - 2. Be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- B. Any newly placed or substantially improved manufactured home in a VE Zone shall also meet the requirements of MMC 15.12.260.

22

18 19

- 23 15.12.250-260 Additional design standards all other buildings and development.
- A. All other buildings and development for which specific design standards are not provided for in this chapter shall meet the following minimum provisions:
- 1. Be located and constructed to minimize flood damage;
- 2. Be anchored to prevent flotation, collapse, or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during the conditions of the design flood;
- 29 3. Be constructed of flood damage-resistant materials;
- 4. Meet the flood opening requirements of MMC 15.12.210; and
- 31 5. Have mechanical, plumbing, and electrical systems:
- a. That are located above the design flood elevation or meet the requirements of ASCE 24; and



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| 1 | | b. | The minimum electric service required to address life safety and electric code requirements | | | |
|----|--------|---|--|--|--|--|
| 2 | | | is permitted below the design flood elevation, provided it conforms to the provisions of the | | | |
| 3 | | | building code for electrical service in wet locations. | | | |
| 4 | 6. | Ad | ditional provisions may apply in the building codes. In the event of a conflict, the more | | | |
| 5 | | res | strictive provision shall apply. | | | |
| 6 | | | | | | |
| 7 | 15.12. | 260- 270 Additional design standards – VE Zones. | | | | |
| 8 | A. All | nev | v construction and substantial improvements in the VE Zone shall: | | | |
| 9 | 1. | Ве | elevated on pilings or columns so that: | | | |
| 10 | | a. | For residential structures, the bottom of the lowest horizontal structural member of the | | | |
| 11 | | | lowest floor, excluding the pilings or columns, is elevated one (1) foot or more above BFE; or | | | |
| 12 | | b. | For non-residential structures, the bottom of the lowest horizontal structural member of the | | | |
| 13 | | | lowest floor, excluding pilings or columns, is elevated one (1) foot or more above BFE or | | | |
| 14 | | | meets the elevation requirements of ASCE 24, whichever is higher; and | | | |
| 15 | | c. | The pile or column foundation and structure attached thereto is anchored to resist flotation, | | | |
| 16 | | | collapse and lateral movement due to the effects of wind and water loads acting | | | |
| 17 | | | simultaneously on all building components; and | | | |
| 18 | | d. | Wind and water loading values shall each have a one (1) percent chance of being equaled or | | | |
| 19 | | | exceeded in any given year (100-year mean recurrence interval. | | | |
| 20 | 2. | Pro | ovide the elevation, in relation to mean sea level, of the bottom of the lowest structural | | | |
| 21 | | me | ember of the lowest floor (excluding pilings and columns) and whether such structures contain | | | |
| 22 | | a b | pasement; | | | |
| 23 | 3. | No | t use or be located on fill for structural support of any structure; | | | |
| 24 | 4. | Ве | located landward of the reach of the mean high tide; | | | |
| 25 | 5. | На | ve the space below the lowest floor either: | | | |
| 26 | | a. | Free of obstruction; or | | | |
| 27 | | b. | Constructed with non-supporting breakaway walls, open wood lattice-work, or insect | | | |
| 28 | | | screening intended to collapse under wind and water loads without causing collapse, | | | |
| 29 | | | displacement, or other structural damage to the elevated portion of the building or | | | |
| 30 | | | supporting foundation system. For the purposes of this section, breakaway walls shall: | | | |
| 31 | | | i. Have a design safe loading resistance of not less than ten (10) and use no more than 20 | | | |

pounds per square foot;



| 1 | | ii. | Only enclose spaces used solely for parking of vehicles, ingress and egress to the | | | |
|----|--|----------------------|---|--|--|--|
| 2 | | | structure, or storage; and | | | |
| 3 | | iii. | Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per | | | |
| 4 | | | square foot, either by design or when required by local or state codes, may be | | | |
| 5 | | | permitted only if an engineer or architect licensed in the State of Washington certifies | | | |
| 6 | | | that the proposal meets the following conditions: | | | |
| 7 | | | (a) Breakaway wall collapse shall result from water load less than that which would | | | |
| 8 | | | occur during the base flood; | | | |
| 9 | | | (b) The elevated portion of the structure and supporting foundation system shall not be | | | |
| 10 | | | subject to collapse, displacement, or other structural damage due to the effects of | | | |
| 11 | | | wind and water loads acting simultaneously on all structural and non-structural | | | |
| 12 | | | components; and | | | |
| 13 | | | (c) Wind and water loading values shall each have a one (1) percent chance of being | | | |
| 14 | | | equaled or exceeded in any given year (100-year mean recurrence interval). | | | |
| 15 | В. | The structu | iral design, specifications and plans for any new construction or substantial improvement | | | |
| 16 | shall be reviewed and certified by an engineer or architect licensed in the State of Washington. The | | | | | |
| 17 | | engineer o | r architect shall certify that the design and methods of construction to be used are in | | | |
| 18 | | accordance | e with the accepted standards of practice for meeting the provisions of subsection (A)(1). | | | |
| 19 | | | | | | |
| 20 | 15 | 12.270 App | eals. | | | |
| 21 | Δ. | Any appeal | of a decision on a floodplain application decision shall follow the procedures set forth in | | | |
| 22 | | Chapter 17 | .13.090 MMC, except that the following appeal authorities shall apply instead of MMC | | | |
| 23 | | 17.13.070 | Fable 6: | | | |
| 24 | | 1. Appeal | s of decisions made by the floodplain administrator shall be made to the Hearing | | | |
| 25 | | Examir | er. | | | |
| 26 | | 2. <u>1.</u> Appeal | s of decisions made under consolidated review where the highest decision authority is | | | |
| 27 | | not the | floodplain administrator shall be made to Snohomish County Superior Court. | | | |
| 28 | | | | | | |
| 29 | 15. | .12.280 Enfo | rcement. | | | |
| 30 | A. | Any violation | on of the provisions of this chapter shall be enforced through the procedures set forth in | | | |
| 31 | | Title 18, La | nd Use Enforcement, of the Mukilteo Municipal Code. | | | |



- B. Any violation of the critical area regulations shall result in the immediate issuance of a stop work order which shall remain in effect until the violation has been corrected. In addition to the stop work order, violations of this chapter shall constitute a civil infraction as outlined in Mukilteo Municipal Code Chapter 1.32, General Penalties. The first violation shall constitute a Class III civil infraction, the second offense shall constitute a Class II civil infraction and the third and each violation thereafter within a one-year period shall be classified as a Class I civil infraction.
- 7 C. Additional remedies.
 - 1. In addition to any other remedy provided by this chapter or under the Mukilteo Municipal Code, the City may initiate injunction or abatement proceedings or any other appropriate action in courts against any person who violates or fails to comply with any provision of this chapter to prevent, enjoin, abate, and/or terminate violations of this chapter and/or to restore a condition which existed prior to the violation. In any such proceeding, the person violating and/or failing to comply with any provisions of this chapter shall be liable for the costs and reasonable attorneys' fees incurred by the City in bringing, maintaining and/or prosecuting such action.
 - 2. Notwithstanding any other provision of this chapter, whenever the floodplain administrator finds that a violation of this chapter has created or is creating an unsanitary or dangerous condition, or which constitutes an immediate hazard, he/she may suspend or revoke any floodplain development permit and suspend or terminate operations under the permit immediately.
 - 3. Any person discharging material which will block, damage or contaminate the area of special flood hazard shall be liable for all costs incurred by the City or others in cleaning up or correcting said action and may be charged with a misdemeanor punishable by fines.
 - 4. Penalty or enforcement provisions provided in this chapter shall not be exclusive, and the City may pursue any remedy or relief deemed appropriate in response to a violation of this chapter or the rules and regulations adopted hereunder. The City council may institute a suit for a mandatory injunction directing a person to remove a structure or make the same comply with its terms. If the City council is successful in its suit, the respondent shall bear the costs of the action.
- 5. The failure or refusal of the City to enforce any provision of this chapter, and as hereafter amended, shall not constitute a waiver or bar to prevent enforcement thereof against any person for a subsequent violation of this chapter, or for any other violation by any other person.