

City of Snoqualmie Planning Commission

Position 1 – Cara Christensen

Position 2 - Steve Smith

Position 3 – Jolyon Johnson, Chair

Position 4 - Vacant

Position 5 - Luke Marusiak, Vice-chair

Position 6 - Muhammad Shakil

Position 7 – David Goodman

Position 8 - Mayor Matt Larson*

Position 9 - Councilmember Katherine Ross*

*Non-voting Member

PLANNING COMMISSION SPECIAL MEETING AGENDA

Monday, June 29, 2020 at 7:00 pm

REMOTE/VIRTUAL MEETING

This is an open public meeting, however under Governor Inslee’s Proclamation 20-28.4, in-person attendance is not allowed, and all participation must occur remotely. Please contact the Gwyn Berry with the Community Development Department at gberry@snoqualmiewa.gov or 425-766-9031 for more information.

AGENDA:

I. OPEN PLANNING COMMISSION MEETING

1. Call to Order
2. Roll Call
3. Approval of the agenda
4. Citizen Comments and requests for items not on the agenda

II. PUBLIC HEARING

5. Flood Hazard Ordinance continued

III. PERMIT REVIEW / DESIGN REVIEW BOARD ITEMS**

6. N/A

IV. LEGISLATIVE / POLICY ITEMS / REGULATIONS

- Page 2** 7. Flood Hazard Ordinance Regulations update; **DISCUSSION/ACTION-RECOMMENDATION TO CITY COUNCIL**

V. BUSINESS WITHIN THE SCOPE OF PLANNING COMMISSION AUTHORITY

8. N/A

VI. ADJOURNMENT

Register in advance for this webinar:

https://us02web.zoom.us/webinar/register/WN_Sig9DibVS4KXGHMnbY4TQA

After registering, you will receive a confirmation email containing information about joining the webinar.

If you are joining by telephone only, please:

- Dial: 1-253-215-8782
- Enter the Meeting ID: **830 9155 5425** and press #
- If you are prompted to enter a password, enter: **29062020** and press #
- If prompted to enter the host key, press # to wait for the meeting to start.
- If prompted to enter a unique ID, press # to skip.

Telephone meeting participation instructions:

- Press *9 to raise your hand to speak. *Raising your hand signals the meeting moderator that you have a comment.*
- Press *6 to mute and unmute.

** Note: Public comment may be limited or not allowed for these items due to the nature of the permit approval process.



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MEMORANDUM

To: Planning Commission
From: Mark Hofman, Community Development Director, CFM
Jason Rogers, Senior Planner
Date: June 29, 2020
Subject: Flood Hazard Regulations

BACKGROUND

The National Flood Insurance Act of 1968 was enacted by title XIII of the Housing and Urban Development Act of 1968. This is codified at 42 U.S.C. 4001-4128, and is also known as the National Flood Insurance Program (NFIP). The purpose of the NFIP was to provide flood insurance protection to property owners in flood-prone areas. Among other things, the NFIP requires that communities containing special flood hazard areas and other flood-prone areas adopt floodplain management regulations that meet certain minimum criteria set by the Federal Emergency Management Agency (FEMA). These regulations are designed to reduce or avoid flood damages.

FEMA designates portions of the City of Snoqualmie as being areas of special flood hazard. These areas are colloquially referred to as the 100-year floodplain. However, the term 100-year floodplain should not be confused with FEMA's formal definitions for flood-prone areas. FEMA's specific definition for areas of special flood hazard is "land within the community subject to a one percent or greater chance of flooding in any given year." Within this area, the flood hazard regulations apply.

The City's current flood hazard regulations were originally adopted in 1989 (Ord. 621), and have been updated several times since then, including in 2000 (Ord. 856), 2001 (Ord. 890), 2003 (Ord. 920), 2005 (Ord. 976), 2008 (Ord. 1031), 2012 (Ord. 1093), and 2018 (Ord. 1203).

The Planning Commission began discussion of the City's flood hazard regulations as well as needed changes to maintain conformance with state and federal law on May 18, 2020. The Planning Commission continued its discussion on June 2, 2020, and opened a public hearing on June 15, 2020. The public hearing has been continued to a special meeting on June 29, 2020.

ANALYSIS

Amendments and the reasons are as follows. Note that changes compared to the previous draft are noted below:

- SMC 15.12.010 – *Change requested by FEMA.*
- SMC 15.12.020 – *Change requested by FEMA.*
- SMC 15.12.030 – *Change requested by FEMA.*
- SMC 15.12.040 – *Most changes required by FEMA. Exceptions:*
 - J. Fill – *Change made by the City.*
 - O. Floodplain Administrator – *Designation required by FEMA, and designation of the Community Development Director is by the City.*
 - X. Market Value – *This definition is required by FEMA, however the exact method is left to the City's discretion within some bounds. Citation to the SD/SI Manual is per FEMA.*

- Y. Mechanical Equipment – *Added by the City.*
- AH. Variance – *Change made by the City.*
- SMC 15.12.050 – *Change required by FEMA.*
- SMC 15.12.060 – *Change required by FEMA.*
- SMC 15.12.070 – *No changes.*
- SMC 15.12.080 – *Change required by FEMA.*
- SMC 15.12.090 – *Change required by FEMA.*
- SMC 15.12.100 – *Change required by FEMA, although the City specifically designated the Community Development Director as Floodplain Administrator.*
- SMC 15.12.110 – *Changes required by FEMA, except for the emergency clause in sub E. These changes made by the City with FEMA concurrence.*
- SMC 15.12.120 – *Changes required by FEMA.*
- SMC 15.12.130 – *Changes made by the City to streamline variance requirements, with FEMA concurrence. Note other changes compared to the previous draft, detailed below.*
- SMC 15.12.140 – *Change required by FEMA.*
- SMC 15.12.150
 - A. *Change required by FEMA.*
 - B. *Change required by FEMA.*
 - C. *Change required to meet CRS Classification standards.*
 - D. *Change required by FEMA.*
 - E. *Change required by FEMA.*
 - F. *Change required by FEMA and to meet CRS Classification requirements.*
 - G. *Change recommended by FEMA.*
- SMC 15.12.160
 - A. *Change required by FEMA.*
 - B. *Change required by FEMA, and mechanical elevation to meet CRS Classification standards.*
 - C. *Change required to meet CRS Classification standards.*
 - D. *Change made by the City.*
 - E. *Change required by FEMA.*
 - F. *Change made by the City, with FEMA concurrence.*
 - G. *No changes.*
 - H. *No changes.*
 - I. *No changes.*
 - J. *Change required by FEMA.*
 - K. *Change recommended by FEMA, and mechanical elevation to meet CRS Classification standards.*
- SMC 15.12.170 – *Change required by FEMA. Note the limitation on residential structures in the floodway comes from state law, RCW 86.16.041, and not from minimum NFIP or CRS Classification standards.*
- SMC 15.12.180 – *Change required by FEMA.*
- SMC 15.12.190 – *Change made by the City. Appeals are required by FEMA and state law, however the exact mechanism is up to the City. The City has been shifting appeals to the Hearing Examiner rather than the City Council or Planning Commission, because the Hearing Examiner is, in general, better equipped to handle quasi-judicial matters such as appeals.*
- SMC 19.12.150 – *Change made by the City. The SFHA is also considered a critical area under state law and the City's code.*
- SMC 15.20.030 – *Change made by the City. See description below under changes compared to the previous draft.*

Compared to the previous draft, the following changes have been made:

- SMC 15.12.040(Y) – *Added a new definition of mechanical equipment, including ductwork. The language is per FEMA's description of mechanical equipment. This change made by the City, for ease of compliance with CRS Classification requirements.*

- SMC 15.12.060(B) – Changed three instances of “building official” to “Floodplain Administrator.” *This change made by the City, for ease of conformance with FEMA requirements requiring designation of a Floodplain Administrator.*
- SMC 15.12.120(A) – Added a new subsection 5 that requires the base flood elevation (BFE) be determined, or alternative elevation data provided. *This change is to conform to CRS Classification requirements.*
- SMC 15.12.120(C)(6) – Subsection added to require maintenance of and access to flood hazard information by the public. *This change is to conform to FEMA requirements.*
- SMC 15.12.130(D) – Amended to add a reference to the non-residential construction section, such that it is no longer possible to get a variance from SMC 15.12.160(B), and also to specifically not allow variances to any elevation requirement. *This change is to conform to CRS Classification requirements.*
- SMC 15.12.150(C)(3) – Amended to add mechanical equipment freeboard requirement. *This change is required for CRS Class 8 and higher.*
- SMC 15.12.150(D)(2) – Amended to clarify that “new” water wells are prohibited in the floodway. *This change made at FEMA request to prohibit wells in the floodway, and the City modified to not affect existing wells including the City’s South Wellfield, located in the floodway near Mt. Si High School.*
- SMC 15.12.150(E) – Added the words “...as well as all new development...” in two places. *This change is to conform to FEMA requirements.*
- SMC 15.12.150(F) – Amended to add a requirement that the base flood elevation be determined prior to permit issuance, or other elevation data provided. *This change made to meet CRS Classification requirements.*
- SMC 15.12.160(B)(2) – Revised the language to make the one foot above base flood elevation requirement clear. *This change made by the City.*
- SMC 15.12.160(C) – Added requirement to elevate mechanical equipment, and floodproof or elevate utilities for manufactured homes. *This change is to conform to CRS Classification requirements.*
- SMC 15.12.160(D) – Revised language to strictly limit RVs to no more than 180 days; the “or” in the list made this requirement non-mandatory if an RV was meeting one of the other two requirements. *This change made by the City.*
- SMC 15.12.160(K) – Amended sub 1.d. to require mechanical equipment for accessory structures be elevated, instead of floodproofed or elevated in a prior draft. *This change is to conform to CRS Classification requirements.*
- SMC 19.12.150 – Amended this section to no longer directly mirror applicable Chapter 15.12 SMC language, as this creates code consistency issues. Also references in the current code were inaccurate. *This change made by the City.*
- SMC 15.20.030 – Amended to add a new clearing & grading permit exception to accommodate the annual 5 cy floodplain fill exception for landscaping. *This change made by the City.*

NEXT STEPS

Please review this memo, the attached proposed amendments, FEMA Checklist, and Chapter 15.12 SMC Flood Hazard Regulations. FEMA’s February letter to the City about needed changes to the City’s code is also part of the packet for this meeting. The City’s current code was distributed with the 5/18/2020 meeting packet, and the FEMA Checklist was distributed with the 6/1/2020 meeting packet. The City’s current code is also available online at <http://www.codepublishing.com/wa/snoqualmie>. You can find the current FIRMs on FEMA’s website at <https://msc.fema.gov/portal/home>. Finally, applicable federal regulations (44 CFR Part 60 Subpart A) can be found at <https://law.cornell.edu/cfr/text/44/part-60/subpart-A>.

The Planning Commission opened a public hearing on this item on June 15, 2020, and continued it to the June 29, 2020, Special Meeting. Following the public hearing the Planning Commission should be prepared to discuss the proposed changes and public comments received. The Planning Commission will make a recommendation on the amendments to the City Council.

Chapter 15.12
(DRAFT) FLOOD HAZARD REGULATIONS

Sections:

Article I. Findings of Fact and Purpose

- 15.12.010 Findings.
- 15.12.020 Purpose.
- 15.12.030 Methods of reducing flood losses.

Article II. Definitions

- 15.12.040 Definitions.

Article III. General Provisions

- 15.12.050 Lands to which chapter applies.
- 15.12.060 Compliance required – Penalties.
- 15.12.070 Abrogation and greater restrictions.
- 15.12.080 Interpretation.
- 15.12.090 Warning and disclaimer of liability.

Article IV. Administration

- 15.12.100 Building official to administer.
- 15.12.110 Development permit required.
- 15.12.120 Duties of the building official.
- 15.12.130 Variances.
- 15.12.140 Conditions for variances.

Article V. Flood Hazard Reduction

- 15.12.150 General standards.
- 15.12.160 Specific standards.
- 15.12.170 Floodways.
- 15.12.180 Repealed.
- 15.12.190 Appeals.

Article I. Findings of Fact and Purpose

15.12.010 Findings.

- A. The flood hazard areas of the city of Snoqualmie are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

- B. These flood losses ~~are may be~~ caused by the cumulative effects of obstructions in areas of special flood hazards ~~which that~~ increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected also contribute to flood loss.

15.12.020 Purpose.

- A. These regulations are promulgated in order to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:
1. To protect human life and health;
 2. To minimize expenditure of public money ~~and for~~ costly flood control projects;
 3. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
 4. To minimize prolonged business interruptions;
 5. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
 6. To help maintain a stable tax base by providing for the sound use and development of ~~areas of~~ special flood hazard ~~areas~~ so as to minimize ~~future flood~~ blight areas ~~caused by flooding~~;
 7. To ~~ensure that notify~~ potential buyers ~~are notified~~ that property is in ~~an area of a~~ special flood hazard ~~area~~; ~~and~~
 8. To ~~ensure that notify~~ those who occupy the ~~areas of~~ special flood hazard ~~areas that they~~ assume responsibility for their actions; ~~and~~
9. To participate in and maintain eligibility for flood insurance and disaster relief.
- B. It is further the purpose of these regulations to comply with the requirements of the National Flood Insurance Program by adoption of floodplain management regulations consistent with federal criteria, as set forth in Title 44 CFR, Subchapter B – Insurance and Hazard Mitigation.

15.12.030 Methods of reducing flood losses.

In order to accomplish the foregoing purposes, ~~the following methods shall be employed pursuant to authority of~~ this chapter ~~in reducing flood losses~~ includes methods and provisions for:

- A. Restricting or prohibiting ~~uses which are~~ development that is dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;
- B. Requiring that ~~uses development~~ vulnerable to floods, ~~including facilities which serve such uses~~, be protected against flood damage at the time of initial construction or substantial improvement;
- C. Controlling the alteration of natural floodplains, stream channels and natural protective barriers which help accommodate the storage or channeling of floodwaters;
- D. Controlling the filling, grading, dredging, and other development which may increase flood damage;
- E. Preventing or regulating the construction of flood barriers ~~which will that~~ unnaturally divert floodwaters or ~~which~~ may increase flood hazards in other areas; and
- F. Such other measures as are deemed necessary and appropriate in light of any special vulnerability to flood damage of a specific site due to location or natural features.

Article II. Definitions

15.12.040 Definitions.

Unless specifically defined in this section, words or phrases used in this chapter shall be interpreted to have the meaning they have in common usage and to give this chapter its most reasonable application to effectuate its purposes. The following words and phrases shall for purposes of this chapter have the following meanings:

- A. "Alteration of Watercourse" means any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.
- B. "Appeal" means a request for a review of the ~~building official's~~Floodplain Administrator's interpretation of this chapter, or review by superior court of a decision of the ~~city council~~hearing examiner such as a variance.
- BC. "Area of shallow flooding" means a designated AO, ~~or~~AH, AR/AO, or AR/AH (or VO) zone on a community's the Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of ~~_. The base flood depths range from~~one to three feet; ~~where a~~ clearly defined channel does not exist; ~~where~~ the path of flooding is unpredictable ~~and indeterminate~~; and ~~where~~ velocity flow may be evident. ~~AO is characterized~~Also referred to as ~~the~~ sheet flow, ~~and AH indicates ponding area.~~
- CD. "Area of special flood hazard" means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. ~~Designation on maps always includes the letters "A" or "V."~~It is shown on the Flood Insurance Rate Map (FIRM) as zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). "Special flood hazard area" is synonymous with this term.
- DE. "Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year. ~~and may be used interchangeably with the term~~Also referred to as the "100-year flood."
- F. "Base Flood Elevation (BFE)" means the elevation to which floodwater is anticipated to rise during the base flood.
- EG. "Basement" means any area of the building having its floor subgrade (below ground level) on all sides, ~~provided a subgrade crawl space shall not be deemed a basement and may be allowed when it meets the requirements of FEMA Technical Bulletin 11-01 (November 2001), including all of the following:~~
- ~~1. The interior grade of the crawl space is not more than two feet below the lowest adjacent exterior grade;~~
 - ~~2. The height of the crawl space from the interior grade of the crawl space to the top of the crawl space foundation wall does not exceed four feet;~~
 - ~~3. There is a drainage system that removes interior floodwaters; and~~
 - ~~4. The velocity of floodwaters at the site is not more than five feet per second.~~
- FH. "Critical facility" means a facility for which even a slight chance of flooding might be too great a threat. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, and installations which produce, use or store hazardous materials or hazardous waste.
- GI. "Development" means any manmade changes to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials located within an area of special flood hazard.
- HJ. "Fill" means any natural or processed earthen material of any nature whatsoever, including, but not limited to, soil, wood chips, gravel, crushed rock, concrete, or asphalt, imported to a lot, tract or parcel, other than those materials that are directly incorporated into a building or structure. Fill is considered development (see definition above) for the purposes of this chapter. For purposes of construction of railroad track, "fill" shall not include such ballast as may be required by state or

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federal regulations to provide for the stability of the track, not exceeding 16 inches in depth. For purposes of road, driveway, sidewalk or approved parking area construction, "fill" shall include materials used to construct to subgrade, including gravel or rock, but shall not include above-grade concrete, asphalt, gravel or other paving material, if any, not exceeding four inches in total thickness; and further provided, for purposes of public streets, "fill" shall not include materials used to construct to six inches of subgrade to create a roadway crown, where deemed necessary or appropriate by the city engineer.

K. "Flood" or "flooding" means:

1. A general and temporary condition of partial or complete inundation of normally dry land areas from:

~~1a.~~ The overflow of inland or tidal waters; ~~and/or~~

~~2b.~~ The unusual and rapid accumulation of runoff of surface waters from any source; ~~and/or~~

~~c.~~ Mudslides (i.e. mudflows) which are proximately caused by flooding as defined in subsection 1.b. of this definition, and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature such as a flash flood or abnormal tidal surge, or by some similarly unusual and foreseeable event which results in flooding as defined in subsection 1.a. of this definition.

~~JL.~~ "Flood Insurance Rate Map (FIRM)" means the official map on which the Federal Insurance Administration ~~Administrator~~ has delineated both the ~~areas of special flood hazards~~ special flood hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

~~KM.~~ "Flood insurance study" or "Flood elevation study" means an examination, evaluation, and determination of flood hazards and, if appropriate, corresponding water surface elevations; or an examination, evaluation, and determination of mudslide (i.e. mudflow) and/or flood-related erosion hazards ~~the official report provided by the Federal Insurance Administration that includes flood profiles, the flood boundary floodway map, and the water surface elevation of the base flood.~~

~~LN.~~ "Floodplain or Flood-prone Area" means a land area ~~adjoining a river, stream, watercourse or lake, which is likely to be flooded~~ susceptible to being inundated by water from any source.

~~O.~~ "Floodplain Administrator" means the community official designated to administer and enforce the floodplain management regulations. The Community Development Director (or designee) is the City's Floodplain Administrator.

~~MP.~~ "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 Base Flood Elevation.

~~NQ.~~ "Floodway" means the channel of a river or other watercourse and the adjacent land ~~area~~ areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than ~~one foot~~ a designated height. Also referred to as the "Regulatory Floodway."

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- O. "Flood barrier" means any manmade obstruction which serves to prevent, hinder, restrict, bar or alter the passage of flood waters through usual and normal conveyance channels, other than any structure specifically approved as part of a flood control project, which has more than a purely localized effect on conveyance.
- R. "Functionally Dependent Use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building or ship repair facilities. The term does not include long-term storage or related manufacturing activities.
- S. "Highest Adjacent Grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structures.
- T. "Historic Structure" means any structure that is:
1. Listed individually in the National Register of Historic Places, or preliminarily designated by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; or
 2. Certified or preliminarily designated by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district primarily determined by the Secretary to qualify as a registered historic district; or
 3. Individually listed on the Washington State inventory of historic places; or
 4. Individually listed on King County's or the City of Snoqualmie's inventory of historic places.
- PU. For purposes of this chapter, "lowest-"Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter (i.e. provided there are adequate flood ventilation openings).
- QV. "Manufactured home" means a single family dwelling built in accordance with the Department of Housing and Urban Development Manufactured Home Construction and Safety Standards Act, which is a national, preemptive building code. For purposes of this chapter, the term "manufactured home" shall also include a mobile home, which is defined as a factory-built dwelling built prior to June 15, 1976, to standards other than the HUD code, and acceptable under applicable state codes in effect at the time of construction or introduction of the home into the state. For purposes of this chapter, and other ordinances, statutes or administrative regulations relating to floodplain management, the term also includes park trailers, travel trailers and other similar vehicles placed on a site for more than 180 consecutive days. A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without permanent foundation when attached to the required utilities. The term does not include a recreational vehicle.
- RW. "Manufactured home park" or "Manufactured home subdivision" means a parcel (or series of contiguous parcels) of land divided into two or more lots for sale or rent for the placement of manufactured homes.
- SX. "Market value" means the value a structure would bring on the open market upon reasonable exposure to sale, excluding the value of the land itself, as determined by the building official/Floodplain Administrator based on the improvement value published by the King County assessor. In no event, however, shall such value be less than the assessed value for tax purposes as determined by the King County assessor. The Floodplain Administrator shall also be guided by

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[Section 4.5 – Determining Market Value of the Substantial Improvement/Substantial Damage Manual, FEMA P-758.](#)

[Y. “Mechanical equipment” means electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities \(including ductwork\).](#)

[Z. “Mean Sea Level” means the vertical datum to which Base Flood Elevations shown on a community’s FIRM are referenced.](#)

~~FAA.~~ “New construction” means:

[1. For the purposes of determining insurance rates, structures for which the start of construction commenced on or after June 25, 1984, and includes any subsequent improvements to such structures.](#)

[2. For floodplain management purposes, structures for which the start of construction commenced on or after July 10, 1989, and includes any subsequent improvements to such structures.](#)

[UAB.](#) “Person” includes any individual, or group of individuals, corporation, partnership, association, or other entity, including state and local governments and agencies.

[VAC.](#) “Recreational vehicle” means a vehicle:

1. Built on a single chassis;
2. Four hundred (400) square feet or less when measured at the largest horizontal projection;
3. Designed to be self-propelled or permanently towable by a light duty truck; and
4. Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel or seasonal use.

[WAD.](#) “Start of construction” includes substantial improvement, and means the date the building permit was issued; provided, the actual start of construction, repair, reconstruction, [rehabilitation, addition, placement,](#) or other improvement was within 180 days of the permit issuance date. The “actual start of construction” means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, ~~and includes;~~ [or](#) the placement of a manufactured home ~~upon~~ [on](#) a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets [and/or](#) walkways; nor does it include [excavation for a basement, footings, piers, or foundations, or the erection of temporary forms; nor does it include](#) the installation on the property of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main structure. [For substantial improvement, the “actual start of construction” means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.](#)

~~AAE.~~ “Structure” means a walled and roofed building ~~or manufactured home~~, including a gas or liquid storage tank, that is principally above ground, [as well as a manufactured home.](#)

~~BAE.~~ “Substantial damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

~~ZAG.~~ ~~1.~~ “Substantial improvement” means any ~~repair,~~ reconstruction, [rehabilitation, addition,](#) or [other](#) improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure [before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed.](#)

~~a. Before the improvement or repair is started; or~~

~~b. If the structure has been damaged and is being restored, before the damage occurred; for purposes of this definition, “substantial improvement” is deemed to occur when the first alteration affects the external dimensions of the structure.~~

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2. The term does not include either:

- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and are the minimum necessary to assure safe living conditions; or
- b. Any alteration of a ~~structure listed on the National Register of Historic Places or a comparable state inventory of historic places~~ historic structure, provided the alteration will not preclude the structure's continued designation as a historic structure.

AAH. "Variance" means a grant of relief from the requirements of this chapter ~~which permits construction in a manner that would otherwise be prohibited.~~

Article III. General Provisions

15.12.050 Lands to which chapter applies.

- A. This chapter shall apply to all special flood hazard areas ~~of special flood hazard~~ within the corporate limits of the city.
- B. The special flood hazard areas ~~of special flood hazard~~ identified by the Federal Insurance Administration ~~Administrator~~ in the most recently adopted flood insurance study for the city, together with the most recent accompanying flood maps as the same now exist or may be hereafter amended, supplemented or revised by the Federal Insurance Administration, are hereby adopted by reference and declared to be a part of this chapter. ~~Copies of the flood insurance study and flood maps shall be maintained on file at City Hall and be available for public inspection during normal business hours.~~ a scientific and engineering report titled "The Flood Insurance Study (FIS) for King County, Washington, and Incorporated Areas," dated August 19, 2020, and any revisions thereto, are hereby adopted by reference. The FIS and FIRM are on file at Snoqualmie City Hall. The best available information for flood hazard identification as outlined in SMC 15.12.120(B) shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under SMC 15.12.120(B).

15.12.060 Compliance required – Penalties.

All development within the special flood hazard area is subject to the terms of this chapter and other applicable regulations.

- A. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations.
- B. Violation of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions by the ~~building official~~ Floodplain Administrator pursuant to the authority of this chapter) after notice of violation and order to comply issued by the ~~building official~~ Floodplain Administrator shall constitute a civil infraction. Any person who violates the provisions of this chapter or fails to comply with any of its requirements shall be subject to a cumulative civil penalty of \$500.00 per day from the date set for compliance in the order to comply until such violation is corrected, or compliance with such order occurs. The penalty provided shall be collected by civil action in ~~Issaquah~~ District Court.
- C. Nothing contained herein shall be construed to prevent the ~~building official~~ Floodplain Administrator from taking such other lawful action as is necessary to prevent or remedy any violation, and all violations shall also be subject to abatement as a public nuisance pursuant to Chapter 8.16 SMC, including removal of unlawful structures, fill or flood barriers, at the owner's expense.
- D. In any action to collect a civil penalty, the defendant may show that the violation giving rise to such action was caused by the willful act or neglect of another, or that correction of such violation was

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commenced promptly upon receipt of notice thereof but that full compliance within the time specified was prevented by inability to obtain necessary materials or labor, or other circumstances or conditions beyond the defendant's control, and upon such showing the court may abate all or part of the penalty accumulated as justice may require.

15.12.070 Abrogation and greater restrictions.

This chapter is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where the provisions of this chapter and any other ordinance, easement, covenant, or deed provision conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

15.12.080 Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

- A. Considered as absolute minimum requirements; This chapter shall be strictly interpreted to effectuate its purposes, and where doubt exists as to the meaning of any word or phrase herein, such word or phrase shall be construed in the most restrictive manner in favor of preservation of flood storage and conveyance consistent with the constitutional rights of the owners of property affected hereby, and further provided, the definitions and substantive provisions of Title 44 CFR, Subchapter B—Insurance and Hazard Mitigation may be consulted as an aid to interpretation of these regulations.
- B. Liberal construed in favor of the City; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes. All provisions of this chapter shall be considered as minimum requirements, and shall be deemed neither to limit nor repeal any other powers granted under state statutes.

15.12.090 Warning and disclaimer of liability.

The degree of flood protection required by this chapter is deemed reasonable for ~~the~~ regulatory purposes ~~for which it is enacted, and this chapter is based upon~~ and is based on scientific and engineering considerations. Larger floods ~~than those contemplated by this chapter may~~ can and will occur ~~from time to time, and on rare occasions.~~ flood Flood heights may be increased by manmade or natural causes. ~~Nothing contained herein shall be construed to assure or warrant that areas outside those identified as~~ This chapter does not imply that land outside of special flood hazard areas, or uses permitted within such areas of special flood hazard, or uses permitted within such areas of special flood hazards will be free from flooding or flood damages. This chapter shall not create any liability on the part of the city of Snoqualmie, any officer or employee thereof, or the Federal Insurance Administration, for any damages that result from reliance on this chapter or any administrative decisions lawfully made hereunder.

Article IV. Administration

15.12.100 ~~Building official~~Community Development Director to administer.

The ~~building official~~ Community Development Director of the city shall ~~be the Floodplain Administrator and shall~~ administer, ~~and~~ implement, ~~and enforce~~ the provisions of this chapter, and shall have the authority to grant or deny flood improvement permits in accordance with its provisions. The Community Development Director may delegate authority to implement these provisions to the Building Official or other City official.

15.12.110 Development permit required.

- A. Prohibition. No land within the areas of special flood hazard shall hereafter be subdivided, short platted or have its lot lines adjusted; nor be improved, filled, graded or cleared; nor shall any structure, including a manufactured home, be constructed, reconstructed, substantially improved, relocated or erected, nor shall any other development, as defined above, be commenced upon such land, unless the person responsible therefor shall first obtain a development permit for such action, to be known as a flood improvement permit.
- B. Permit Application. Application for a development permit shall be made on forms as prescribed by the ~~building official~~Floodplain Administrator, and may include but not be limited to plans in duplicate drawn to scale, showing the nature, location, dimensions and elevations of the area for which application is made, and existing or proposed structures, fill, storage of materials, drainage facilities and their locations. The following information and documents shall be required:
1. The name and address of the applicant;
 2. The name and address of the legal owner;
 3. The legal description of the property;
 4. The nature of the proposed action;
 5. A statement as to the proposed use of any structure;
 6. A statement as to whether the proposed action is temporary or permanent;
 7. The elevation in relation to mean sea level of the lowest floor (including basement) of all structures;
 8. The elevation in relation to mean sea level to which any structure has been floodproofed;
 9. The certification of registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria of this chapter;
 10. A description of the extent to which a watercourse will be altered or relocated as a result of the proposed development; ~~and~~
 11. ~~A topographic survey, prepared by a licensed surveyor or engineer, with sufficient scale and contour interval to adequately assess variation in the ground surface; provided, this requirement shall be waived if the proposed development does not include either excavation or fill, or if the development proposal is for an addition to, or elevation or remodel of, an existing residence containing not more than an additional 300 square feet~~Where development is proposed in a floodway, an engineering analysis indicating no net rise of the Base Flood Elevation; -
 12. Any other information that may be reasonably required by the Floodplain Administrator in order to review the application; and
 13. A floodplain habitat assessment and mitigation plan may be required unless the ~~building official~~Floodplain Administrator makes and documents a determination of no adverse effect on any species listed under the Endangered Species Act. The habitat assessment and mitigation plan shall be prepared at the applicant's sole expense by a qualified consultant in accordance with the requirements of the Floodplain Habitat Assessment and Mitigation Draft Regional Guidance 2011 prepared by FEMA Region X, or any successor guidance document approved by FEMA for habitat assessment and mitigation. The city's actual costs of review of applicant's habitat assessment and mitigation plan shall be paid by the applicant.
- C. Permits May Be Conditioned or Denied. All proposals shall be reviewed for and may be denied or conditioned upon their effect upon their compliance with the requirements of this chapter, including but not limited to their effect upon storage and conveyance of floodwaters.
- D. Permit Fees. The fees for processing flood improvement permit applications shall be as established by resolution of city council.
- E. Hazards and Emergencies.

1. The ~~building official~~Floodplain Administrator may temporarily waive the requirement to obtain a permit under this chapter if they determine that a hazard and/or emergency that threatens the public health, safety and welfare has occurred or is occurring. Waiver of the requirement to obtain a permit shall not waive the requirement to comply with any other provision of this chapter, except that the Floodplain Administrator may allow abatement of an emergency in a manner not otherwise allowed by this chapter, provided such abatement is removed, replaced, or otherwise modified to be in conformance with the provisions of this chapter within a reasonable time as determined by the Floodplain Administrator, not to exceed one year.
2. The ~~building official~~Floodplain Administrator shall require a permit once they have determined that the hazard and/or emergency is no longer occurring, or that the circumstances which lead to the hazard or emergency have sufficiently abated to minimize the hazard or end the emergency.
3. The ~~building official~~Floodplain Administrator shall transmit a report to the mayor detailing any and all activity authorized under this section within 30 days of the termination of the hazard and/or emergency, or if the emergency extends for a period in excess of 30 days, then the Floodplain Administrator shall transmit a report every 30 days for the duration of the emergency.
4. Determination of Hazard or Emergency.
 - a. For the purposes of this chapter, and except as provided by this section, determinations of a hazard and/or emergency are at the discretion of the ~~building official~~Floodplain Administrator, in consultation with the ~~community development director~~emergency management director, city administrator, and mayor.
 - b. The declaration of an emergency by the mayor shall constitute a hazard and/or emergency under this chapter.

15.12.120 Duties of the ~~building official~~Floodplain Administrator.

Duties of the ~~building official~~Floodplain Administrator shall include but not be limited to the following:

- A. Permit Review. ~~The building official shall review all applications for flood improvement permits, for compliance with the requirements of this chapter, determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required, determine if the proposed action will occur in the floodway, and if so, determine that all special provisions relating to actions in the floodway have been met, provided, it shall be the responsibility of the applicant to identify all federal, state or local agencies whose prior approval is required, and all risk of loss or damage for the failure to do so shall be borne solely by the applicant.~~Review all development permits to determine that:
 1. The permit requirements of this chapter have been satisfied;
 2. All other required state and federal permits have been obtained;
 3. The site is reasonably safe from flooding;
 4. The proposed development is not located in the floodway. If located in the floodway, ensure the encroachment provisions of this chapter are met;
 5. Base flood elevation data is available for the site of the proposed development. If base flood information is not available, ensure base flood elevation is determined or alternative base flood data is provided per subsection B of this section; and
 6. FEMA is notified when annexations occur in the Special Flood Hazard Area.
- B. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with SMC 15.12.050(B), the ~~building official~~Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other

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source, in order to administer the provisions of SMC 15.12.160, Specific Standards, and SMC 15.12.170, Floodways.

- C. ~~Maintenance of Information~~Information to be Obtained and Maintained. The ~~building official~~Floodplain Administrator shall obtain, record and maintain for public inspection the following information:
1. ~~Where base flood elevation data is provided through a Flood Insurance Study (FIS), FIRM, or as required by SMC 15.12.050(B), The the~~ actual (as-built) elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement; ~~and~~
 2. For all new or substantially improved floodproofed ~~nonresidential~~ structures ~~where base flood elevation data is provided through the FIS, FIRM, or as required by SMC 15.12.050(B):~~
 - a. ~~verify~~Verify and record the actual elevation (in relation to mean sea level) ~~to which the structure was floodproofed;~~
 - b. ~~and maintain~~Maintain the floodproofing certifications required by this chapter.
 3. Certification required by SMC 15.12.170 regarding floodway encroachments;
 4. Records of all variance actions, including justification for their issuance;
 5. Improvement and damage calculations; and
 6. All other records pertaining to the provisions of this ordinance.
- D. Alteration of Watercourses. With respect to any alteration or relocation of a watercourse, the ~~building official~~Floodplain Administrator shall:
1. Notify adjacent communities and the Washington State Department of Ecology prior to such alteration or relocation of a watercourse~~hereof~~, and submit evidence of such notification to the Federal Insurance ~~Administration~~Administrator; and
 2. Require that maintenance is provided within the altered or relocated portion of the watercourse so that the flood carrying capacity is not diminished.
- E. Interpretation of FIRM Boundaries. The ~~building official~~Floodplain Administrator shall make interpretations where needed as to the exact location of the boundaries of the areas of special flood hazards, for example, where there appears to be a conflict between a mapped ~~area boundary~~ and actual field conditions. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation. Such appeals shall be granted when consistent with the standards of Section 60.6 of the Rules and Regulations of the National Flood Insurance Program (44 CFR § 59-76) as the same now exist or may hereafter be amended.
- F. Inspections and Right of Entry
1. Whenever necessary to make an inspection to enforce any of the provisions of this chapter, or whenever the ~~building official~~Floodplain Administrator or ~~his~~ designee has reasonable cause to believe that there exists in any building or upon any lands any condition or violation of this chapter, the ~~building official~~Floodplain Administrator or ~~his~~ designee may enter such building or lands at all reasonable times to inspect the same or to perform any duty imposed on the ~~building official~~Floodplain Administrator by this chapter, provided, that if such building or lands be occupied, ~~he they~~ shall first identify ~~himself themselves~~ and request entry; and if such building or lands is unoccupied, ~~he they~~ shall first make a reasonable effort to locate the owner or person having control of the building or lands and request entry. If such entry is refused, the ~~building official~~Floodplain Administrator or ~~his~~ designee shall have recourse to every remedy provided by law to secure entry.

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- 2. No owner or occupant or any other person having charge, care or control of any building or lands shall fail or neglect, after proper request, to promptly permit entry by the building official Floodplain Administrator or designee for the purposes authorized above.

15.12.130 Variances.

A. Purpose. The variance provision is provided to property owners who, due to the strict application of standards set forth in this chapter, and/or due to unique circumstances regarding the subject property, are deprived of privilege commonly enjoyed by other properties in the same vicinity and flood area and under the same flood regulation; provided, however, the fact that surrounding properties have been developed under regulations in force prior to the adoption of this code shall not be the sole basis for the granting of a variance.

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B. Intent. The variance criteria set forth in this section are based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this chapter would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

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It is the duty of the City of Snoqualmie to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below the Base Flood Elevation are so serious that variances from the flood elevation or from other requirements in the flood hazard regulations are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance criteria provided in this section are very detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

C. The ~~city council~~ Hearing Examiner of the city shall hear and decide requests for variances from the requirements of this chapter.

BD. Variances from the strict application of this chapter may be granted only upon full consideration of the matters set forth in SMC 15.12.130(BE) and (F). No variances may be granted from the requirements of SMC 15.12.160(A), SMC 15.12.160(B), or SMC 15.12.170(B), and no variance may be granted to any requirement in this chapter to elevate a structure, mechanical equipment, or other development.

E. Variance Criteria:

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1. Variance shall only be issued if the Hearing Examiner finds on the basis of clear and convincing evidence that:
 - a. A showing of good and sufficient cause has been made;
 - b. Failure to grant the variance would result in exceptional hardship to the applicant;
 - c. Granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense or nuisance, or conflict with any other existing local laws or ordinances; and
2. Variances may be issued for the reconstruction, repair, rehabilitation, or restoration of structures listed on the National Register of Historic Places or a comparable state inventory of historic places, without regard for the procedures set forth in this section.
3. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.

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4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

5. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the provisions of subsection F of this section have been fully considered. As the lot size increases beyond the 1/2 acre, the technical justification required for issuing the variances increases.

F. In passing upon such applications, the ~~city council~~Hearing Examiner shall consider all technical evaluations, relevant factors, standards specified in other sections of this chapter, and the following:

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, if applicable;
6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion ~~damage~~;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
10. The expected heights, velocities, duration, rate of rise and sediment transport of the floodwaters ~~and the effects of wave action, if applicable~~, expected at the site; and
11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

G. Upon consideration of the factors specified in ~~the foregoing paragraph~~subsections (E) and (F) of this section and the purposes of this chapter, the ~~city council~~Hearing Examiner may approve, approve with conditions such as it deems necessary to further the purposes of this chapter, or deny the request.

H. ~~The director of planning and parks~~Floodplain Administrator shall maintain records of all appeal actions and report any variances to the Federal Insurance ~~Administration~~Administrator upon request.

I. Any applicant to whom a variance is granted shall be given a written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting therefrom. All risk of damage or loss not covered by flood insurance occurring as a result of such variance permitting a reduction in the required elevation for the lowest floor shall be borne solely by the applicant.

15.12.140 Conditions for variancesChanges to Special Flood Hazard Area.

A. If a project will alter the BFE or boundaries of the SFHA, then the project proponent (applicant) shall provide engineering documentation and analysis regarding the proposed change. If the change to the BFE or boundaries of the SFHA would normally require a Letter of Map Change, then the project proponent shall initiate, and receive approval of, a Conditional Letter of Map Revision (CLOMR) prior to approval of the development permit. The project shall be constructed in a manner consistent with the approved CLOMR. ~~Variances from the strict application of this chapter may be granted only upon~~

full consideration of the matters set forth in SMC 15.12.130(D). No variances may be granted from the requirements of SMC 15.12.160(A) or SMC 15.12.170(D).

- B. ~~If a CLOMR application is made, then the project proponent shall also supply the full CLOMR documentation package to the Floodplain Administrator to be attached to the floodplain development permit, including all required property owner notifications. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or a comparable state inventory of historic places, without regard for the procedures set forth in this section.~~
- C. ~~Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.~~
- D. ~~Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.~~
- E. ~~Variance requests shall be denied unless the city council finds on the basis of clear and convincing evidence that:
 - 1. A showing of good and sufficient cause has been made;
 - 2. Failure to grant the variance would result in exceptional hardship to the applicant; and
 - 3. Granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense or nuisance, or conflict with any other existing local laws or ordinances.~~
- F. ~~Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry floodproofing, where it can be determined that such action will have low damage potential, complies with all variance criteria except subsection (A) of this section, and otherwise complies with the provisions regarding anchoring and construction materials and methods below.~~
- G. ~~Any applicant to whom a variance is granted shall be given a written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting therefrom. All risk of damage or loss not covered by flood insurance occurring as a result of such variance permitting a reduction in the required elevation for the lowest floor shall be borne solely by the applicant.~~

Article V. Flood Hazard Reduction

15.12.150 General standards.

In all areas of special flood hazards, the following standards are required:

- A. Finished Grade After Construction.
 - 1. After construction or other development, but prior to final building inspection, certificate of occupancy or other final approval, the applicant shall obtain and furnish to the city a topographic survey, prepared by a licensed surveyor or engineer, with sufficient scale and contour to interval to adequately assess variation in ground surface and determine the average grade after construction or development, unless the requirement for a topographic survey was waived at the time of application.
 - 2. The average finished grade of all lots, tracts or parcels after construction of a building or other development, excluding the area occupied by the above-grade building or other development, shall be no greater than the average grade of the lot prior to construction or development. After construction or other development but prior to final building inspection, the applicant shall furnish, together with the topographic survey, the written certification of the licensed surveyor or

engineer preparing the topographic survey that the finished grade meets the requirement of this subsection. No building or other development shall be occupied or used if the requirements of this section are not met.

3. Any earth material that must be removed from a site in order to comply with the requirements of this chapter shall be transported to an approved disposal site at the applicant's or property owner's sole expense, and evidence of such disposal shall be furnished to the [building official](#)~~Floodplain Administrator~~.

B. Anchoring.

1. All new construction and substantial improvements, [including those related to manufactured homes](#), shall be anchored ~~so as~~ to prevent flotation, collapse or lateral movement of the structure, [resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy](#), pursuant to a design prepared by a registered professional engineer or architect licensed by the state of Washington.
2. All manufactured homes shall be anchored to prevent flotation, collapse or lateral movement, [and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors. All anchoring designs shall be](#) pursuant to a design prepared by a registered professional engineer or architect, ~~and shall be installed using methods and practices that minimize the flood damage.~~
- ~~3. An alternative method of anchoring may involve a system designed to withstand a wind force of 80 miles per hour or greater. Certification must be provided to the building official that this standard has been met.~~

C. Construction Materials and Methods.

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
3. Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be ~~designed and/or otherwise~~ elevated [at least one foot about the BFE](#) ~~or located~~ so as to prevent water from entering or accumulating within the components during conditions of flooding.

D. Utilities.

1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- ~~2.~~ [New water wells shall be located on high ground that is not in the floodway.](#)
- ~~23.~~ New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
- ~~34.~~ On-site waste disposal systems, if otherwise permitted, shall be located to avoid impairment to them or contamination from them during flooding.

E. Subdivision, Short Subdivision, Binding Site Improvement Plan and Commercial and Multifamily Site Plan Approval Proposals As Well As New Development Within Areas of Special Flood Hazard.

1. All subdivision, short subdivision, binding site improvement plan and commercial and multifamily site plan proposals, [as well as new development](#) within areas of special flood hazard shall be subject to the provisions of this subsection.
2. [All proposals shall be consistent with the need to minimize flood damage.](#)
- ~~3.~~ All proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

34. All proposals shall have adequate drainage provided to reduce exposure to flood damage.
45. Where subdivision, short subdivision, binding site improvement plan, and commercial and multifamily site plan proposals contain more than 50 lots and/or more than 5 acres, base flood elevation data ~~has not been provided or is not available from another authoritative source, it shall be generated for subdivision and short subdivision proposals and other proposed developments which contain the lesser of 50 lots or five acres at the applicant's sole expense provided as part of the application.~~
5. All proposals shall be reviewed for, and may be denied or conditioned upon, their effect upon storage and conveyance of floodwaters. The design of all projects shall be reviewed specifically (without limitation of review for compliance with all other requirements) to ensure compliance with the requirements of SMC 15.12.160(E) and to eliminate potential flood barriers to the maximum degree possible.
6. No subdivision proposal shall be approved until the application has been submitted to the Department of Ecology and the ~~planning official~~Floodplain Administrator has either received the comments of the Department of Ecology or confirmed in writing that the Department of Ecology does not intend to submit comments.
- F. Review of Building Permits. Where elevation data is not available either through the flood insurance study, FIRM, or from another authoritative source per SMC 15.12.120(C), applications for building permits for floodplain development shall ~~be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and may include the use of historical data, high water marks, photographs of past flooding, and similar information as may be available. In such cases, elevation shall be required to at least two feet above grade~~not be granted until base flood elevation data is established.
- G. Storage of Materials and Equipment
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 special flood hazard areas.
 2. Storage of other material or equipment may be allowed by the Floodplain Administrator if, in their sole determination, such material or equipment is not subject to damage by floods and is firmly anchored to prevent flotation, or is readily removable from the area within the time available after flood warning.

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15.12.160 Specific standards.

A. Residential Construction.

1. In AE zones, where the BFE has been determined or can be reasonably obtained, New-new construction and substantial improvement of any residential structure shall have the lowest floor (including basement) and all electrical, heating, ventilation, air conditioning, and other utility and mechanical equipment elevated to at least one foot above the base flood elevation. Mechanical equipment shall be elevated at least one foot above the BFE. Utilities shall be waterproof or elevated at least one foot above the BFE. The following elevation requirements for the first floor of additions to existing residential structures shall apply:
 - a. A vertical addition not increasing the footprint of the residential structure shall require elevation of the structure only if it constitutes a substantial improvement.
 - b. A lateral addition to a residential structure which constitutes a substantial improvement shall require elevation of the structure, regardless of when construction of the structure commenced.
 - c. A lateral addition to a residential structure which does not constitute a substantial improvement shall require elevation of the addition to the base flood elevation in effect at the time the

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~~residential structure was built if the start of construction of the structure occurred on or after June 25, 1984.~~

- ~~d. A lateral addition to a residential structure which does not constitute a substantial improvement shall not require elevation of the addition if the start of construction of the structure occurred prior to June 25, 1984.~~
2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, unless they are designed to automatically equalize hydrostatic ~~pressure-flood forces~~ on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be certified by a registered professional engineer or architect or must meet ~~or exceed~~ the following minimum criteria:
- a. ~~A-Have a~~ minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
 - b. The bottom of all openings shall be no higher than one foot above grade; and
 - c. Openings may be equipped with ~~break-away type~~ screens, louvers, valves, or other coverings or devices; ~~provided,~~ that they permit the automatic entry and exit of floodwaters and do not otherwise inhibit the flow of floodwaters.

B. Nonresidential Construction.

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall meet the requirements of subsection 1 or 2 below:

1. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:~~either have the lowest floor (including basement) elevated to or above the level of the base flood elevation or, together with attendant utility and sanitary facilities, shall:~~
- a. ~~Be floodproofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water.~~In AE zones where the BFE has been determined or can be reasonably obtained, the lowest floor, including basement, shall be elevated one foot or more above the BFE or to the elevation required by ASCE 24, whichever is greater. Mechanical equipment shall be elevated at least one foot above the BFE. Utilities shall be waterproof up to at least one foot above the BFE, or elevated at least one foot above the BFE; and
 - b. ~~Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and~~Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement shall be certified by a registered professional engineer or architect and must meet or exceed the following criteria:
 - i. Have a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - ii. The bottom of all openings shall be no higher than one foot above grade; and
 - iii. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters and do not otherwise inhibit the flow of floodwaters.
 - c. ~~Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this subsection based on their development and/or review of the structural design, specifications and plans, and such certification is provided to the building official.~~

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2. ~~Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as provided for residential structures~~If the requirements of subsection 1 are not met or cannot be met, then new construction and substantial improvement of any commercial, industrial, or nonresidential structure shall meet all of the following requirements:

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- a. Be dry floodproofed up to at least one foot above the BFE such that the structure is watertight with walls substantially impermeable to the passage of water;
- b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- c. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this subsection based on their development and/or review of the structural design, specifications and plans, and such certification is provided to the building official.

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3. Applicants for floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level; for example, a building floodproofed to one foot above the base flood level will be rated as at the base flood level.

C. Manufactured Homes.

1. All manufactured homes to be placed or substantially improved on sites within the area of special flood hazard shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is one foot or more above the base flood elevation, and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

2. Mechanical equipment for manufactured homes shall be elevated at least one foot above the BFE. Utilities for manufactured homes shall be waterproof up to at least one foot above the BFE, or elevated at least one foot above the BFE.

3. For purposes of this section, "substantial damage" of a manufactured home shall mean any damage the cost of which to repair or reconstruct exceeds 50 percent of the market value of the manufactured home before the repair or reconstruction is started.

D. Recreational Vehicles. Recreational vehicles placed on site within zones A1 – 30, AH and AE on the FIRM shall be on the site fewer than 180 consecutive days, and either:

1. ~~Be on site fewer than 180 consecutive days;~~

2. ~~Be fully licensed and ready for highway use, be on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanent attached additions; or~~

3. ~~Meet the requirements of the elevation and anchoring requirements for manufactured homes in subsection C. above.~~

E. Critical Facilities. Construction of new critical facilities shall be, to the greatest extent possible, located outside of the limits of the ~~base special flood hazard area (SFHA or 100-year floodplain).~~ Construction of new critical facilities shall be permissible within the ~~base floodplain~~SFHA if no feasible alternative site is available. Critical facilities constructed within the ~~base floodplain~~SFHA shall have the lowest floor elevated to three feet or more above the base flood elevation at the site or to the height of the 500-year flood, whichever is higher. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base ~~floodplain~~flood elevation shall be provided to all critical facilities to the extent possible.

F. Fill.

1. Subject to the provisions of subsection (F)(2) of this section, no fill shall be permitted except where provision has been made on the subject property to balance the capacity to store floodwaters and accommodate potential surface flow in an amount equal to the amount of floodwater likely to be displaced by the fill; provided, provision may be made to balance the capacity to store floodwaters off the subject property, when it can be demonstrated that the property upon which the balancing capacity is being created is located such that no increase in the base flood discharge will result. Care shall be taken to prevent erosion and surface runoff to adjacent properties. All fill shall be compacted at the time of placement.
2. Any person may place not more than five yards of material used solely for landscape maintenance or gardening at a residence or business in any one calendar year; provided, ~~written notification shall be given to the~~ such activity requires a flood improvement permit from the building official/Floodplain Administrator ~~within five business days after the placement of such fill~~. Such right shall not be assignable, nor shall it carry over from year to year or otherwise be cumulative.
3. Fill within the floodway shall comply with the provisions of SMC 15.12.170.

G. Clearing and Grading. Clearing and grading shall be approved only when the application provides:

1. A plan and profile of the site to be cleared;
2. Identification of the flora to be protected, or removed;
3. A reclamation plan to prevent erosion; and
4. A drainage plan in accordance with Chapter 12.16 SMC, where a street project is proposed.

H. Bank Improvements. Where proposed development or improvements include modification or work along the banks of the Snoqualmie River or Kimball Creek, application shall first be made to the State Department of Fisheries and Game for a State Hydraulics Permit. Application for the permit required by this chapter shall not be made until after the state permit is approved, and a certified copy has been provided to the city.

I. Hazardous Materials.

1. The placement, transfer or storage of chemicals, petroleum products or by-products, fertilizers, insecticides, pesticides, lime, cement or other material that, when inundated, will constitute a hazard to life, health and safety, or adversely affect the quality of surface waters, in quantities greater than those declared to be exempt pursuant to the Uniform Building Code is prohibited within areas of special flood hazard.
2. Where a clearing and grading permit is sought in connection with any development for which a shorelines substantial development permit is required, the application shall be reviewed by the city shorelines administrator prior to issuance of a clearing and grading permit.

J. Enclosed Areas Below the Lowest Floor. If buildings or manufactured homes are constructed or substantially improved with fully enclosed areas below the lowest flood, these areas shall be used solely for parking of vehicles, building access, or storage.

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K. Accessory Structures. For A Zones:

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1. Accessory structures used solely for parking of vehicles or limited storage may be constructed such that the floor is below the BFE, provided the structure is designed and constructed in accordance with the following requirements:

- a. Use of the accessory structure shall be limited to parking of vehicles or limited storage;
- b. The portions of the accessory structure located below the BFE shall be built using flood resistant materials;

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- c. The accessory structure shall be adequately anchored to prevent flotation, collapse, and lateral movement;
 - d. Any mechanical equipment servicing the accessory structure shall be elevated at least one foot above the BFE;
 - e. Any utilities servicing the accessory structure shall be waterproof up to at least one foot above the BFE, or elevated at least one foot above the BFE;
 - f. The accessory structure must comply with floodway encroachment provisions in SMC 15.12.170;
 - g. The accessory structure shall be designed to allow for the automatic entry and exit of floodwaters in accordance with SMC 15.12.160.B.1.b.
 - h. The structure shall have low damage potential;
 - i. If the structure is converted to another use, it shall be brought into full compliance with the standards governing such use; and
 - j. The structure shall not be used for human habitation.
2. Detached garages, storage structures, and other accessory structures not meeting the standards in subsection 1. of this section shall be constructed in accordance with all applicable standards in SMC 15.12.160.A.
 3. Upon completion of the structure, certification that the requirements of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

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15.12.170 Floodways.

Located within areas of special flood hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and increase erosion potential, the following provisions apply in all areas designated as floodways on the FIRM:

- A. Encroachments Prohibited. No encroachments, including fill, new construction, substantial improvements, or other development shall be permitted within the floodway unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge.
- B. Residential Construction Prohibited. No new construction or reconstruction of residential structures shall be permitted within the floodway, except for the following:
 1. Repairs, reconstruction or improvements to a structure which do not increase the ground floor area; and
 2. Repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value either:
 - a. Before the repair, reconstruction or improvement is commenced, or
 - b. If the structure has been damaged, and is being restored, before the damage occurred. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and are the minimum necessary to assure safe living conditions or to structures identified as historic places shall not be included in the 50-percent limitation.
- C. If the requirements of subsection (A) of this section are met, all new construction and substantial improvement shall comply with all other applicable flood hazard reduction standards of this chapter.

15.12.180 ~~Register of excavation credits~~Zones with Base Flood Elevations but No Floodways.

In areas with BFEs when a regulatory floodway has not been designated no new construction, substantial improvements, or other development (including fill) shall be permitted within zones A1-30 and AE on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the City.~~Repealed by Ord. 975.~~

15.12.190 Appeals.

- A. Any ~~applicant, resident or taxpayer~~person with standing may appeal from any requirements, decision or determination of the ~~building official~~Floodplain Administrator when it is alleged that there is an error in the administration of this chapter. All such appeals shall be made by written notice of appeal, filed with the ~~city clerk~~Community Development Department. ~~which~~The notice shall identify the requirement, decision or determination alleged to be erroneous, and shall ~~state the factual and legal grounds relied upon~~include information required by SMC 2.14.100. Such appeal shall be heard and determined by the ~~city council~~Hearing Examiner within 60 days of the date of filing of the notice of appeal, ~~and all. The Hearing Examiner's decision~~decisions shall be in writing supported by findings of fact and rendered per SMC 2.14.110.
- B. Any ~~applicant, resident or taxpayer of the city~~person with standing aggrieved by a decision of the ~~city council~~Hearing Examiner made pursuant to this chapter, may appeal such decision to the King County superior court ~~within 30 days of the date such decision was rendered~~in accordance with the provisions of Chapter 36.70C RCW.

19.12.150 Frequently flooded areas.

- A. Standards for building and development in frequently flooded areas are set forth in Chapter 15.12 SMC, Flood Hazard Regulations. SMC 15.12.170, Floodways, adopted by Ordinance 621, 1989, and ~~amended by Ordinance 856, 2000, and Ordinance 890, 2001, or as~~ hereafter amended, is hereby adopted by reference.
- B. No encroachment, including fill, new construction, substantial improvement or other development shall be permitted within the floodway ~~unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge except as described in SMC 15.12.170.~~
- C. No new construction or reconstruction of residential structures shall be permitted within the floodway, except ~~for the following:~~
 - ~~1. Repairs, reconstruction or improvements to a structure which do not increase the ground floor area; and~~
 - ~~2. Repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value either:
 - ~~a. Before the repair, reconstruction or improvement is commenced, or~~
 - ~~b. If the structure has been damaged, and is being restored, before the damage occurred. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and are the minimum necessary to assure safe living conditions or to structures identified as historic places shall not be included in the 50 percent limitation as described in SMC 15.12.170.~~~~

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- D. ~~If the requirements of subsection A of this section are met, all~~ new construction and substantial improvement shall comply with all other applicable flood hazard reduction standards of Chapter 15.12 SMC, Flood Hazard Regulations.
- E. New structural flood hazard reduction measures are allowed only where demonstrated to be necessary, and when nonstructural measures are infeasible and mitigation is accomplished, and provided, such measures are landward of associated wetlands and buffer areas except where no alternative exists as documented in a geotechnical analysis.

15.20.030 Clearing and grading permit – When required.

- A. A clearing and grading permit shall be required for all clearing and grading activity except as provided for in subsections B and C of this section.
- B. No clearing and grading permit shall be required for the following activities (hereinafter “exempt activities”), regardless of where they are located:
 1. Normal and routine maintenance of existing lawns, landscaping, and LID BMPs;
 2. Permitted agricultural uses in critical areas as provided for in SMC 19.12.040(A)(9);
 3. Emergency tree removal to prevent imminent danger or hazard to persons or property;
 4. Normal and routine horticultural activities associated with existing commercial orchards, nurseries or Christmas tree farms. This exception shall not include clearing or grading for expansion of such existing operations;
 5. Normal and routine maintenance of existing public and private parks and golf courses. This exception shall not include clearing and grading for expansion of such existing parks and golf courses;
 6. Removal of noxious weeds as defined in Chapter 16-750 WAC from areas of geologic instability and the buffers of streams and wetlands;
 7. Pruning and cutting of vegetation for maintenance of above-ground utilities, provided all reasonable measures are used to protect any critical area as defined in Chapter 19.12 SMC;
 8. Clearing and grading for roads, utilities or trails approved under a residential plat, provided the performance standards of this chapter are met;
 9. Clearing associated with an approved building permit, provided the building permit conditions comply with the performance standards of this chapter;
 10. Alteration of a critical area that involves clearing and grading if approved under the provisions of the critical areas ordinance, Chapter 19.12 SMC;
 11. [In an area subject to flood hazard regulation as defined in Chapter 15.12 SMC, grading of less than 5 cubic yards per calendar year, in accordance with SMC 15.12.160\(F\)\(2\).](#)
- C. For clearing and grading activity that is not located in a critical area or critical area buffer as defined in Chapter 19.12 SMC or an area subject to flood hazard regulation as defined in Chapter 15.12 SMC, no clearing and grading permit shall be required for the following activities:
 1. Clearing of less than 5,000 board feet timber, or clearing of less than 7,000 square feet of brush or vegetation that does not consist of merchantable timber as defined by Chapter 76.09 RCW, on any parcel of land in any single year;
 2. On-site excavation or fill with an unsupported vertical height of less than five feet for basements, building footings, retaining walls, parking lots or other structures authorized by a valid building permit;
 3. Maintenance of existing driveways or private access roads within the existing graded area, provided the performance standards of SMC 15.20.060 are met;
 4. Clearing and grading by a public agency for the following routine maintenance activities:

- a. Roadside ditch cleaning, provided the ditch does not contain salmonids;
 - b. Pavement maintenance;
 - c. Normal gravel shoulder maintenance;
 - d. Culvert maintenance;
 - e. Approved flood control or surface water management facilities maintenance;
5. Cemetery graves;
 6. Grading of less than 100 cubic yards or creation of less than 2,000 square feet of new impervious surface.

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