

Flood Fringe (FF) and Flood Way (FW) Overlay District Chapter 9

900 Purpose. The purpose of this overlay district is to minimize losses described in the Flood Insurance Study provided by the Federal Insurance Administration. The Flood-Fringe (FF) and Flood-Way (FW) overlay districts are created to supplement the Federal Insurance Rate Map's flood zones and the City Flood Plain Management Ordinance No. 1812.

- .1 This overlay district shall:
1. Restrict or prohibit uses which are dangerous to health, safety or property in times of flooding or cause undue increases in flood height or velocities.
 2. Require that uses vulnerable to floods, including public facilities that serve such uses, be provided with flood protection at the time of initial construction.
 3. Protect individuals from buying lands that are unsuited for intended purposes because of flood hazard.

901 Definitions. See Chapter 17 and Ordinance No. 1812.

100-Year Flood is the base flood having a one-percent (1%) chance of annual occurrence.

500-Year Flood is the base flood having a one-percent (1%) chance of occurrence once every 500 years.

902 FEMA Flood Zones. See Federal Insurance Rate Map. FEMA Flood Zones are used in conjunction with the Flood-way overlay district and the Flood-way Fringe overlay district.

- .1 Flood Zones on the FIRM Map as revised on December 21, 1982.

Zone A Areas of 100-year flood; base flood elevations and flood hazard factors not determined.

902 .1 Zone AO Areas of 100-year flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.

Zone AH Areas of 100-year shallow flooding where depths are Between one (1) and three (3) feet; base flood elevations Are shown, but no flood hazard factors are determined.

- Zone A1-30 Areas of 100-year flood; base flood elevations and Flood hazard factors determined.
- Zone A99 Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
- Zone X Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. Medium shading.
- Zone X Areas of minimal flooding. No shading.
- Zone D Areas of undetermined, but possible, flood hazards.

.2 Flood Zones on the FIRM Map as revised on May 21, 2001.

- Zone A No base flood elevations determined.
- Zone AE Base flood elevations determined.
- Zone AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- Zone AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding; velocities also determined.
- Zone A99 To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- Zone X (shaded) Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.
- Zone X (un-shaded) Areas determined to be outside 500-year flood plain.
- Zone D Areas in which flood hazards are undetermined.

903 General Provisions.

- .1 Land to which these regulations apply. This regulation shall apply to all lands within the jurisdiction of the City of Augusta identified on the Flood Insurance Rate Map (FIRM) within the FW and FF zoning districts. The FW and FF overlay districts shall conform and enhance the FIRM "A" zones.
- .2 Interpretation. In the interpretation and application, the provisions of this regulation shall be held to be minimum requirements and shall be liberally construed in favor of the City and shall not be deemed a limitation or repeal of any other powers granted by the state.
- .3 Interpretation of District Boundaries. The boundaries of the flood-way and flood-way fringe overlay districts shall be determined by scaling distances on the official zoning map or the Federal Insurance Rate Map. Where interpretation is needed to the exact location of the boundaries of the districts as shown on the map(s), as for example where there appears to be a conflict between a mapped boundary and actual field conditions, the Enforcement Officer shall make the necessary interpretation. The regulatory flood elevation for the point in question shall be the governing factor in locating the district boundary on the land. In such cases where the interpretation is contested, the person contesting the location of the district boundary shall appeal the decision of the enforcing officer to the Board of Zoning Appeals.
- .4 Compliance. No development located within known flood hazard areas of this City shall be located, extended, converted or structurally altered without full compliance with the terms of this regulation and the flood plain ordinance.
- .5 Disclaimer of Liability. The degree of flood protection required by this regulation is considered reasonable for regulatory purposes. Larger floods may occur on rare occasions or the flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This regulation does not imply that areas outside flood-way and flood-way fringe district boundaries or that larger floods may occur on rare occasions or the flood height may be increased by man made or natural causes. These regulations shall not create liability on the part of the City of Augusta, Kansas or any officer or employee thereof for any flood damages that may result from reliance on these regulations or any administrative decision lawfully made thereunder.

904 Appeal. Any appeal of the decision of the enforcement officer or request for a variance shall be made to the Planning Commission as provided by Section 203.2.9.3.2 of these regulations.

905 Flood-Way (FW) Overlay District.

- .1 Permitted Uses. Only uses having a low flood-damage potential and not obstructing flood flows shall be permitted within the Floodway District to the extent that they are not prohibited by any other District in these regulations. All encroachments, including fill, new construction, substantial improvements and other developments must be prohibited unless certification by a professional registered engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge. No use shall increase the flood levels of the regulatory flood elevation. These uses are subject to the standards of Section 906 of this article. The following are recommended uses for the Flood-way District:
 - .1 Agricultural uses such as general farming, pasture, nurseries and forestry.
 - .2 Recreational uses such as lawns, gardens, parking and play areas.
 - .3 Non-residential areas such as loading areas, parking, airport landing strips.
 - .4 Public and private recreational uses such as golf courses, archery ranges, picnic grounds, parks, wildlife and nature preserves.
 - .5 Public and private utility services provided they are flood proofed.
- .2 Uses Not Permitted. All uses not meeting the standards of these regulations shall be prohibited.
- .3 Specific Standards for the Flood-Way Overlay District and the Flood-Way Fringe Overlay District.
 - .1 Permits. A floodplain development permit shall be required for all proposed construction or other development, including the placement of manufactured homes. No person, firm, corporation, or unit of government shall initiate any development or substantial-improvement or cause the same to be done without first obtaining a separate floodplain development permit for each structure or other development.
 - .1 Every floodplain development permit application shall:
 - .1 Describe the land on which the proposed work is to be done by lot, block and tract, house and street address, or similar description that will readily identify and specifically locate the proposed structure or work;

- .2 Identify and describe the work to be covered by the floodplain development permit;
 - .3 Indicate the use or occupancy for which the proposed work is intended;
 - .4 Indicate the assessed value of the structure and the fair market value of the improvement;
 - .5 Specify whether development is located in designated flood fringe or floodway;
 - .6 Identify the existing base flood elevation and the elevation of the proposed development;
 - .7 Give such other information as reasonably may be required by the Floodplain Administrator;
 - .8 Be accompanied by plans and specification for proposed construction; and
 - .9 Be signed by the permittee or his authorized agent who may be required to submit evidence to indicate such authority.
- .2 FIRM. The City's Federal Insurance Rate Map shall determine the need for conformance with this Section. If flood Insurance Study data is not available the city shall utilize any base flood elevation or flood-way data currently available from Federal, State or other sources.
- .3 Requirements. All new construction, subdivision proposals, substantial-improvements, prefabricated structures, placement of manufactured homes and other developments shall require:
- .1 Design or anchorage to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
 - .2 Construction with materials resistant to flood damage.
 - .3 Utilization of methods and practices that minimize flood damages.
- .4 All electrical, heating, ventilation, plumbing, air-conditioning equipment, and other service facilities be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- .5 New or replacement water supply systems and/or sanitary sewage systems be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and on-site waste disposal systems be located so as to avoid impairment or contamination.

- .6 Subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, located within special flood hazard areas are required to assure that:
 - .1 All such proposals are consistent with the need to minimize flood damage.
 - .2 All public utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damage.
 - .3 Adequate drainage is provided so as to reduce exposure to flood hazards.
 - .4 All proposals for development, including proposals for manufactured home parks and subdivisions, of five (5) acres or fifty (50) lots, whichever is lesser, include within such proposals base flood elevation data.

- .7 Storage and material equipment.
 - .1 The storage or processing of materials that are in time of flooding buoyant, flammable, explosive or could be injurious to human, animal or plant life is prohibited.
 - .2 Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation or if readily removable from the area within the time available after flood warning.

- .4 Specific Standards for A and AE Zones.
 - .1 Residential Construction.

New construction or substantial-improvement of any residential structures, including manufactured homes, shall have the lowest floor, including basement, elevated a minimum of one (1) foot above base flood elevation. The elevation of the lowest floor shall be certified by a licensed land surveyor.
 - .2 Non-Residential Construction.

New construction or substantial-improvement of any commercial, industrial, or other non-residential structures, including manufactured homes, shall have the lowest floor, including basement, elevated a minimum of one (1) foot above the base flood elevation or, together with attendant utility and sanitary facilities, be flood proofed so that below the base flood elevation the structure 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. A registered professional engineer or architect shall certify that the standards of these regulations are satisfied. The elevation of the lowest floor shall be certified by a licensed land surveyor.

- .3 Fully enclosed areas below lowest floor used solely for parking of vehicles, building access, or storage in an area other than a basement and that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
 - .1 A minimum of two openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - .2 The bottom of all opening shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.
- .4 **Manufactured Homes.** All manufactured homes shall be anchored to resist flotation, collapse, or lateral movement. Manufactured homes must be anchored in accordance with the Building Code or FEMA guidelines. In the event that over-the-top frame ties to ground anchors are used, the following specific requirements (or their equivalent) shall be met:
 - .1 Over-the-top ties be provided at each of the four corners of the manufactured home, with additional ties per side at ten (10) foot intervals.
 - .2 Frame ties shall be provided as above.
 - .3 All components of the anchoring system be capable of carrying a force of 4800 pounds.
 - .4 The lowest floor shall be elevated on a permanent foundation one (1) foot above the base flood elevation and be anchored to the foundation system. The elevation of the lowest floor shall be certified by a licensed land surveyor.
- .5 **Recreational Vehicles.** Recreational vehicles placed on sites within all unnumbered or numbered A and AE Zones either:

- .1 Be on the site fewer than 180 consecutive days.
- .2 Be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions.
- .3 Meet the permitting, elevating, and the anchoring requirements for manufactured homes of these regulations.

906 Flood-way Fringe (FF) Overlay District.

- .1 Permitted Uses. Any use permitted by Section 910.1 of these regulations.
- .2 Uses Not Permitted. All uses not meeting the standards of these regulations shall be prohibited.
- .3 Standards for the Flood-way Fringe Overlay District. The same standards as required by Section 910.3.
- .4 Requirements for FIRM zone "AO."
 - .1 All new construction and substantial improvements of residential and non-residential structures shall have the lowest floor (including the basement) elevated two (2) feet above the base flood elevation.
 - .2 Together with attendant utility and sanitary facilities be completely flood-proofed to or above the base flood elevation so that any space below the base flood elevation is watertight.
- .5 Drainage Paths. Adequate drainage paths around structures on slopes shall be required in order to guide floodwater around and away from proposed structures.

Note: All changes made to Chapter 9 are in compliance with Ordinance Number 1812.