ORDINANCE NO. 4158

AN ORDINANCE of the City Council of the city of Kent, Washington, amending Chapter 14.09 of the Kent City Code, entitled "Flood Hazard Regulations."

RECITALS

A. Pursuant to the state Growth Management Act, Chapter 36.70A RCW (GMA), the city of Kent ("City") hereby amends its flood hazard regulations. This ordinance is the product of extensive study, review and evaluation of the City's development regulations to identify and protect the functions and values of frequently flooded areas required under the GMA, consistent with RCW 36.70A.172 and WAC 365-195-900. The Flood Hazard Regulations ordinance has been updated to comply with state law, federal law, and best available science. The City has identified, collected and assessed the available scientific information offered by staff, the City’s environmental consultants, by state agency representatives, and by the public in order to interpret the nature, scope, and application of best available science to protect the functions and values of the City’s frequently flooded areas, which exist in a highly complex, natural, and built urban environment.

B. Throughout this process, the City’s intent has been to develop and implement a comprehensive, balanced, and fair regulatory program that requires avoidance, minimization, and mitigation of frequently flooded areas, in that order of preference, by anyone whose

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activities affect frequently flooded areas. To that end, the City also desires to protect the public from injury, loss of life, or loss of property or other financial impact, to the extent reasonably possible.

C. On August 4, 2014, staff made a presentation to the Public Works Committee to discuss the need to update to the Flood Hazard Regulations ordinance, as required by the Growth Management Act. Staff further discussed that the update process is required to include best available science, as well as compliance with state, regional and local mandates.

D. On August 11, 2014, the Land Use and Planning Board ("LUPB") held a workshop to discuss updates to the Kent Comprehensive Plan, including the Flood Hazard Regulations update element of the plan; compliance with state, regional and local mandates; the proposed timeline; and public outreach activities.

E. On November 24, 2014, the LUPB held a workshop to generally discuss the Flood Hazard Regulations update process, best available science rule, and timeline.

F. On February 9, 2015, the LUPB held a workshop to discuss preliminary findings from the best available science recommendations, comments from staff and the public, and draft regulations.

G. On February 12, 2015, the City provided the required sixty day notification under RCW 36.70A.106 to the Washington State Department of Commerce ("Department") for the City’s proposed Flood Hazard Regulations ordinance. Comments from the Department were received and considered.
H. On March 16, 2015, the City received comments on the update from the Washington State Department of Ecology. These comments were also considered.

I. On April 3, 2015, the City conducted and completed environmental review for the Flood Hazard Regulations update under the State Environmental Policy Act (SEPA), issuing an Addendum to its Comprehensive Plan Environmental Impact Statement (EIS).

J. On April 13, 2015, the LUPB held a public hearing on the draft Flood Hazard Regulations and recommended updating Chapter 14.09 KCC, accordingly.

K. Staff made a presentation to the Public Works Committee on April 20, 2015, regarding the recommended revisions to the Flood Hazard Regulations.

L. Following certain substantive changes by staff to the proposed ordinance, the LUPB held a second public hearing regarding the revised Flood Hazard Regulations on June 8, 2015, and recommended passage of the revised ordinance.

M. Staff made a presentation regarding the revised Flood Hazard Regulations to the Economic and Community Development Committee at its meeting on July 13, 2015, and the Committee voted to forward its recommendation to the full City Council.

N. At its regularly scheduled meeting on July 21, 2015 the City Council considered the recommendations and voted to adopt the proposed amendments to the Flood Hazard Regulations.
NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF KENT, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

ORDINANCE

SECTION 1. - Amendment. Chapter 14.09 of the Kent City Code is hereby amended as follows:

Sec. 14.09.010. Definitions. The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

A. Appeal means a request for review of any final action pursuant to this chapter, or of the interpretation of any provision of this chapter by any city official.

B. Area of shallow flooding means the land within the floodplain where the base flood depths range from one (1) to three (3) feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident.

C. Area of special flood hazard means the land within the floodplain which is subject to a one (1) percent or greater chance of flooding in any given year.

D. Base flood means the flood having a one (1) percent chance of being equaled or exceeded in any given year, also referred to as the one hundred (100)-year flood.

E. Base flood elevation means the actual elevation (in mean sea level) of the water surface of the base flood determined by the Federal Emergency Management Agency (FEMA) Flood Insurance Administration or other qualified person or agency as described in this chapter.

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EF.  *Basement* means any area of the building having its floor subgrade (below ground level) on all sides.

FG.  *Best available data* means: (1) the data provided by the Federal Emergency Management Agency FEMA in a scientific and engineering report entitled Flood Insurance Study for King County, Washington and Incorporated Areas, dated June—May 16, 1995, along with the accompanying flood insurance maps Flood Insurance Rate Map (FIRM), and including any subsequent revisions thereto; or (2) hydrologic and hydraulic analyses performed in accordance with standard engineering practice and in accordance with FEMA standards contained in 44 C.F.R. Part 65.

G.  *Compensatory flood storage* means any new, excavated flood storage volume equivalent to any flood storage capacity which has been or would be eliminated by filling or grading within the special flood hazard area. The compensatory flood storage must be provided within the special flood hazard area and be free draining.

H.  *Critical facility* means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire, and emergency response installations; and public and private facilities which produce, use, or store hazardous materials or hazardous waste as defined by the State Department of Ecology.

I.  *Development* means any proposed or actual manmade changes to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations located within flood hazard areas the special flood hazard area and other site preparation activities, or storage of materials or

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equipment, subdivision of land, removal of substantial amounts of vegetation, or alteration of natural site characteristics.

J. **Director** means the director—city of Kent economic and community development director or the director’s designee of the department of public works of the city.

K. *Fill* means deposition of earth material—the addition of soil, sand, rock, gravel, sediment, walls, structures and their associated internal volume, or other material by artificial means.

L. *Flood or flooding* means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland or tidal waters;

2. The unusual and rapid accumulation of runoff of surface water from any source.

M. *Flood fringe* means the portion of the special flood hazard area outside of the floodway which is generally covered by flood waters during the base flood.

M-N. *Flood Insurance Rate Map (FIRM)* means the official map on which the FEMA federal flood insurance administration has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

NQ. *Flood insurance study* means the official report provided by FEMA the Federal Insurance Administration that includes flood profiles, the flood boundary and floodway map, the FIRM flood insurance rate map, and the water surface elevation of the base flood.
QP. *Flood protection elevation* means that the finished floor of any structure must be a minimum of two (2)-feet above the base flood elevation.

PQ. *Flood season* means the period from November–October 1st to March 31st during which, historically, the frequency, distribution, and volume (inches of rainfall) of storms in the Green River Basin have been the largest and all known major floods have occurred.

QR. *Floodplain* means that portion of a river or stream channel and adjacent lands which are subject to the base flood flooding.

RS. *Floodway* means the channel of the stream and that portion of the adjoining special flood hazard area which is necessary to contain and discharge the base flood flow without 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 base water surface elevation/flood elevation more than one (1)-foot.

S. *Floodway fringe* means that portion of a floodplain which is not floodway.

T. *Lowest floor* means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage, in an area other than a basement area, is not considered a building’s lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this chapter.

U. *Manufactured home* means a structure, used for residential or commercial purposes, transportable in one (1)-or more sections, which is
built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term *manufactured home* also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days. For insurance purposes the term *manufactured home* does not include park trailers, travel trailers, and other similar vehicles.

V. *Manufactured home park or subdivision* means a parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

W. *No net fill* means that if any fill is brought on to a site for the construction of a structure or access road then an equal amount of soil/material will be removed from the site. *Earthen fill* must be obtained from the same site, to the extent practicable. The soil removed must be from within the boundaries of the site, to the extent practicable, and from within the special flood hazard area. If not practical, soil could be removed from property in the immediate vicinity and within the special flood hazard area. *The area from which the soil is removed must be able to drain completely into the adjoining watercourse following a flood.*

X. *New construction* means structures for which the start of construction commenced on or after the effective date of the ordinance codified in this chapter.

Y. *Recreational vehicle* means a vehicle which is:

1. Built on a single chassis;

2. Four hundred (400)-square feet or less when measured at the largest horizontal projection;
3. Designed to be self-propelled or permanently towable by a light duty truck; and

4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Z. **Special flood hazard area** means the total area subject to inundation by the base flood those land and water areas identified by the Federal Insurance Administration FEMA in a report entitled The Flood Insurance Study for King County, Washington and Incorporated Areas, dated September 30, May 16, 1995, with accompanying pages on file with King County or the city of Kent department of public works of the city economic and community development.

AA. **Start of construction** includes substantial improvement, and means the date a building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty (180) days after the permit issuance 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 submission of an application for development, 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.
BB. *Structure* means that which is built or constructed, or an edifice or building of any kind or any piece of work composed of parts joined together in some definite manner, and includes posts for fences and signs. It specifically includes buildings that are not fully enclosed on all sides where the orientation may affect the flow of flood waters, but does not include mounds of earth or debris, a walled and roofed building including a gas or liquid storage tank that is principally above ground.

CC. *Substantial improvement* means any repair, remodeling, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty (50)—percent of the appraised fair market value of the structure either:

1. Before the improvement or repair is started; or

2. If the structure has been damaged and is being restored, before the damage occurred.

For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

____ a. Any project for improvement of a structure to correct an existing violation of state or local health, sanitary, or safety code specifications, as identified by the local code enforcement official, and which is the minimum necessary to assure safe living conditions—comply with existing state or local health, sanitary, or safety code specifications which are necessary solely to assure safe living conditions; or
b. Any alteration of a structure listed on the National Register of Historic Places or a recognized state or local inventory of historic places.

Sec. 14.09.020. Findings. The city council finds that:

1. The flood hazard areas of the city are subject to periodic inundation which endangers life and property, presents health and safety hazards, disrupts commerce and governmental services, and necessitates extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety, and general welfare; and

2. These flood losses are caused by the natural accumulation and ponding of floodwaters and the cumulative effect of obstructions in flood hazard areas which increase flood heights and velocities. Uses inadequately floodproofed, elevated, or protected from flood damage or that otherwise encroach on the natural holding capacity of the floodplain also contribute to the flood loss.

Sec. 14.09.030. Purpose. It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by enacting provisions designed to:

1. Protect life and property by preventing the hazardous use of flood-prone lands;

2. Protect downstream or surrounding property from higher velocities or higher flood levels which may be caused by loss of holding capacity in the floodplain;
3. Minimize turbidity and pollution from upstream or surrounding development during a flood;

4. Minimize the expenditure of public money for remedial flood control measures;

5. Minimize the need for rescue and relief efforts associated with flooding which are generally undertaken at the expense of the general public;

6. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in flood hazard areas;

7. Alert appraisers, assessors, owners, potential buyers, and lessees to the natural limitations of flood-prone land;

8. Ensure that those who occupy or seek to develop in flood hazard areas assume responsibility for their actions;

9. Qualify the city and existing homes and businesses for participation in the Federal Flood Insurance Program; and

10. Implement local, state, and federal flood protection programs.

Sec. 14.09.040. Policies and standards for reducing flood losses. In order to accomplish its purpose, this chapter includes policies and standards to:

1. Restrict, condition, or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion, flood heights, or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial development and construction;

3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;

4. Control filling, grading, dredging, and other development which may increase flood damage; and

5. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

Sec. 14.09.050. Lands to which this chapter applies. This chapter shall apply to all areas of special flood hazard areas within the jurisdiction of the city.

Sec. 14.09.060. Basis for establishing the areas of special flood hazard areas. The basis for establishing the areas of special flood hazard areas is the areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled Flood Insurance Study for King County, Washington and Incorporated Areas, dated May 16, June 16, 1995, along with the accompanying flood insurance maps, FIRM, and including any subsequent revisions thereto (the flood insurance study), which is hereby adopted by reference and declared to be a part of this chapter as if stated verbatim; or the use of best available data as defined in this chapter. The flood insurance study is on file and available for examination at the office of the department of public works.
Sec. 14.09.070. Penalties for noncompliance. No structure or land shall hereafter be developed, constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violation of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall upon conviction thereof be fined not more than five hundred dollars ($500) or imprisoned for not more than one hundred eighty (180)-days, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. In addition, nothing herein contained shall prevent the city from issuing notices of violation pursuant to Chapter 1.04 KCC to any person or entity responsible for acts or omissions contrary to the regulations contained in this chapter, nor prevent the city from taking any other lawful action as is necessary to prevent or remedy any violation.

Sec. 14.09.080. Abrogation and greater restrictions. This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Sec. 14.09.090. Interpretation. In the interpretation and application of this chapter, all provisions shall be:

1. Considered as minimum requirements;

2. Liberally construed in favor of the governing body; and
3. Deemed neither to limit nor repeal any other powers granted under state statutes.

**Sec. 14.09.100. Warning and disclaimer of liability.** The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards areas or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city, its elected officials or any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administration decision lawfully made hereunder.

**Sec. 14.09.110. Green River flood control zone number 2.** All building and development within the boundaries of the Green River flood control zone number 2 shall comply with all provisions of Chapter 86.16 RCW and Chapter 508-60 WAC, the state Flood Control Zone Act and permit-program regulations.

**Sec. 14.09.120. Permits and licenses.** No permit or license for structures or the development or use of land shall be issued by the city within a special flood hazard area unless approved by the director or other designate. Such approval shall be based on a review of the provisions set forth in this chapter and the technical findings and recommendations of city departments and divisions, including, but not limited to, building, fire, and planning departments. Compliance with the provisions of this chapter does not obviate the need to obtain other permits which may be required pursuant to state or federal law including but not limited to approvals required from the United States Army Corps of Engineers and the State Departments of Social and Health Services and Ecology relating to water.
and sewer systems which ensure that water and sewer systems will be designed to avoid infiltration, inflow, or impairment.

**Sec. 14.09.130. Procedural requirements.** City permits or licenses which relate to the development and use of land within a flood hazard area or the special flood hazard areas shall be referred to the department of economic and community development of public works by the issuing department for approval. If it can be determined from information at hand that the property does not lie in a special flood hazard area, the issuing department may approve the permit or license directly. If it appears that any portion of the property may lie in a special flood hazard area, the department of public works, economic and community development shall require its owner to submit information necessary to determine if in fact any portion of the property lies within the floodway or floodway fringe. If it is determined that any portion of the property lies within the floodway or within the floodway fringe, the applicant shall be required by the department of public works, economic and community development to submit such surveys, plans, and supporting documents as are necessary to determine the applicability of city regulations to the proposed structure, development, or use. The department of public works, economic and community development shall consider not only the individual structure, development, or use, but shall also consider it in combination with existing and future similar structures, developments, and uses. Whenever technical information is furnished to the city by an applicant, the city shall consider such report in acting upon the requested permit. In performing such review, the department of public works, economic and community development may request additional applicant information, including the preparation and submission of an environmental checklist under the State Environmental Policy Act or a supplement thereto if already submitted to an issuing department. The director or his designate shall, within a reasonable time, indicate approval or disapproval of the requested permit.
or license; and if approved, the director shall transmit all conditions of approval; in a letter to the issuing department, with copies to the applicant, the issuing department, commenting departments, other agencies, and other known parties of interest.

Sec. 14.09.140. Use of other base flood data. In order to administer the provisions of this chapter when base flood elevation data has not been provided in accordance with sections herein, the director shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source determined by the director to provide accurate and detailed flood related information. Such information shall supplement special flood hazard area information and maps and shall be retained on file with the department of public works, including information under KCC 14.09.150.

Sec. 14.09.150. Designation of local administrator. The public works director or his/her designee is hereby appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

Duties of the administrator shall include, but not be limited to:

A. Permit review.

1. Review all development permits to determine that the permit requirements of this chapter have been satisfied.

2. Review all permits to determine that all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required.
3. Review all permits to determine if the proposed development is located within a floodway. If proposed development is located within a floodway, ensure that KCC 14.09.180 is enforced.

B. Use of other base flood data (in A and V zones).

1. When base flood elevation data has not been provided (A and V zones) in accordance with KCC 14.09.060, the public works director or his/her designee shall obtain, review, and reasonably utilize any best available data, base flood elevation, and floodway data available from a federal, state, or other source to administer this title.

C. Information to be obtained and maintained.

1. Where base flood elevation data is provided through the flood insurance study, FIRM, or required as pursuant to KCC 14.09.140, the director shall obtain and record the actual 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.

2. For all new or substantially improved floodproofed structures where base flood elevation data is provided through the flood insurance study, FIRM, or as required pursuant to KCC 14.09.140, the director shall:

   a. Obtain and record the elevation (in relation to mean sea level) to which the structure was floodproofed; and

   b. Maintain floodproofing certifications required pursuant to this chapter.
3. The director shall maintain for public inspection all records pertaining to the provisions of this chapter, to the extent required by Chapter 1.05 KCC and Chapter 42.56 RCW.

D. Alteration of watercourses.

1. Notify adjacent communities and the Department of Ecology prior to any alteration or relocation of a watercourse, submit evidence of such notification to the Federal Insurance Administration.

2. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

E. Interpretations of FIRM boundaries. Make interpretations where needed, as to exact location of boundaries of the special flood hazard areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the actual boundary shall be given reasonable opportunity to appeal the interpretation as provided for in KCC 14.09.210.

Sec. 14.09.160. General standards. In all special flood hazard areas of special flood hazards, the following standards are required:

1. Anchoring.

   a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

   b. All manufactured homes must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using
methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA’s Manufactured Home Installation in Flood Hazard Areas Guidebook for additional techniques).

2. **Construction materials and methods.**

   a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

   b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

   c. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed, constructed, and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

3. **Utilities.**

   a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;

   b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters;

   c. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding; and
d. Proposed water wells shall be located on high ground that is not located within a special flood hazard area.

4. Subdivision proposals.

a. All subdivision proposals shall be consistent with the need to minimize flood damage;

b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;

c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage;

d. Where for all proposed subdivisions or other developments that contain at least fifty lots or encompass five or more acres, whichever is less, when base flood elevation data has not been provided, or is not available from another authoritative source, it shall be the base flood elevation shall be determined through a hydrologic study completed by a qualified professional and submitted by the applicant to the city for the director's approval. The director may accept, reject, or require the applicant to submit additional documentation that the director reasonably deems necessary for review of the hydrologic study—generated for subdivision proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres (whichever is less); and

e. Subdivision approval should depict or state what portions of the development are within special flood hazard areas.

5. Review of building permits. Where elevation data is not available either through the flood insurance study or from another authoritative
source, applications for building permits shall be reviewed by both the issuing department and department of public–work–economic and community development to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment based, in part, on local and engineering practices, and includes use of historical data, high-water marks, photographs of past flooding, and other similar evidence, where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.

**Sec. 14.09.170. Specific standards.** In all special flood hazard areas, areas of special flood hazards where base flood elevation data has been provided as set forth in pursuant to KCC 14.09.060 or KCC 14.09.140, the following provisions are required:

1. **Residential construction.**
   a. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to the flood protection elevation.
   b. 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:
      i. A minimum of two (2)–openings placed on at least two separate walls and having a total net area of not less than one (1)–square inch for every square foot of enclosed areas subject to flooding shall be provided.
ii. The bottom of all openings shall be no higher than one (1)-foot above grade.

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

2. Nonresidential construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the flood protection elevation; or, together with attendant utility and sanitary facilities, shall:

   a. Be floodproofed to the flood protection elevation so that the structure is watertight with walls substantially impermeable to the passage of water;

   b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

   c. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in KCC 14.09.150(C)(2);

   d. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in subsection (1)(b) of this section;
e. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1)-foot below the floodproofed level (e.g., a building floodproofed to one (1)-foot above the base flood level will be rated as at the base flood level).

3. **Critical facility.** Construction of new critical facilities shall be, to the extent possible, located outside the limits of the base-floodplain. Construction of new critical facilities shall be permissible within the base floodplain if no feasible alternative site is available. Critical facilities constructed within the base-floodplain shall have the lowest floor elevated to three (3)-feet or more above the level of the base flood elevation at the site. **Below the lowest floor,** floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

4. **Manufactured homes.** All manufactured homes to be placed or substantially improved within zones A1 - 30, AH, and AE on the community’s FIRM shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at the flood protection elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provisions of KCC 14.09.160(1)(b). Openings in accordance with KCC 14.09.170(1) are required in rigid skirting attached to frames or foundations of manufactured homes to relieve hydrostatic loads and minimize transferring loads that can damage homes and their supporting foundation systems. Installation of skirting does not trigger the requirement for flood openings if the skirting does not provide structural support and will collapse, without causing structural damage to the elevated home or the foundation, under wind and water loads that are less than those expected during the base flood event.
5. **Recreational vehicles.** Recreational vehicles placed on sites are required to meet all applicable provisions of this code. If allowed by code, recreational vehicles are required to either:

   a. Be onsite for fewer than one hundred eighty (180)-days;

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

   c. Meet the requirements of KCC 14.09.160(1) and the elevation and anchoring requirements for manufactured homes.

6. **Drainage around structures.** Adequate drainage paths are required around structures on slopes to guide waters around and away from proposed structures.

7. **Standards for AE and A1-30 zones with base flood elevations but no floodways.** In areas with base flood elevations, if a regulatory floodway has not been designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within Zones AE and A1-30 on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

   **Sec. 14.09.175. Compensatory storage.**
A. Except as provided in subsection (B) of this section, within the floodplain of the areas of special flood hazard areas, the following provisions apply:

1. Applicants shall provide onsite replacement of one hundred (100)-percent of the storage area lost to encroachments so that there is no increase in flood levels during the occurrence of the base flood discharge. Encroachments include fill, new construction, substantial improvements, and other development. No net fill in the floodway fringespecial flood hazard area shall be allowed.

2. If an applicant seeks to provide offsite replacement of one hundred (100)-percent of the storage area lost to encroachments so that there is no increase in flood levels during the occurrence of base flood discharge, the applicant must submit certification by a registered professional engineer or architect demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge, and the offsite replacement location must be located within the same watershed that the encroachment is occurring.

3. If subsection (A)(1) or (2) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of KCC 14.09.170.

B. Within the lower Mill Creek floodplain delineated on the Flood Insurance Rate Map Panels 969, 1232, and 1251 as a floodway:

1. Applicants shall provide onsite replacement of one hundred (100)-percent of the storage area lost to encroachments so that there is no increase in flood levels during the occurrence of the base flood discharge. An alternative is to construct such that no net fill is placed onsite.
2. If an applicant seeks to provide offsite replacement of one hundred (100)-percent of the storage area lost to encroachments so that there is no increase in flood levels during the occurrence of base flood discharge, the applicant must submit certification by a registered professional engineer or architect demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge, and the offsite replacement location must be located within the same watershed that the encroachment is occurring.

3. If subsection (B)(1) or (2) of this section is satisfied, all residential construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of KCC 14.09.170.

**Sec. 14.09.180. Floodways.** Within the floodway of the special flood hazard areas of special flood hazard, the following provisions apply:

1. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

2. Construction or reconstruction of residential structures is prohibited within designated floodways, except for: repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and repairs, reconstruction, or improvements to a structure, the cost of which does not exceed fifty (50)-percent of the market value of the structure either before the repair, reconstruction, or improvement is started, or if the structure has been damaged, and is being restored before the damage occurred. Work done to correct an existing violation of state or local health, sanitary, or safety code specifications, as identified by the
local code enforcement official, and which is the minimum necessary to assure safe living conditions, on structures to comply with existing health, sanitary, or safety codes or work done to structures identified as historic places, shall not be included in the fifty (50)-percent determination.

3. Projects specifically designed for the enhancement of fish habitat are allowed within the floodway when they have been designed to minimize their impact on base flood elevations, keep any rise in the 100-year flood levels as close to zero as practically possible, and do not affect any insurable structures.

43. If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of KCC 14.09.170.

Sec. 14.09.190. Wetlands management. To the extent possible adverse impacts to wetlands should be avoided as such:

1. Proposals for development within base-floodplains shall be reviewed by the department of economic and community development both issuing departments and the department of public works for their possible impacts probable effects on wetlands located within the floodplain.

2. Development activities in or around wetlands shall not negatively affect public safety, health, and welfare by disrupting the wetlands' ability to reduce flood and storm drainage.

3. Assistance from the United States Army Corps of Engineers, or State Department of Ecology, or qualified professional as defined in KCC 11.06, shall be sought in identifying wetland areas.
Sec. 14.09.200. Standards for shallow flooding areas (AO zones). Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from one (1)-to three (3)-feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:

1. New construction and substantial improvements of residential structures within AO zones shall have the lowest floor (including basement) elevated above the highest grade adjacent to the building, one (1)-foot or more above the depth number specified on the FIRM (at least two (2)-feet if no depth number is specified).

2. New construction and substantial improvements or nonresidential structures within AO zones shall either:

   a. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one (1)-foot or more above the depth number specified on the FIRM (at least two (2)-feet if no depth number is specified); or

   b. Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in KCC 14.09.170(2).

3. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
Sec. 14.09.210 Appeals. The decision of the department of public works—director to approve, to approve with conditions, condition or to disapprove a permit or license for work in a special flood hazard area shall be in writing, and may be appealed to the land-use hearing examiner. The requested permit or license shall not be issued by a city department during the appeal period. The following procedures apply to appeals for from the director’s decision of the department of public works to approve, condition, or deny regarding proposals within a special flood hazard area: shall be governed by the procedures set forth in KCC 12.01.190 and Chapter 2.32 KCC.

1. Written notice of appeal shall be filed with the department of public works within ten (10) days from the date of the decision which aggrieves the appealing party. A fee of twenty-five dollars ($25) shall be paid at the time of filing the written appeal. The appeal will not be accepted unless accompanied by full payment.

2. All notices of appeal shall state in full the decision appealed and the reasons why the appealed decision should be reversed or modified.

3. All appeals so filed shall be heard by the hearing examiner and a determination by the examiner made within thirty (30) days from the closing date of the hearing.

4. At least seven (7) days before the appeal hearing, the department of public works will provide the hearing examiner, the appellant, and any other person expressing written interest in the application or appeal a copy of the decision which is being appealed.

5. In passing upon such applications, the hearing examiner shall consider all technical evaluations, all relevant factors and standards, and the criteria specified in this chapter and applicable state regulations.
6. The hearing examiner shall prepare a written report and decision containing findings and conclusions which show how its decision implements the purposes of this chapter and is consistent with the criteria, standards, and limitations of this chapter.

7. The decision of the land use hearing examiner shall be final and conclusive unless, within fourteen (14) calendar days from the date of the hearing examiner's decision, an aggrieved party obtains a writ of certiorari from superior court for the purpose of review of the action taken.

Sec. 14.09.220. Variances. Variances shall be completed in accordance with those variance provisions identified in the city of Kent critical areas code regulations found in KCC Title 11 Chapter 11.06 KCC, as amended.

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

SECTION 3. - Severability. If any one or more section, subsection, or sentence of this ordinance is held to be unconstitutional or invalid, that decision shall not affect the validity of the remaining portion of this ordinance and that remaining portion shall maintain its full force and effect.

SECTION 4. - Effective Date. This ordinance shall take effect and be in force thirty (30) days after its passage, as provided by law.
ATTEST:

RONALD F. MOORE, CITY CLERK

APPROVED AS TO FORM:

ARTHUR FITZPATRICK, ACTING CITY ATTORNEY

PASSED: 21st day of July, 2015.

APPROVED: 21st day of July, 2015.

PUBLISHED: 24th day of July, 2015.

I hereby certify that this is a true copy of Ordinance No. 4158 passed by the City Council of the City of Kent, Washington, and approved by the Mayor of the City of Kent as hereon indicated.

RONALD F. MOORE, CITY CLERK

(SEAL)