

# ORDINANCE 1726

**AN ORDINANCE OF THE CITY OF NORTH BEND, WASHINGTON, RELATING TO FLOODPLAIN MANAGEMENT; AMENDING DEFINITIONS SET FORTH IN NORTH BEND MUNICIPAL CODE (NBMC) SUBSECTIONS 14.05.040(A), (B), (E), (F), (H), (M), (N), (P), (R), (S), AND (V); AMENDING NBMC SECTIONS 14.12.010, .030, .050, .060, .070, .080, .100, .110, .120, .130, .140, .200, .205, .210; ADOPTING NEW NBMC SECTIONS 14.12.015, .055 AND .230; REPEALING AND REPLACING NBMC 14.12.020; REPEALING NBMC 14.12.180; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE**

**WHEREAS**, the City of North Bend (“City”) participates in the National Flood Insurance Program (“NFIP”) administered by the Department of Homeland Security’s Federal Emergency Management Agency (“FEMA”) and has adopted North Bend Municipal Code (“NBMC”) Chapter 14.12, *Floodplain Management*, in compliance with FEMA requirements; and

**WHEREAS**, in conjunction with a Flood Insurance Rate Map (FIRM) update for King County, the City must bring NBMC Chapter 14.12 and associated definitions in NBMC Section 14.05.040 into compliance with a Washington State Model Floodplain Ordinance (“Model Ordinance”) per Title 44 Code of Federal Regulations Section 60.3(d), as described in a letter sent to the King County Executive from FEMA on February 19, 2020, and described in a letter sent to Mayor McFarland on May 15, 2020; and

**WHEREAS**, said letters describe mandatory compliance with the Model Ordinance by August 19, 2020 to avoid suspension from the NFIP; and

**WHEREAS**, City Staff with the City’s Floodplain Management consultant have identified and prepared amendments to the City’s Floodplain Management Regulations in NBMC 14.12 and associated amendments to the Critical Area definitions in NBMC 14.05.040 to address compliance with provisions of the Model Ordinance; and

**WHEREAS**, draft amendments were sent to both the Washington State NFIP Coordinator and FEMA Region X representatives on March 11, 2020 and June 4, 2020, resulting in two reviews from the NFIP Coordinator and one review from FEMA; and

**WHEREAS**, a State Environmental Policy Act Determination of Non-Significance (“SEPA DNS”) was issued on the draft amendments on June 5, 2020, and no comments were received on the SEPA DNS; and

**WHEREAS**, the City’s Planning Commission reviewed the draft amendments at its June 11 and June 25, 2010, meetings and recommended approval of the draft amendments on June 25, 2010; and

**WHEREAS**, the City’s Planning Commission held a public hearing on the draft amendments at its June 25, 2010, meeting and received no public comment on the amendments; and

**WHEREAS**, the City Council finds that the draft amendments are consistent with the requirements of Title 44 Code of Federal Regulations Section 60.3(d); and

**WHEREAS**, the City Council finds that the City followed the procedural requirements of Chapter 20.08 NBMC to notify and advertise amendments of the Code to the public and interested agencies, and finds that both the Planning Commission and the City Council considered all written and verbal comments received during their respective public participation processes;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:**

**Section 1. NBMC Subsection 14.05.040(A) (“A” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(A) (“A” Definitions) is hereby amended to read as follows:

A. “A” Definitions.

1. “Accessory structure” means a structure on the same parcel as a principal structure, the use of which is incidental to the use of the principal structure; an accessory structure specifically excludes any structure used for human habitation.

12. “Active fault” means a fault that is considered likely to undergo renewed movement within a period of concern to humans. Faults are commonly considered to be active if the fault has moved one or more times in the last 10,000 years.

23. “Addition” means an extension or increase in floor area or height of a building or structure.

34. “Adjacent” means immediately adjoining (in contact with the boundary of the influence area) or within a distance less than that needed to separate activities from critical areas to ensure protection of the functions and values of the critical areas. “Adjacent” shall mean any activity or development located:

- a. On site immediately adjoining a critical area; or
- b. A distance equal to or less than the required critical area buffer width and building setback.

5. “Agricultural structure” means a structure used exclusively in connection with the production, harvesting, storage, raising or drying of agricultural products, livestock or aquatic animals or plants; an agricultural structure specifically excludes any structure used for human habitation.

46. “Alteration” means any human-induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to, grading, filling, dredging, channelizing, clearing (vegetation), applying pesticides, discharging waste, construction, compaction, excavation, modifying for stormwater management, relocating, or other activities that change the existing landform, vegetation, hydrology, wildlife, or habitat value of critical areas.

7. “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.

58. “Anadromous fish” means fish that spawn in fresh water and mature in the marine environment.

69. “Appeal” means a request for a review of the director’s interpretation of any provision of the critical area regulations or a request for a variance.

710. “Applicant” means a person who files an application for a permit under this chapter and who is either the owner of the land on which that proposed activity would be located, a contract purchaser, or the authorized agent of such a person.

811. “Aquifer recharge area” means an area that, due to the presence of certain soils, geology, and surface water, acts to recharge groundwater by percolation.

912. “Area of shallow flooding” means a designated zone AO, AH, AR/AO or AR/AH (or VO) on a community’s Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. Also referred to as the sheet flow area, a designated AO or AH zone on the flood insurance rate map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not

~~exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident.~~

~~1013. “Area(s) of special flood hazard” means the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. 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 in meaning with the phrase “area of special flood hazard”.  
land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.~~

14. “ASCE 24” means the most recently published version of ASCE 24, Flood Resistant Design and Construction, published by the American Society of Civil Engineers. Further detail on ASCE is found in Title 15 Buildings and Construction.

~~115. “Assessed value” means an assessed valuation as established by the King County assessor’s office, unless otherwise provided by a market appraisal institute (MAI) appraisal.~~

**Section 2. NBMC Subsection 14.05.040(B) (“B” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(B) (“B” Definitions) is hereby amended to read as follows:

B. “B” Definitions.

1. “Base flood” means a flood having a one percent chance of being equaled or exceeded in any given year, and which may also be referred to as the “100-year flood.” “Base flood” is designated on flood insurance rate maps with the letter A or V.

2. “Base flood elevation (BFE)” means the elevation to which floodwater is anticipated to rise during the base flood.~~water surface elevation of the base flood. “Base flood elevation” shall be referenced to the North American Vertical Datum of 1988 (NAVD).~~

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

4. “Best available science” means current scientific information used in the process to designate, protect, or restore critical areas that is derived from a valid scientific process as defined by WAC 365-195-900 through 365-195-925.

5. “Best management practices” means conservation practices or systems of practice and management measures that:

- a. Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics, and sediment;

- b. Minimize adverse impacts to surface water and groundwater flow, circulation patterns, and the chemical, physical, and biological characteristics of wetlands;
  - c. Protect trees and vegetation designated to be retained during and following site construction consistent with Chapter 19.10 NBMC; and
  - d. Provide standards for proper use of chemical herbicides within critical areas.
6. “Buffer” means the zone contiguous with a critical area that is required for the continued maintenance, function, and structural stability of the critical area.
7. “Building setback line” or “BSBL” means a line beyond which the foundation of a structure shall not extend.

**Section 3. NBMC Subsection 14.05.040(E) (“E” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(E) (“E” Definitions) is hereby amended to read as follows:

E. “E” Definitions.

1. “Elevation certificate” means the administrative tool of the National Flood Insurance Program (NFIP) that can be used to provide elevation information, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F) official form (FEMA Form 81-31) used to track development, provide elevation information necessary to ensure compliance with community floodplain management ordinances, and determine proper insurance premium rates.
2. “Erosion” means the process by which soil particles are mobilized and transported by natural agents such as wind, rain, frost action, or stream flow.
3. “Erosion hazard area” means those areas that, because of natural characteristics including vegetative cover, soil texture, slope gradient, and rainfall patterns, or human-induced changes to such characteristics, are vulnerable to erosion.
4. “Essential facility” has the same meaning as “Essential Facility” defined in ASCE 24. Table 1-1 in ASCE 24-14 further identifies building occupancies that are essential facilities.

**Section 4. NBMC Subsection 14.05.040(F) (“F” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(F) (“F” Definitions) is hereby amended to read as follows:

F. "F" Definitions.

1. "Federal Emergency Management Agency" or "FEMA" means the agency that oversees the administration of the National Flood Insurance Program (44 CFR).

2. "Flood" or "flooding" means:

~~a. A general and temporary condition of partial or complete inundation of normally dry land areas from: general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters and/or the unusual and rapid accumulation of runoff or surface waters from any source.~~

i. The overflow of inland waters;

ii. The unusual and rapid accumulation or runoff of surface waters from any source; and

iii. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in section (a)(ii) of this section 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.

b. 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 flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(i) of this definition.

3. "Flood elevation study" is 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. A "flood elevation study" is also known as a Flood Insurance Study (FIS).

34. "Flood hazard area" means any area subject to inundation by the base flood or risk from channel migration including, but not limited to, an aquatic area, wetland, or closed depression.

45. "Flood insurance rate map" or "FIRM" means the official map of a community, on which the Federal Insurance Administrator has delineated both the special 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), the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazard and the risk premium zones applicable to the community (44 CFR Part 59).~~

~~56. “Flood insurance study” or “FIS” means the official report provided by the Federal Insurance Administration that includes the flood profiles, the FIRM, and the water surface elevation of the base flood (44 CFR Part 59).~~

~~67. “Flood protection elevation” means the elevation at which structures and uses regulated by Chapter 14.12 NBMC are required to be elevated or floodproofed.~~

~~87. “Floodplain” means any land area susceptible to being inundated by floodwaters from any source.~~

~~9. “Floodplain administrator” is the community official designated by title to administer and enforce the floodplain management regulations.~~

~~10. “Floodplain management regulations: are the zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance and erosion control ordinance) and other application of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.~~

~~§11. “Flood proofing” or “floodproofed” 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. Flood proofed structures are those that have the structural integrity and design to be impervious to floodwater below the Base Flood Elevation, adaptations that ensure a structure is substantially resistant to the passage of water below the flood protection elevation and resists hydrostatic and hydrodynamic loads and effects of buoyancy.~~

~~912. “Floodway” means the channel of a river 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 a designated height. A “floodway” is also referred to as “Regulatory Floodway.” one foot.~~

~~10. “Floodway dependent structure” means structures that are floodway dependent including, but not limited to, dams, levees and pump stations, stream bank stabilization, boat launches and related recreational structures, bridge piers and abutments, and fisheries enhancement or stream restoration projects.~~

~~113~~. “Formation” means an assemblage of earth materials grouped together into a unit that is convenient for description or mapping.

~~1214~~. “Formation, confining” means the relatively impermeable formation immediately overlaying a confined aquifer.

~~1315~~. “Frequently flooded areas” means lands in the floodplain subject to a one percent or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance, and attenuation functions, as determined by the director, in accordance with WAC 365-190-080(3). Classifications of frequently flooded areas include, at a minimum, the 100-year floodplain designations of the Federal Emergency Management Agency (FEMA) and National Flood Insurance Program (NFIP).

16. “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 and ship repair facilities, and does not include long term storage or related manufacturing facilities.

~~1417~~. “Functions and values” mean the beneficial roles served by critical areas, including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, and recreation. “Functions” and “values” may be considered independently, with functions being measured indicators such as water quality, hydrologic functions, and habitat functions and values being nonmeasured indicators such as local importance, potential qualities, or recreational benefits.

**Section 5. NBMC Subsection 14.05.040(H) (“H” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(H) (“H” Definitions) is hereby amended to read as follows:

H. “H” Definitions.

1. “Hazard areas” means areas designated as frequently flooded or geologically hazardous areas due to potential for erosion, landslide, seismic activity, mine collapse, or other geologically hazardous conditions, including steep slopes.

2. “Hazardous substance(s)” means:

a. A hazardous substance as defined by Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any substance designated pursuant to Section 311(b)(2)(A) of the Clean Water Act (CWA); any hazardous

waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by act of Congress); any toxic pollutant listed under Section 307(a) of the CWA; or any imminently hazardous chemical substance or mixture with respect to which the United States Environmental Protection Agency has taken action pursuant to Section 7 of the Toxic Substances Control Act; and

b. Hazardous substances include any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090, 173-303-102, or 173-303-103.

3. “Heavy equipment” means construction machinery such as backhoes, treaded tractors, dump trucks, and front-end loaders.

34. “High-intensity land use” means a land use consisting of commercial, urban, industrial, institutional, retail, residential with more than one unit per acre, agricultural (such as dairies, nurseries, raising and harvesting crops, requiring annual tilling, raising and maintaining animals, and the like), high-intensity recreation (such as golf courses, ball fields, and the like), and hobby farms.

5. “Highest adjacent grade” means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

6. “Historic structure” means any structure that is:

a. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

b. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

c. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

d. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

i. By an approved state program as determined by the Secretary of the Interior; or

ii. Directly by the Secretary of the Interior in states without approved programs.

~~4. “Heavy equipment” means construction machinery such as backhoes, treaded tractors, dump trucks, and front end loaders.~~

~~75. “Hydraulic project approval” or “HPA” means a permit issued by the state of Washington’s Department of Fish and Wildlife for modification to waters of the state in accordance with Chapter 75.20 RCW.~~

**Section 6. NBMC Subsection 14.05.040(M) (“M” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(M) (“M” Definitions) is hereby amended to read as follows:

M. “M” Definitions.

1. “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.”

2. “Mean sea level” means the vertical datum to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

32. “Mobile home park,” “manufactured housing community,” or “manufactured/mobile home community” means any real property which is rented or held out for rent to others for the placement of two or more mobile homes, manufactured homes, or park models for the primary purpose of income, except where such real property is rented or held out for rent for seasonal recreational purposes only and is not intended for year-round occupancy.

43. “Minor utility project” means the placement of a utility pole, street sign, anchor, vault, or other small component of a utility facility, where the disturbance of an area is less than 75 square feet.

54. “Mitigation” means the process of minimizing or compensating for adverse environmental impact(s) of a proposal on a critical area.

65. “Mobile home” means a structure that is transportable in one or more sections, built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. A mobile home is also included within the definition of

manufactured homes; however, the standards relating to mobile homes shall take precedence over the standards relating to manufactured homes where such standards are more stringent.

76. “Moderate-intensity land use” includes, but is not limited to, residential at a density of up to one dwelling unit per acre, moderate-intensity open space (e.g., parks), and agriculture (moderate-intensity land uses such as orchards and hay fields).

87. “Monitoring” means the collection of data by various methods for the purpose of understanding natural systems and features, evaluating the impact of development proposals on such systems, and/or assessing the performance of mitigation measures imposed as conditions of development.

**Section 7. NBMC Subsection 14.05.040(N) (“N” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(N) (“N” Definitions) is hereby amended to read as follows:

N. “N” Definitions.

1. “Native growth protection easement” or “NGPE” means an easement granted to the city for the protection of native vegetation within a critical area or its associated buffer.

2. “Native vegetation” means plant species that are indigenous to the region.

3. “New construction” means:

a. ~~structures~~—Structures for which the start of construction commenced on or after the effective date of the ordinance codified in this chapter, except as otherwise regulated pursuant to NBMC 14.12 as set forth immediately below; and-

b. For purposes of NBMC 14.12, the definition of “new construction” for the purpose of determining insurance rates means structures for which the “start of construction” commenced on or after the effective date of an initial Flood Insurance Rate Map or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, “new construction” means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

**Section 8. NBMC Subsection 14.05.040(P) (“P” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(P) (“P” Definitions) is hereby amended to read as follows:

P. “P” Definitions.

1. “Practical alternative” means an alternative that is available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes, and having less impact to critical areas.
2. “Priority habitat” means habitat types or elements with unique or significant value to one or more species as classified by the State Department of Fish and Wildlife.
3. “Protected area” means the portion of the special flood hazard area (SFHA) extending landward from a waterbody to the boundary of whichever of the three following areas extends the farthest: floodway, riparian habitat zone, and/or the channel migration zone (CMZ) plus 50 feet. If no CMZ is identified in the riverine system, the protected area extends to the outer limits of the ~~floodplain~~ SFHA.
4. “Public agency” means every city, county, state, or federal office, every officer, every institution, whether educational, correctional, or other, and every department, division, board, and commission that provides services or recommendations to the public or other such agencies.
5. “Public utility” means a public service corporation performing some public service subject to special governmental regulations, or a governmental agency performing similar public services, either of which are paid for directly by the recipients thereof. Such services shall include, but are not limited to, water supply, electric power, gas, and transportation for persons and freight.

**Section 9. NBMC Subsection 14.05.040(R) (“R” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(R) (“R” Definitions) is hereby amended to read as follows:

R. “R” Definitions.

1. “Reasonable use” means a legal concept articulated by federal and state courts in regulatory taking cases.
2. “Recreational vehicle” means a vehicle that is: built on a single chassis; 400 square feet or less when measured at the largest horizontal projection; designed to be self-propelled or permanently towable by an automobile or light duty truck; and designed primarily for use as temporary living quarters for

recreational, camping, travel, or seasonal use, and not as a permanent dwelling.

3. “Riparian habitat” means areas adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems that mutually influence each other.

4. “Riparian habitat zone” means the land adjacent to streams and other bodies of water where vegetation is strongly influenced by the presence of water. The riparian habitat zone includes lands within:

- a. ~~Two hundred fifty~~ 250 feet of the ordinary high water mark of Type S streams;
- b. ~~Two hundred feet~~ 200 of the ordinary high water mark of Type F streams greater than five feet wide;
- c. ~~One hundred fifty~~ 150 feet of the ordinary high water mark of Type F streams less than five feet wide or lakes; and
- d. ~~One hundred fifty~~ 150 to 225 feet of the ordinary high water mark of Type N perennial and seasonal streams depending on slope stability.

**Section 10. NBMC Subsection 14.05.040(S) (“S” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(S) (“S” Definitions) is hereby amended to read as follows:

S. “S” Definitions.

1. “Salmonid” means a member of the fish family Salmonidae. In King County this includes eChinook, coho, chum, sockeye, and pink salmon; cutthroat, brook, brown, rainbow, and steelhead trout; kokanee; and native char (bull trout and Dolly Varden). In the city and the surrounding upper Snoqualmie River Valley, salmonids are limited to resident populations of cutthroat trout, rainbow trout, eastern brook trout, and mountain whitefish.

2. “Section 404 permit” means a permit issued by the Army Corps of Engineers for the placement of dredge or fill material waterward of the ordinary high water mark or clearing in waters of the United States, including wetlands, in accordance with 33 U.S.C. 1344.

3. “Seismic hazard areas” means areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, or soil liquefaction.

4. “Special flood hazard area” or “SFHA” means the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. 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” has the same meaning as “area of special flood hazard”, ~~an area subject to a base or 100-year flood. Areas of special flood hazard are shown on the flood insurance rate maps as Zones A, AO, AE, AH.~~

5. “Species and habitats of local importance” means those species that may not be endangered, threatened, or critical from a state-wide perspective, but are of local concern due to their population status, sensitivity to habitat manipulation, or other educational, cultural, or historic attributes. These species may be priority habitats, priority species, and those habitats and species identified in the critical areas code as having local importance (e.g., elk).

6. “Species, threatened and endangered” means those native species that are listed by the State Department of Fish and Wildlife pursuant to RCW 77.12.070 as threatened (WAC 232-12-011) or endangered (WAC 232-12-014), or that are listed as threatened or endangered under the Federal Endangered Species Act (16 U.S.C. 1533).

7. “Start of construction” means and includes substantial improvement, and means the date a building permit is issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement is within 180 days of the permit issuance date. For cumulative tracking, the permit may extend beyond the specified time frame to the time of permit completion. 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 foundation 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 date on which the first alteration of any wall, ceiling, floor, or other structural part of a building starts, whether or not that alteration affects the external dimensions of the building.

8. “Steep slope” means a slope (excluding a city-approved geotechnical engineered slope) 40 percent or steeper within a vertical elevation change of at least 10 feet. A slope is defined by establishing its toe and

top, and is measured by averaging the inclination over at least 10 feet of vertical relief.

9. “Structure” means a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

10. “Stream” means any portion of a watercourse, either perennial or intermittent, where the surface water flow is sufficient to produce a defined channel or bed. Streams also include natural watercourses modified by humans. Streams do not include irrigation ditches, canals, stormwater runoff facilities, or other entirely artificial watercourses.

11. “Streams and other fish and wildlife habitat areas” means land management for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. This does not mean maintaining all individuals of all species at all times, but it does mean not degrading or reducing populations or habitats so that they are no longer viable over the long term. These areas include:

- a. Areas with which state or federally designated endangered, threatened, and critical species have a primary association;
- b. Habitats of local importance, including, but not limited to, areas designated as priority habitat by the Washington State Department of Fish and Wildlife, and fish habitat associated with resident fish species within the upper Snoqualmie Watershed, including all habitats associated with the following resident native fish species likely to occur in city rivers and streams: cutthroat trout, rainbow trout, mountain whitefish, largescale sucker, longnose dace, shorthead sculpin, mottled sculpin, western brook lamprey, and threespine stickleback;
- c. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish and wildlife habitat;
- d. Waters of the state, including lakes, rivers, ponds, and streams;
- e. State natural area preserves and natural resource conservation areas; and
- f. Land essential for preserving connections between habitat blocks and open spaces.

12. “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 determinations shall be made by the floodplain administrator.

13. “Substantial improvement” means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value 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. The term does not, however, 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 which are the minimum necessary to assure safe living conditions; or
- b. Any alterations of a “historic structure”; provided, that the alteration will not preclude the structure’s continued designation as a “historic structure.”

**Section 11. NBMC Subsection 14.05.040(V) (“V” Definitions), Amended:** North Bend Municipal Code Subsection 14.05.040(V) (“V” Definitions) is hereby amended to read as follows:

V. “V” Definitions.

1. “Variance” 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.
2. “Vegetation” means plant life growing below, at, and above the soil surface.
3. “Vegetation alteration” means any clearing, grading, cutting, topping, limbing, or pruning of vegetation.
4. “Violation” means the failure of a structure or other development to be constructed or implemented in conformance with applicable floodplain development regulations.

**Section 12. NBMC Section 14.12.010 (Applicability), Amended:** North Bend Municipal Code Section 14.12.010 (Applicability) is hereby amended to read as follows:

**14.12.010 Applicability.**

This chapter shall apply to all areas of special flood hazards (also referred to as “special flood hazard areas” or “SFHA”) within the city. Special flood hazard areas shall ~~have the meaning ascribed~~ be as defined in NBMC

14.05.200(S)(4) as now in effect or as may be subsequently amended, which areas shall be determined by consideration of the following:

A. Basis for Establishing Areas of Special Flood Hazard. Special flood hazard areas identified by the Federal Insurance Administration in a scientific and engineering report entitled “The Flood Insurance Study for King County, Washington, and Incorporated Areas” dated ~~April 19, 2005~~ August 19, 2020, and any revisions thereto, with an accompanying Flood Insurance Rate Map (FIRM), and any revisions thereto, which are hereby adopted by reference as though fully set forth. The Flood Insurance Study (FIS) and the FIRM are on file at North Bend City Hall at 920 Cedar Falls Way, North Bend, WA. The best available information for flood hazard area identification as outlined in subsection B of this section shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under subsection B of this section; and

B. When base flood elevation data has not been provided (in A zone) in accordance with NBMC 14.12.050(A), Basis for Establishing the Areas of Special Flood Hazard, the Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer the specific standards found in NBMC 14.12.100 through 14.12.140, and NBMC 14.12.200 Floodways. ~~When base flood elevation data has not been provided by the FIS or FIRM, the city shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from federal, state, county, or other valid sources.~~

C. In the event of a conflict, the more restrictive provision shall apply.

D. Compliance. All development within special flood hazard areas is subject to the terms of this ordinance and other applicable regulations.

E. Penalties For Noncompliance. No structure shall hereafter be constructed, located, extended, converted, or altered, and no land shall be altered, without first complying with the terms of this ordinance and other applicable regulations. Violations of the provisions of this ordinance by failure to comply with any of its requirements, including violations of conditions attached to permits or other approvals, shall constitute a civil violation subject to the provisions of NBMC Chapter 1.20, NBMC Chapter 8.08, and other applicable law.

**Section 13. New NBMC Section 14.12.015 (Designation of the Floodplain Administrator), Adopted:** A new North Bend Municipal Code Section 14.12.015, to be entitled “Designation of the Floodplain Administrator,” is hereby adopted to read as follows:

**14.12.015 Designation of the Floodplain Administrator.**

Designation of the Floodplain Administrator. The Public Works Director is hereby appointed to administer, implement, and enforce this ordinance by granting or denying development permits in accordance with its provisions. The Floodplain Administrator may delegate authority to implement these provisions. Duties of the Floodplain Administrator shall include, but not be limited to reviewing all development permits to determine that:

A. The permit requirements of this ordinance have been satisfied;

B. All other required state and federal permits have been obtained;

C. The site is reasonably safe from flooding;

D. The proposed development is not located in the floodway. If located in the floodway, assure the encroachment provisions of Section 14.12.200(B) are met; and

E. Notify FEMA when annexations occur in the Special Flood Hazard Area.

**Section 14. NBMC Section 14.12.020 - Repeal and Replace:** North Bend Municipal Code Section 14.12.020 (Severability) is hereby repealed in its entirety and replaced with a new North Bend Municipal Code Section 14.12.020, to be entitled “Definitions,” which is adopted to read as follows:

**14.12.020 Definitions.**

To ensure consistency throughout all critical area regulations within the City, and except as otherwise set forth in this chapter, all definitions applicable to this chapter are set forth in NBMC 14.05.040.

**Section 15. NBMC Section 14.12.030 (Floodplain Development Permit), Amended:** North Bend Municipal Code Section 14.12.030 (Floodplain development permit) is hereby amended to read as follows:

**14.12.030 Floodplain development permit.**

A. A floodplain development permit shall be obtained before new construction, substantial improvement, or development begins within any SFHA. The permit shall be for all structures, including mobile and manufactured homes or nonlicensed recreational vehicles on site for more than 180 days, as set forth in NBMC 14.12.140 and 14.12.150, and for all other development including fill and other activities as defined in NBMC 14.05.200040.

B. Exemptions. The following uses and activities do not require a floodplain development permit, provided all applicable local, state, and federal requirements are met:

1. Maintenance of aboveground utilities and facilities, such as replacing power lines and utility poles;

2. Normal agricultural practices on existing agricultural areas involving plowing, storing of materials, etc., normal to operation of a farm (other than new structures);

3. Removal of noxious weeds, hazard trees, and replacement of non-native vegetation with native vegetation;

4. Routine maintenance of existing landscaping that does not involve clearing of native vegetation, grading, excavation, or filling;

5. Normal road maintenance, such as filling potholes, repaving, installing sign and traffic signals, but not including any expansion, increase of impervious surfaces, or distribution of native vegetation; and

6. Normal maintenance of a levee or other flood control facility as prescribed in the operations and maintenance plan for the facility. Normal maintenance does not include repair from flood damage, any expansion of the prism, face or toe expansion, or the addition of material for protection of armor.

C. The fee and/or review cost for a floodplain development permit shall be as set forth in the city's taxes, rates and fees schedule, as now adopted or as may be amended from time to time.

€D. The fee and/or review cost for a floodplain development permit shall be waived by the city when the permit is for a structure under 200 square feet in size.

ÐE. The fee and/or review cost for a floodplain development permit shall be waived by the city when the permit is associated with a building permit for any of the following improvements:

1. Electrical repairs;
2. Furnace repairs or replacements;
3. Water heater or boiler repairs or replacements;
4. Air conditioner repairs or replacements;
5. Re-roofs;
6. Re-siding;
7. Insulation or simple weatherization or energy efficiency upgrades;
8. Roof-mounted or existing structure mounted solar collectors;
9. Window and door replacements; or

10. Renovation or remodel projects that cost less than \$2,500;

provided, that waiver under ~~this subsections~~ D and E shall not apply if the project includes any other improvements ~~that are~~ not listed above, increases the structure's floor area or footprint, causes a floodplain encroachment, or constitutes a substantial improvement under NBMC 14.12.170.

The cost of improvements that qualify for a waiver under ~~this subsections~~ D and E shall not be included in the cumulative calculation required by NBMC 14.12.170, unless the improvements are part of a substantial damage calculation or estimate.

~~FF.~~ Permit Application. Application for a floodplain development permit shall be made on forms furnished by the ~~director~~ Floodplain Administrator. Required application materials as determined by the Floodplain Administrator may include:

1. Plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question, native vegetation, existing or proposed structures, fill, storage of materials, drainage facilities, and other information as identified on the application information sheet. These documents shall be maintained by the city for inspection of all records pertaining to the provisions of these critical areas regulations;
2. A critical areas report, if required, pursuant to Chapter 14.05 NBMC;
3. Habitat assessment, if required, pursuant to ~~this chapter~~ NBMC 14.12.210;
4. The base flood elevation in relation to the lowest floor (including basement) of all structures located in the AE zone or within the AO zone, shall be recorded on a current elevation certificate. Identify the highest adjacent natural grade next to the building prior to construction;
5. Proposed floodproofing elevation in relation to the base flood elevation or highest adjacent natural grade next to the building prior to construction;
6. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in NBMC 14.12.130~~120~~;
7. A description of the extent to which a watercourse will be altered or relocated as a result of a proposed development; ~~and~~
8. An elevation certificate for all new or substantially improved structures. When elevations are required, Section C of ~~The~~ the elevation

certificate must be completed and certified by a licensed professional land surveyor, as defined in RCW 18.43.020;-

9. Where development is proposed in a floodway, an engineering analysis subject to the approval of the Floodplain Administrator indicating no rise of the Base Flood Elevation; and

10. Any other information that may be reasonably required by the Floodplain Administrator in order to review the application.

~~F.~~G. All development permits for the site must be reviewed to ensure all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required, prior to floodplain development permit issuance.

**Section 16. NBMC Section 14.12.050 (Information to be Obtained and Maintained), Amended:** North Bend Municipal Code Section 14.12.050 (Information to be obtained and maintained) is hereby amended to read as follows:

**14.12.050 Information to be obtained and maintained.**

A. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or other source in accordance with NBMC 14.12.010, the applicant shall obtain and record 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.

B. For all new or substantially improved floodproofed nonresidential structures where base flood elevation data is provided through the FIS, FIRM, or other source in accordance with NBMC 14.12.010:

1. The applicant shall obtain and record the elevation (in relation to mean sea level) to which the structure was floodproofed; and

2. The city shall maintain the floodproofing certifications required in NBMC 14.12.130.

~~C. 2.~~The city shall maintain:

1. Certification required by NBMC 14.12.200(B);

2. Records of all variance actions, including justification for their issuance;

3. Improvement and damage calculations; and

~~C4. The city shall maintain for public inspection a~~All records pertaining to the provision of this chapter for public inspection.

**Section 17. New NBMC Section 14.12.055 (Elevation Certificates), Adopted:** A new North Bend Municipal Code Section 14.12.055, to be entitled “Elevation Certificates,” is hereby adopted to read as follows:

**14.12.055 Elevation Certificates.**

Three elevation certificates are required throughout the building process for all new structures and structures for which a substantial improvement as defined herein is proposed, unless the floodplain administrator determines an elevation certificate is not necessary for a specific structure:

A. For construction drawings, an elevation certificate is required with the building permit application;

B. An elevation certificate is required for a building under construction prior to scheduling of an underfloor inspection, or equivalent, but always before vertical construction; and

C. An elevation certificate is required for finished construction prior to issuance of a Certificate of Occupancy or final approval. Finished construction certificates will be reviewed for accuracy, and any required corrections must be made prior to acceptance of the certificate.

**Section 18. NBMC Section 14.12.060 (Alteration of Watercourses), Amended:** North Bend Municipal Code Section 14.12.060 (Alteration of watercourses) is hereby amended to read as follows:

**14.12.060 Alteration of watercourses.**

Adjacent communities and the Department of Ecology must be notified prior to any alteration or relocation of a watercourse, and evidence of such notification must be submitted to the Federal Insurance Administration. Assurance to the reasonable satisfaction of the Floodplain Administrator must be provided demonstrating that the flood carrying capacity of the altered or relocated portion of said watercourse is maintained.

**Section 19. NBMC Section 14.12.070 (Performance Standards – Flood Hazard Areas), Amended:** North Bend Municipal Code Section 14.12.070 (Performance standards – Flood hazard areas) is hereby amended to read as follows:

**14.12.070 Performance standards – Flood hazard areas.**

The following standards apply to development proposals and alterations on sites within special flood hazard areas:

A. When fill is proposed to achieve elevated construction, a report by a registered professional engineer is required, demonstrating that the proposal will not increase the base flood elevation. If a development proposal will alter the base flood elevation or boundaries of the base flood elevation, then the project proponent shall provide the Floodplain Administrator with engineering documentation and analysis regarding

the proposed change to demonstrate that no increased upstream or downstream flood hazard shall be created by the proposed development. If the change to the base flood elevation 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.

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;

~~A development proposal shall not increase the base flood elevation unless revisions to the FIRM are approved by FEMA in accordance with 44 CFR 70, and appropriate legal arrangements have been made and documents filed prior to issuance of a construction permit;~~

B. The following circumstances are presumed to produce no ~~increase in base flood elevation~~decrease in flood storage volume-, and shall not require special studies to establish this fact:

1. ~~Reconstruction or remodeling of existing structures in the floodway where the structure's footprint is not increased~~Expansion of an existing structure that is no greater than 10 percent beyond its existing footprint, and that is outside of the floodway and outside of the AE zone where the floodway has not been mapped;
2. Development of new ~~residential~~ structures outside the FEMA floodway ~~on lots in existence before November 17, 1998~~and outside of the AE zone where the floodway has not been mapped, where the area below the lowest floor allows for the automatic entry and exit of flood waters;
3. Substantial improvements to existing residential structures in the floodplain but outside the FEMA floodway and outside of the AE zone where the floodway has not been mapped;
4. New development or substantial improvement in the area identified in the downtown commercial zoning district which is within the AO-1, AO-2, AO-3 or AE ~~zone (outside the floodway)~~ flood zone where the floodway has not been mapped and outside of the floodway; provided, that in the AE flood zone the difference between the highest adjacent grade of the site and the base flood elevation as measured on the Flood Insurance Rate Map is no greater than two feet; and/or

~~5. Minor accessory structures exempt from building permits under the International Building Code~~The improvement of all existing historic structures as defined by NBMC 14.05.040(H)(6);

C. The cumulative effect of any proposed development, where combined with all other existing and anticipated development on the site, shall not reduce the effective base flood storage volume of the floodplain. Except as exempted in subsection B of this section, grading or other activity that would reduce the effective base flood storage volume shall be mitigated by creating compensatory storage on site, or off site if legal arrangements can be made, to assure that the effective compensatory storage volume will be preserved over time in equivalent volume, at equivalent elevations to that being displaced. Compensatory storage areas must be hydraulically connected to the source of flooding, and no area below the waterline of a pond or other body of water can be credited as a compensating excavation; provided, however, that no increased upstream or downstream flood hazard shall be created by any fill authorized in the floodplain by this chapter or other applicable chapters;

D. If a lot has a buildable site or sites out of the special flood hazard area, all new structures shall be located there, when feasible. If a lot is fully in the floodplain, structures must be located to have the least impact on riparian habitat and listed species. All structures must be set back at least 15 feet from the protected area, as practicable. The city has prepared maps identifying the approximate boundaries of the protected area and the riparian habitat zone used to establish the protected area which are available on the city's website. The protected area has been defined using the CMZs identified in the study titled Channel Migration in the Three-Forks Area of the Snoqualmie River, prepared by King County in January 1996. This study identified that little channel migration is expected to occur on the Middle Fork upstream from Tanner due to channel stability, nor on the South Fork upstream of the Burlington Northern Railroad (Snoqualmie Valley Trail) due to levee channelization. Therefore, channel migration was not used as a factor to determine the protected area within these reaches;

E. If the proposed project will create new impervious surfaces so that more than 10 percent of the portion of the lot in the regulatory floodplain is covered by impervious surface, the applicant shall demonstrate that there will be no net increase in the rate and volume of the stormwater surface runoff that leaves the site or that the adverse impact is mitigated per the approved habitat mitigation assessment;

~~F. When fill is proposed to achieve elevated construction, a report by a registered professional engineer is required demonstrating that the proposal will not increase the base flood elevation;~~

~~G. If grading or other activity will displace any effective flood storage volume, compensatory storage shall be created on site, or off site if legal arrangements can be made, to assure that the effective compensatory storage volume will be preserved over time, in equivalent volume, at equivalent elevations to that being displaced. Compensatory storage areas must be hydraulically connected to the source of flooding. Alternatively, if feasible, the applicant may provide an increase in side channel habitat as mitigation for floodway alterations;~~

~~H. Approved alterations shall not block side channel habitats; and~~

~~I. An analysis of bioengineering and/or vegetation enhancements will be required when existing levees or dikes are proposed to be repaired or renovated as specified in King County's Guidelines for Bank Stabilization.~~

**Section 20. NBMC Section 14.12.080 (Construction Materials and Methods), Amended:** North Bend Municipal Code Section 14.12.080 (Construction materials and methods) is hereby amended to read as follows:

**14.12.080 Construction materials and methods.**

Construction materials and methods for residential and nonresidential structures shall meet the following criteria:

A. All construction elevated by pilings must be designed and certified by a professional structural engineer registered in the state of Washington and approved by the city building official;

B. All new ~~or substantially improved buildings and structures~~ construction or substantial improvements shall be constructed with materials and utility equipment resistant to flood damage, using methods and products that minimize flood damage;

C. Electrical, mechanical, plumbing, heating, ventilation and air conditioning and other service facilities shall be elevated or floodproofed to the flood protection elevation so as to prevent water from entering or accumulating within the components during conditions of flooding; and

D. All new construction and substantial improvements, including those related to manufactured homes, shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy.

**Section 21. NBMC Section 14.12.100 (Subdivision and Development proposals), Amended:** North Bend Municipal Code Section 14.12.100 (Subdivision and development proposals) is hereby amended to read as follows:

**14.12.100 Subdivision and development proposals.**

~~Subdivisions~~ Applications for subdivisions, short subdivisions, master site plans, contract rezones, site plan/design review, planned residential developments, ~~and binding site plans, and other proposed development~~ shall conform to the following ~~these~~ requirements:

A. Be consistent with the need to minimize flood damage;

B. New buildable lots shall contain 5,000 square feet or more of buildable land outside the floodway;

~~B~~C. Locate and construct all utilities and their facilities in a manner that minimizes flood damage;

~~C~~D. Provide adequate drainage to reduce exposure to flood damage;

~~D~~E. Base flood data and flood hazard notes shall be shown on the face of the recorded plat; this may include the floodwater depth, required flood elevations, and the boundary of the base flood and floodway as deemed appropriate by the city;

~~E~~F. Where base flood elevation data has not been provided or is not available from another authorized source, it shall be generated for subdivision proposals and other proposed developments that contain at least 50 lots or five acres (whichever is less); and

~~F~~G. The following note shall appear on the face of the recorded documents and shall be recorded on the title of records for all affected lots:

Note: Lots and structures located within special flood hazard areas may be inaccessible to emergency vehicles during flood events. Residents and property owners should take appropriate advance precautions to provide access.

**Section 22. NBMC Section 14.12.110 (Residential Construction), Amended:** North Bend Municipal Code Section 14.12.110 (Residential construction) is hereby amended to read as follows:

**14.12.110 Residential construction.**

New residential construction and substantial improvements within the SFHA shall meet the following criteria:~~A. The lowest floor, including basement, shall be elevated two feet or more above base flood elevation.~~

~~B. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited. The area and rooms below the lowest floor 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 must meet or exceed the following minimum criteria:~~

~~1. A minimum of two openings shall be provided on two different walls having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;~~

~~2. The bottom of all openings shall be no higher than one foot above grade; and~~

~~3. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.~~

A. In AE and A1-30 zones or other A zoned areas where the base flood elevation has been determined or can be reasonably obtained, new construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated two feet or more above the base flood elevation. Mechanical equipment and utilities shall be waterproof or elevated at least two feet above the base flood elevation;

B. New construction and substantial improvement of any residential structure in an AO zone shall meet the requirements in NBMC 14.12.150;

C. New construction and substantial improvement of any residential structure in an unnumbered A zone for which a base flood elevation is not available and cannot be reasonably obtained shall be reasonably safe from flooding as determined by the Floodplain Administrator, but in all cases the lowest floor shall be at least two feet above the highest adjacent grade;

D. 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 must meet or exceed the following minimum criteria:

1. Have a minimum of two openings on two opposing walls with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

2. The bottom of all openings shall be no higher than one foot above grade;

3. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater;

4. A garage attached to a residential structure, constructed with the garage floor slab below the base flood elevation, must be designed to allow for the automatic entry and exit of floodwaters;

5. Alternatively, a registered engineer or architect may design and certify engineered openings; and

6. If structures are constructed or substantially improved with fully enclosed areas below the lowest floor, the areas shall be used solely for parking of vehicles, building access, or storage;

~~CE.~~ Portions of the building structure below the ~~base~~ flood protection elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the base flood elevation, in compliance with the most updated technical guidance published by FEMA; and

~~DE.~~ The elevation of the interior crawlspace grade must be at or above the lowest elevation of the exterior grade; provided, that below-grade crawlspace foundations may be allowed when all of the following conditions are met, in compliance with the most updated technical guidance published by FEMA:

1. The interior grade of the crawlspace below the base flood elevation is no more than two feet below the lowest adjacent exterior grade; ~~and~~

2. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall, does not exceed four feet at any point; ~~and~~

3. The crawlspace contains an adequate drainage system that removes floodwaters from the interior of the crawlspace, such as natural drainage through porous, well-drained soils, and/or constructed drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means; ~~and~~

4. Any building utility systems within the crawlspace are elevated to the flood protection elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. In particular, all ductwork is elevated above the design flood elevation or sealed from floodwaters; ~~and~~

5. The velocity of floodwaters at the site does not exceed five feet per second for any crawlspace; and

6. All other minimum criteria set forth in this section are satisfied.

**Section 23. NBMC Section 14.12.120 (Accessory Structures), Amended:** North Bend Municipal Code Section 14.12.120 (Accessory structures) is hereby amended to read as follows:

**14.12.120 Accessory structures.**

This provision applies to accessory structures that are used for parking or limited storage only, such as garages or small storage sheds. Accessory structures that cannot meet the following standards shall be constructed following the requirements of NBMC 14.12.130. The following standards shall apply in the SFHA:

A. The accessory structure shall not have a floor area greater than 400 square feet;

AB. Accessory structures shall be designed to have low flood damage potential and be considered a minimal investment;

BC. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;

CD. Accessory structures shall be firmly anchored to prevent flotation, collapse, and lateral movement that may result in damage to other structures;

DE. Service facilities such as electrical, Mechanical and utility equipment shall be floodproofed or elevated above the base flood elevation;

EF. Floodway encroachment standards must be met;

FG. The portions of accessory structures located below the base flood elevation must be constructed of flood-resistant materials; and

GH. Accessory structures must be designed to allow for the automatic entry of flood waters as described in NBMC 14.12.110(BD), unless the floor is elevated above the base flood elevation.

**Section 24. NBMC Section 14.12.130 (Nonresidential Structures), Amended:** North Bend Municipal Code Section 14.12.130 (Nonresidential structures) is hereby amended to read as follows:

**14.12.130 Nonresidential construction.**

~~New construction and substantial improvements of any existing commercial, industrial, or other nonresidential structure shall either:~~

~~A. Elevate the lowest floor, including the basement, a minimum of two feet or more above base flood elevation and meet the same standards for space below the lowest floor as described in NBMC 14.12.110; or~~

~~B. Floodproof the structure to the same elevation. If the structure is floodproofed, the following criteria are required:~~

~~1. The floodproofing must be certified by a professional engineer or architect registered in the state of Washington stating that the floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impacts, uplift forces, and other factors associated with the base flood. The certification shall be provided to the official as set forth in NBMC 14.12.050.~~

~~2. Approved building permits for floodproofed nonresidential buildings shall contain a statement to notify applicants that flood insurance premiums will be based upon rates that are one foot below the floodproofed level. (Ord. 1606 § 5 (part), 2016; Ord. 1594 § 1 (part), 2016).~~A. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the requirements in this subsection A, or all of the requirements in subsection B, below:

1. In AE and A1-30 zones or other A zoned areas where the base flood elevation has been determined or can be reasonably obtained:

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated two feet or more above the base flood elevation, or elevated as required by ASCE 24, whichever is greater. Mechanical equipment and utilities shall be waterproofed or elevated least two feet above the base flood elevation, or as required by ASCE 24, whichever is greater.

2. If located in an AO zone, the structure shall meet the requirements in NBMC 14.12.150.

3. If located in an unnumbered A zone for which a base flood elevation is not available and cannot be reasonably obtained, the structure shall be reasonably safe from flooding as determined by the Floodplain Administrator, but in all cases the lowest floor shall be at least two feet above the highest adjacent grade.

4. Portions of the structure below the flood protection elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the base flood elevation, in compliance with the most updated technical guidance published by FEMA.

5. 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 must either be

certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria, in compliance with the most updated technical guidance published by FEMA:

- a. Have a minimum of two openings on opposing walls, with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
- b. The bottom of all openings shall be no higher than one foot above grade;
- c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater; and
- d. If structures are constructed or substantially improved with fully enclosed areas below the lowest floor, the areas shall be used solely for parking of vehicles, building access, or storage.

B. If the requirements of subsection A are not met, then new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:

- 1. Be dry floodproofed so that below two feet or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water or dry flood proofed to the elevation required by ASCE 24, whichever is greater;
- 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- 3. Commercial, industrial, or other nonresidential structures that are elevated and not floodproofed, must meet the same standards for space below the lowest floor as set forth in 14.12.130(A)(4); and
- 4. Applicants who are floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g. a building flood proofed to the base flood level will be rated as one foot below), and shall further be notified that flood proofing the building an additional foot will reduce insurance premiums.

**Section 25. NBMC Section 14.12.140 (Mobile and Manufactured Homes), Amended:**  
North Bend Municipal Code Section 14.12.140 (Mobile and manufactured homes) is hereby amended to read as follows:

**14.12.140 Mobile and manufactured homes.**

For all mobile and manufactured homes, all standards for flood hazard protection for residential construction shall apply. All new and substantially

improved mobile and manufactured homes must be elevated on a permanent foundation to the flood protection elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. For existing mobile and manufactured homes where the value of the repair or reconstruction of the utilities and pad equals or exceeds 50 percent of the value of utilities and pad before the repair or reconstruction has commenced, all standards for flood hazard protection applicable for residential construction shall apply.

**Section 26. NBMC Section 14.12.180 (Additions) – Repeal and Reservation.** The text of North Bend Municipal Code Section 14.12.180 (Additions) is hereby repealed in its entirety. This section number is reserved for future use.

**Section 27. NBMC Section 14.12.200 (Floodways), Amended:** North Bend Municipal Code Section 14.12.200 (Floodways) is hereby amended to read as follows:

**14.12.200 Floodways.**

Floodways are special flood hazard areas as determined in NBMC 14.12.010 due to the velocity of floodwaters that can actually carry debris and increase erosion potential. The following provisions apply in all designated floodways within the city:

A. Construction of new ~~residential, commercial or industrial~~ structures is prohibited within the floodway.

B. No-Rise Standard. Encroachments, including fill, new construction, substantial improvements or other developments, are prohibited 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.

C. Construction or reconstruction of residential structures is prohibited within the floodway, except for projects that meet the following conditions:

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, which are not considered a substantial improvement as defined in NBMC 14.20.190.

D. Any new construction and substantial improvement permitted under subsection B of this section shall comply with all other applicable flood hazard reduction standards of this chapter.

**Section 28. NBMC Section 14.12.210 (Floodplain Habitat Assessment), Amended:**  
North Bend Municipal Code Section 14.12.210 (Floodplain habitat assessment) is hereby amended read as follows:

**14.12.210 Floodplain habitat assessment.**

A. Assessment Required. A floodplain habitat assessment is required unless the project is exempt under subsection B of this section. A habitat assessment determines if the project is likely to have no effect, not likely to adversely affect, or likely to adversely affect critical habitat or threatened and endangered species. If required, the habitat assessment 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 Regional Guidance 2013 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 pursuant to the city's adopted taxes, rates and fee schedule.

B. Exemptions. Any of the following activities do not require the preparation of a floodplain habitat assessment or consideration of associated mitigation measures, even if they may require a floodplain permit:

~~1. Nondevelopment activities, including, but not limited to pursuant to those set forth in NBMC 14.12.030(B);:~~

~~a. Routine maintenance of existing landscaping that does not involve grading, excavation, or filling;~~

~~b. Removal of noxious weeds and hazard trees and replacement of nonnative vegetation with native vegetation;~~

~~c. Normal maintenance of aboveground utilities and facilities, such as replacing power lines and utility poles;~~

~~d. Normal road maintenance, including filling potholes, repaving, and installing signs and traffic signals, but not including expansion of paved areas;~~

~~e. Normal maintenance of a levee or other flood control facility as prescribed in the operations and maintenance plan for the facility. Normal maintenance does not include repair from flood damage, and expansion of the prism, face or toe expansion, or the addition of material for protection or armor; and~~

~~f. Plowing and other normal farm practices (other than new structures or filling) on legally existing agricultural areas, excluding clearing additional land for expanded agricultural use;~~

2. Repairs or remodeling of an existing structure that qualifies for a fee exemption pursuant to NBMC 14.12.030(D), provided such work does not constitute a substantial improvement, a change in the structure's footprint, or an increase in impervious surfaces;

3. Expansion of an existing structure that is no greater than 10 percent beyond its existing footprint; provided, that the repairs or remodeling are not a substantial improvement or repair of substantial damage;

4. Activities with the sole purpose of creating, restoring or enhancing natural functions associated with floodplains, streams, lakes, estuaries, marine areas, habitats, and riparian areas that meet federal and state standards, provided the activities do not include structures, grading, excavation, fill, or impervious surfaces;

5. Development of open space and recreational facilities, such as parks and trails, that do not include structures, grading, excavation, net-fill, impervious surfaces, or removal of more than five percent of the native vegetation on that portion of the property in the special flood hazard area;

6. Repair to on-site septic systems provided the ground disturbance is minimal and best management practices to prevent stormwater runoff and soil erosion are used;

7. Projects that have already received concurrence under another permit or other consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service, either through Section 7, Section 4d, or Section 10 of the Endangered Species Act, that address the entirety of the project in the floodplain (such as an Army Corps 404 permit or nonconversion forest practice activities including any interrelated and interdependent activities);

~~8. Repair of an existing, functional bulkhead in the same location and footprint with the same materials when the ordinary high water mark is still outside the face of the bulkhead (i.e., if the work qualifies for a Corps exemption from Section 404 coverage).~~

C. If the assessment conducted under subsection A of this section concludes the project is expected to have an adverse effect on Endangered Species Act ("ESA") listed species and/or their critical habitat, the applicant shall provide a plan to mitigate those impacts, in accordance with the Floodplain Habitat Assessment and Mitigation Regional Guidance 2013 prepared by FEMA Region X.

1. If the USFWS or NMFS issues an incidental take permit under Section 10 of the ESA or a biological opinion under Section 7 of the ESA for the project in its entirety, then such may be considered to qualify as a plan to mitigate those impacts.

2. No compensatory mitigation is allowed within the protected area. Projects within the protected area must avoid short- and long-term direct and indirect effects including those of interrelated and interdependent activities.
3. If the project is located outside of the protected area, the mitigation plan shall include such avoidance, minimization, restoration, or compensation measures so that indirect adverse effects of development in the floodplain are mitigated such that equivalent or better habitat protection is provided.
4. The plan's habitat mitigation activities shall be incorporated into the proposed project. The floodplain development permit shall be based on the redesign of the project and its mitigation components.
5. All work identified in the habitat assessment and mitigation plan shall be completed or assurances provided according to NBMC 14.05.090 (bonds or performance security) prior to issuance of the certificate of occupancy or final approval.

**Section 29. New NBMC Section 14.12.230 (Variances), Adopted:** A new North Bend Municipal Code Section 14.12.230, to be entitled "Variances," is hereby adopted to read as follows:

**14.12.230 Variances.**

A. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this ordinance would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

B. Variances to the requirements of this chapter shall only be issued:

1. Upon a determination by the Floodplain Administrator that the variance will not result in increased flood heights, additional unreasonable threats to public safety, extraordinary public expense, creation of public nuisances, or conflict with existing local laws or ordinances;
2. In the case of the repair, rehabilitation, or restoration of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure;
3. Upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;

4. Upon a determination that failure to grant the variance would result in unusual or exceptional hardship to the applicant;

5. Upon a showing that the use subject to the variance application cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes only facilities defined in NBMC 14.05 of this ordinance in the definition of “Functionally Dependent Use.”

6. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by one or more lots with existing structures constructed below the base flood elevation, provided the procedures set forth in this ordinance have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

7. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.

C. In considering variance applications, the City of North Bend shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:

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, where 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 consistency of the proposed use to the comprehensive plan and floodplain management program for that area;

9. The safety of access to the property in time of flood for ordinary and emergency vehicles;

10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters 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, water system, and streets and bridges;

D. Any applicant to whom a variance is granted shall be given written notice over the signature of the Floodplain Administrator that:

1. The issuance of a variance to construct a structure below the BFE will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and

2. Such construction below the BFE increases risks to life and property.

E. The Floodplain Administrator may approve variances to the nonresidential elevation and dry floodproofing standards in NBMC 14.12.130 for accessory structures and agricultural structures as follows:

1. The structure shall not be used by the public, such as a place of employment or entertainment, or used as temporary or seasonal living quarters, or have one or more uses that does not meet the definition of an accessory structure or agricultural structure;

2. The building shall not be used in a manner that would create a threat to public safety, health and welfare, such as but not limited to confinement operations; structures with liquified natural gas terminals; and facilities producing and storing highly volatile, toxic or water-reactive materials;

3. The building shall have low damage potential given the characteristics of the building's construction and the base flood;

4. The building shall be constructed and placed on the site so as to offer the minimum resistance to the flow of floodwaters;

5. The portions of the building below the flood protection elevation shall be constructed with flood-resistant materials;

6. Building utilities shall not be installed except electrical fixtures, which must be elevated or floodproofed to or above the flood protection elevation.

7. The building shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters, as described in as described in NBMC 14.12.230(A)(4).

8. The building shall not have all sides of the building below grade.

9. The building shall comply with the standards in NBMC 14.12.200.

11. The applicant shall demonstrate that the strict enforcement of the standards of NBMC 14.12.230 would result in exceptional hardship to the property owner.

F. The Floodplain Administrator shall maintain a record of all variance applications, including the basis for final decision on such applications.

G. The Floodplain Administrator may condition the variance as needed to ensure that the requirements and criteria of this chapter are met.

**Section 30. Severability:** Should any section, paragraph, sentence, clause or phrase of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

**Section 31. Effective Date:** This ordinance shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after the date of publication.

**ADOPTED BY THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, AT A REGULAR MEETING THEREOF, THIS 21<sup>ST</sup> DAY OF JULY, 2020.**

**CITY OF NORTH BEND:**

**APPROVED AS TO FORM:**

\_\_\_\_\_  
**Rob McFarland, Mayor**

\_\_\_\_\_  
**Michael R. Kenyon, City Attorney**

Published: July 31, 2020  
Effective: August 5, 2020

**ATTEST/AUTHENTICATED:**

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**Susie Oppedal, City Clerk**