

ORDINANCE NO. 797

**AN ORDINANCE OF THE CITY OF SHORELINE, WASHINGTON,
AMENDING THE CHAPTER 13.12 FLOODPLAIN MANAGEMENT OF
THE SHORELINE MUNICIPAL CODE.**

WHEREAS, the City of Shoreline is a participating community in the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program; and

WHEREAS, on May 19, 2017, FEMA conducted a Community Assistance Contact (CAC) to ensure the City was properly regulating its floodplain management and development; and

WHEREAS, part of the CAC assessment was a review of the City's Floodplain Management regulations set forth in Chapter 13.12 of the Shoreline Municipal Code; and

WHEREAS, FEMA determined that SMC Chapter 13.12 required nominal updates to ensure the City's continued participation in the National Flood Insurance Program and protect the public's health, safety, and welfare; and

WHEREAS, SMC Chapter 13.12 needs to be amendment to reflect FEMA's determination and allow for continued participation in the National Flood Insurance Program;

**NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF SHORELINE,
WASHINGTON, DO ORDAIN AS FOLLOWS:**

Section 1. Amendment – Chapter 13.12 Floodplain Management. Chapter 13.12 Floodplain Management is amendment as set forth in Exhibit A to this Ordinance.

Section 2. Corrections by City Clerk or Code Reviser. Upon approval of the City Attorney, the City Clerk and/or the Code Reviser are authorized to make necessary corrections to this ordinance, including the corrections of scrivener or clerical errors; references to other local, state, or federal laws, codes, rules, or regulations; or ordinance numbering and section/subsection numbering and references.

Section 3. Severability. Should any section, subsection, paragraph, sentence, clause, or phrase of this ordinance or its application to any person or situation be declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of this ordinance or its application to any person or situation.

Section 4. Publication and Effective Date. A summary of this Ordinance consisting of the title shall be published in the official newspaper. This Ordinance shall take effect five days after publication.

PASSED BY THE CITY COUNCIL ON OCTOBER 2, 2017

ORIGINAL



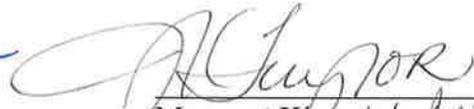
Mayor Christopher Roberts

ATTEST:



Jessica Simulcik Smith
City Clerk

APPROVED AS TO FORM:



Margaret King
City Attorney



Julie Ann Swarth-Taylor
City Attorney

Date of Publication: October 5, 2017

Effective Date: October 10, 2017

Chapter 13.12
FLOODPLAIN MANAGEMENT

13.12.105 Definitions.

Unless specifically defined below, terms or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application. The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

“Adversely affect” or “adverse effect” means an effect that is a direct or indirect result of the proposed action or its interrelated or interdependent actions and the effects are not discountable, insignificant or beneficial. A discountable effect is extremely unlikely to occur. An insignificant effect relates to the size of the impact and should never reach the scale where a take occurs. Based on best judgment, a person would not: (A) be able to meaningfully measure, detect, or evaluate an insignificant effect; or (B) expect a discountable effect to occur.

“Appurtenant structure” means a structure which is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

“Base flood” means the flood having a one percent chance of being equaled or exceeded in any given year (also referred to as the “100-year flood”). The area subject to the base flood is the special flood hazard area designated on flood insurance rate maps as Zone “A” or “V” including AE, AO, AH, A1-99 and VE.

“Base flood elevation” means the elevation of the base flood above the datum of the effective flood insurance rate map (FIRM).

“Basement” means any area of the structure having its floor subgrade (below ground level) on all sides.

“Beneficial effect” means a contemporaneous positive effect without any adverse effect. In the event that the overall effect of the proposed action is beneficial, but is also likely to cause some adverse effect, then the proposed action is considered to result in an adverse effect.

“Channel migration zone” means the area within the lateral extent of likely stream channel movement due to a destabilization and erosion, rapid stream incision, aggradations, avulsions, and shifts in location of stream channels.

“Critical facility” means a facility necessary to protect the public health, safety, and welfare during a flood. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency operations installations, water and wastewater treatment plants, electric power stations, and installations which produce, use, or store hazardous materials or hazardous waste (other than consumer products containing hazardous substances or hazardous waste intended for household use).

“Development” means any manmade change to improved or unimproved real estate in the regulatory floodplain, including but not limited to buildings or other structures, mining,

dredging, filling, grading, paving, excavation or drilling operations, storage of equipment or materials, subdivision of land, removal of more than five percent of the native vegetation on the property, or alteration of natural site characteristics.

“Director” means the public works director or designee.

“Dry floodproofing” means any combination of structural and nonstructural measures that prevent floodwaters from entering a structure.

“Elevation certificate” means the most current version of the FEMA National Flood Insurance Program form that documents the elevation of a structure within a Special Flood Hazard Area relative to the ground level so as to ensure compliance with this chapter, to determine the flood insurance premium rate, and/or to support a map amendment or revision. ~~means the official form (FEMA Form 81-31) used to provide elevation information necessary to ensure compliance with provisions of this chapter and determine the proper flood insurance premium rate. means the official form (FEMA Form 81-31) used to provide elevation information necessary to ensure compliance with provisions of this chapter and determine the proper flood insurance premium rate.~~

“ESA” means the Endangered Species Act.

“Federal Emergency Management Agency (FEMA)” means the agency responsible for administering the National Flood Insurance Program.

“FEMA” means Federal Emergency Management Agency.

“FIRM” means flood insurance rate map.

“Fish and wildlife habitat conservation area” means lands needed to maintain species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. These areas are designated in SMC 20.80.260 through 20.80.300.

“Flood” or “flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- A. The overflow of inland or tidal waters; and/or
- B. The unusual and rapid accumulation of runoff of surface waters from any source.

“Flood insurance rate map (FIRM)” means the official map on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

“Flood insurance study” means the official report provided by the Federal Emergency Management Agency that includes flood profiles, the flood insurance rate map, and the water surface elevation of the base flood.

“Flood protection elevation (FPE)” means the elevation above the datum of the effective FIRM to which new and substantially improved structures must be protected from flood damage.

“Floodway” means the channel of a stream or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot at any point.

“Functionally dependent use” means a use that must be located or carried out close to water, for example docking or port facilities necessary for the unloading of cargo or passengers, or shipbuilding and ship repair.

“Historic structure” means a structure that:

A. Is listed on the National Register of Historic Places, the Washington Heritage Register, or the Washington Heritage Barn Register; or

B. Has been certified to contribute to the historical significance of a registered historic district.

“Hyporheic zone” means a saturated layer of rock or sediment beneath and/or adjacent to a stream channel that contains some proportion of channel water or that has been altered by channel water infiltration.

“Impervious surface” means a hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled macadam or other surfaces which similarly impede the natural infiltration of stormwater.

“Lowest floor” means the lowest floor of the lowest enclosed area (including basement or crawl space) of a structure. An unfinished or flood-resistant enclosure, used solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a structure’s lowest floor; provided, that such enclosure is compliant with SMC 13.12.500(B)(6), so that there are adequate openings to allow floodwaters into the area.

“Manufactured home” means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured home” does not include a “recreational vehicle.”

“Manufactured home park or subdivision” means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

“Market Value” means either the true and fair value of the property as established by the county assessor or by a Washington State certified or licensed appraiser.

“Native vegetation” means plant species that are indigenous to the community’s area and that reasonably could be expected to naturally occur on the site.

“Natural floodplain functions” means the contribution that a floodplain makes to support habitat, including but not limited to providing flood storage and conveyance, reducing flood velocities, reducing sedimentation, filtering nutrients and impurities from runoff, processing organic wastes,

moderating temperature fluctuations, and providing breeding and feeding grounds, shelter, and refugia for aquatic or riparian species.

“New construction” means structures for which the “start of construction” commenced on or after the effective date of this chapter.

“NMFS” means National Marine Fisheries Service.

“Protected area” means the lands that lie within the boundaries of the floodway, the riparian habitat zone, and the channel migration area. Because of the impact that development can have on flood heights and velocities and habitat, special rules apply in the protected area.

“Recreational vehicle” means a vehicle:

- A. Built on a single chassis; and
- B. Four hundred square feet or less when measured at the largest horizontal projection; and
- C. Designed to be self-propelled or permanently towable by an automobile or light duty truck; and
- D. Designed primarily for use as temporary living quarters for recreational, camping, travel, or seasonal use, not as a permanent dwelling.

“Regulatory floodplain” means the area of the special flood hazard area plus the protected area, as defined in SMC 13.12.300. The term also includes newly designated areas that are delineated pursuant to SMC 13.12.300(E).

“Riparian” means of, adjacent to, or living on the bank of a river, lake, pond, ocean, sound, or other water body.

“Riparian habitat zone” means the water body and adjacent land areas that are likely to support aquatic and riparian habitat as detailed in SMC 13.12.300(D)(2).

“Special flood hazard area (SFHA)” means the land subject to inundation by the base flood. Special flood hazard areas are designated on flood insurance rate maps with the letter “A” or “V” including AE, AO, AH, A1-99 and VE. The special flood hazard area is also referred to as the area of special flood hazard or SFHA.

“Start of construction” includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start 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; or the placement of a manufactured home 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 a 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. ~~includes substantial improvement, and means the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement that occurred before the permit's expiration date. The actual start is 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; or the placement of a manufactured home 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 structures not occupied as dwelling units or not part of the main structure. For a 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.~~

"Structure" means a walled and roofed building, including a gas or liquid storage tank that is principally above ground.

"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.

"Substantial damage" also means flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

"Substantial improvement" means any repair, reconstruction, rehabilitation, addition, replacement, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

- A. Before the "start of construction" of the improvement; or
- B. Before damage occurred, if the structure has been damaged or is being restored.

Substantial improvement occurs with the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not the alteration affects external dimensions.

Substantial improvement includes structures that have incurred "substantial damage," regardless of the actual repair work performed.

Substantial improvement does not include any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.

“Variance (floodplain)” means a grant of relief from the requirements of this chapter that permits construction in a manner that would otherwise be prohibited by this chapter.

“Water typing” means a system for classifying water bodies according to their size and fish habitat characteristics. The Washington Department of Natural Resources’ forest practices water typing classification system is hereby adopted by reference. The system defines four water types:

A. Type “S” – Shoreline. Streams that are designated “shorelines of the state,” including marine shorelines.

B. Type “F” – Fish. Streams that are known to be used by fish or meet the physical criteria to be potentially used by fish.

C. Type “Np” – Non-fish perennial streams.

D. Type “Ns” – Non-fish seasonal streams.

“Waters of the state” includes lakes, rivers, ponds, streams, inland waters, underground water, salt waters, estuaries, tidal flats, beaches, and lands adjoining the seacoast of the state, sewers, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

“Zone” means one or more areas delineated on the FIRM. The following zones may be used on the adopted FIRM. The special flood hazard area is comprised of the A and V zones.

- A SFHA where no base flood elevation is provided.
- A# Numbered A Zones (e.g., A7 or A14), SFHA with a base flood elevation.
- AE SFHA with a base flood elevation.
- AO SFHA subject to inundation by shallow flooding usually resulting from sheet flow on sloping terrain, with average depths between one and three feet. Average flood depths are shown.
- AH SFHA subject to inundation by shallow flooding (usually pond areas) with average depths between one and three feet. Base flood elevations are shown.
- B The area between the SFHA and the 500-year flood of the

- primary source of flooding. It may also be an area with a local, shallow flooding problem or an area protected by a levee.
- C An area of minimal flood hazard, as above the 500-year flood level of the primary source of flooding. B and C zones may have flooding that does not meet the criteria to be mapped as a special flood hazard area, especially pond and local drainage problems.
 - D Area of undetermined but possible flood hazard.
 - V The SFHA subject to coastal high hazard flooding including waves of three feet or greater in height. There are three types of V zones: V, V#, and VE, and they correspond to the A zone designations.
 - X The area outside the mapped SFHA.
 - X – Shaded The same as a Zone B, above.

13.12.300 Regulatory data.

A. Regulatory Floodplain. The regulatory floodplain is comprised of the special flood hazard area and all protected areas within the jurisdiction of city of Shoreline. The term also includes areas delineated pursuant to subsection E of this section.

B. Special Flood Hazard Area. The special flood hazard area (SFHA) is the area subject to flooding by the base flood and subject to the provisions of this chapter. It is identified by the Federal Emergency Management Agency in a scientific and engineering report entitled “Flood Insurance Study for King County and Incorporated Areas,” dated ~~November 6, 2010~~ **April 19, 2005** ~~Flood Insurance Study Number 53033CV001B~~, and any revisions thereto, with an accompanying flood insurance rate map (FIRM), and any revisions thereto, hereby adopted by reference and declared to be a part of this chapter. The flood insurance study and the FIRM are on file at 17500 Midvale Avenue N, Shoreline, WA 98133.

C. Flood Hazard Data.

1. The base flood elevation for the SFHAs of the city of Shoreline shall be as delineated on the 100-year flood profiles in the flood insurance study for King County.

2. The base flood elevation for each SFHA delineated as a “Zone AH” or “Zone AO” shall be that elevation (or depth) delineated on the flood insurance rate map. Where base flood depths are not available in Zone AO, the base flood elevation shall be considered two feet above the highest grade adjacent to the structure.
3. The base flood elevation for all other SFHAs shall be as defined in subsections (C)(6) and (E)(4) of this section.
4. The flood protection elevation (FPE) shall be the base flood elevation plus one foot.
5. The floodway shall be as delineated on the flood insurance rate map or in accordance with subsections (C)(6) and (E)(4) of this section.
6. Where base flood elevation and floodway data have not been provided in special flood hazard areas, the director shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source.
7. Where elevation data are not available either through the flood insurance study, FIRM, or from another authoritative source, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness includes use of historical data, high water marks, photographs of past flooding, etc. Failure to elevate at least two feet above the highest adjacent grade in these zones may result in higher insurance rates.

D. Protected Area. The protected area is comprised of those lands that lie within the boundaries of the floodway, the riparian habitat zone, and the channel migration area.

1. In riverine areas, where a floodway has not been designated in accordance with subsection (C)(5), (C)(6), or (E)(5) of this section, the protected area is comprised of those lands that lie within the boundaries of the riparian habitat zone, the channel migration area, and the SFHA.
2. The riparian habitat zone includes those watercourses within the SFHA and adjacent land areas that are likely to support aquatic and riparian habitat. The size and location of the riparian habitat zone is dependent on the type of water body. The riparian habitat zone includes the water body and adjacent lands, measured perpendicularly from ordinary high water on both sides of the water body:
 - a. Type S – Streams that are designated “shorelines of the state”: 250 feet.
 - b. Type F – Fish-bearing streams greater than five feet wide and marine shorelines: 200 feet.
 - c. Type F – Streams less than five feet wide and lakes: 150 feet.
 - d. Type N – Non-salmonid-bearing perennial and seasonal streams with unstable slopes: 225 feet.
 - e. All other Type N – Non-salmonid-bearing perennial and seasonal streams: 150 feet.

3. Channel Migration Area.

- a. The channel migration area shall be the channel migration zone plus 50 feet.
- b. Where a channel migration zone has not yet been mapped, the provisions of subsection (E)(6) of this section shall apply at the time of permit application.
- c. Where more than one channel migration zone has been delineated, the director shall use the delineation that has been adopted for other local regulatory purposes.

E. New Regulatory Data.

1. All requests to revise or change the flood hazard data, including requests for a letter of map revision and a conditional letter of map revision, shall be reviewed by the director.
 - a. The director shall not sign the community acknowledgment form for any requests based on filling or other development, unless the applicant for the letter documents that such filling or development complies with this chapter.
 - b. The director shall not approve a request to revise or change a floodway delineation until FEMA has issued a conditional letter of map revision that approves the change.
2. The director shall use the most restrictive data available for the channel migration zone, floodways, future conditions, and riparian habitat areas.
3. If an applicant disagrees with the regulatory data prescribed by this chapter, he/she may submit a detailed technical study needed to replace existing data with better data in accordance with FEMA mapping guidelines or Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management and the Endangered Species Act, 2010, FEMA Region 10. If the data in question are shown on the published FIRM, the submittal must also include a request to FEMA for a conditional letter of map revision.
4. Where base flood elevation data are not available in accordance with subsection C of this section, applicants for approval of new subdivisions and other proposed developments, including proposals for manufactured home parks and subdivisions greater than 50 lots or five acres, whichever is smaller, shall include such data with their permit applications.
5. Where floodway delineation is not available in accordance with subsection C of this section, the floodway will be designated to be one-half the distance of the mapped 100-year floodplain at any point, and the prohibition on floodway development applies, unless a floodway study indicates otherwise. This provision applies to any floodplain development permit, including those for substantial improvements.
6. Where channel migration zone data are not available in accordance with subsection (D)(3) of this section, the permit applicant shall either:
 - a. Designate the entire SFHA as the channel migration zone; or
 - b. Identify the channel migration area in accordance with Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management and the Endangered Species Act, 2010, FEMA Region 10.

7. All new hydrologic and hydraulic flood studies conducted pursuant to this section shall consider future conditions and the cumulative effects from anticipated future land use changes in accordance with Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management and the Endangered Species Act, 2010, FEMA Region 10.